# APPENDIX A. PUBLIC ENGAGEMENT

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# APPENDIX A: PUBLIC ENGAGEMENT

## Introduction

Pursuant to California Government Code Section 65583(c)(9), local governments are required to "make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element." To meet these requirements, the City of Irvine has organized multiple activities to engage with all ages and economic segments of the community through the following: a community outreach survey, two focus groups, three community workshops, a Planning Commission study session, a City Council scoping session, stakeholder meetings with property owners and special interest groups, and additional public meetings and adoption hearings.

To promote the community engagement activities and events, the City used its City website, social media accounts, mailers, and public email system. The City also provided outreach materials in English and seven additional languages: Chinese (Traditional and Simplified), Korean, Vietnamese, Japanese, Farsi, Arabic, and Spanish to ensure the outreach materials reached many diverse segments of the community.

The City gathered feedback from outreach activities and summarized the findings to identify the issues and topics that were most pressing to the Irvine community. The City then used this information to develop goals, policies, and proposed activities for the planning period.

## Public Engagement Plan

The Public Engagement Plan summarizes the strategies and process the City of Irvine and the consultant team, Harris & Associates, used to engage the public and other stakeholders in preparation of the 6th Cycle Housing Element Update. The Public Engagement Plan identifies the goal and strategies for public engagement, followed by summaries of specific outreach methods the planning team used during the planning process for the Housing Element.

The purpose and goal of the Engagement Plan is to ensure residents, businesses, community-based organizations, and public agencies (collectively referred to as "stakeholders") are aware of, and actively involved in, updating the City's Housing Element. Engaging the community in the planning process and incorporating feedback is essential to ensuring that the Housing Element reflects the priorities of the community it serves and that the strategies for achieving those goals are feasible, equitable, and can be implemented with support from the community.

The Engagement Plan consists of several strategies that create awareness of the Housing Element, provide opportunities for stakeholder input, and maximize participation from all economic and cultural segments of the community. Listed below are components of the Engagement Plan:

A. Outreach Coordinator
B. Housing Element Update Webpage
C. Social Media and Email Outreach
D. Print Media
E. Community Outreach Survey - Summer 2020
F. Focus Groups - January 26 and 27, 2021
G. Stakeholder Meetings with Major Property Owners
H. AB 52 and SB 18 - Tribal Consultation
I. City Council Scoping Session – February 9, 2021
J. Planning Commission Study Session – February 18, 2021
K. Future Housing Sites Outreach Letters
L. Focused Community Workshop 1 on Future Housing Sites – March 16, 2021
M. Stakeholder Meeting with Irvine Unified School District – April 1, 2021
N. Stakeholder Meetings for Affordable Housing
O. General Community Workshops 2 and 3 – April 22 and 29, 2021
P. At-Risk Affordable Housing Outreach
Q. Draft Housing Element Release to Public – (July 2021)
R. ALUC Review – (TBD)
S. 6th Cycle Housing Element Adoption Hearings – (anticipated Winter 2021/2022)
T. Ongoing Engagement

Each component of the Engagement Plan is described in further detail below, including the outreach activities the City performed in chronological order.

## A. Outreach Coordinator

The City designated Outreach Coordinators to ensure the outreach process aligned with the public engagement goals described above. The role of the Outreach Coordinator was to serve as a central contact for the planning team and stakeholders with respect to public engagement. The Outreach Coordinator was also responsible for press releases as well as posting webpage and social media content through the City's website and other channels as appropriate. The contact information for the Outreach Coordinators are listed below:

- **Kristina Perrigoue**, Public Information Officer, City Manager's Department, KPerrigoue@cityofirvine.org; 949-724-6212-5028
- **Justin Equina**, Senior Planner, Community Development Department, JEquina@cityofirvine.org; 949-724-6364
- **Melissa Chao**, Senior Planner, Community Development Department, MChao@cityofirvine.org; 949-724-6395

## B. Housing Element Update Website

In September 2020, the City created a webpage (cityofirvine.org/HEUpdate) that serves as a 24/7 on-demand resource for the Housing Element Update (HEU) with translation capability available for 81 languages through an easy-to-use drop-down menu. The landing page provides an overview of the Housing Element, including:

- What is a Housing Element?
- What does the State Require?
- Project Timeline Table
- Upcoming and Past Meetings

In addition, the landing page includes click buttons that lead to individual pages with more specific information, such as "RHNA: Who Decides How Much Housing is Needed and Why?" and "Housing Element Benefits: Why This Matters." These click buttons define terms like "RHNA", explain the RHNA process, and how the housing units are distributed among local jurisdictions. Additionally, the website feature links to workshop announcements, Zoom links, video recordings, presentations, and informational handouts. As of June 9, 2021, the HEU website has 1,456 visits (i.e., single browsing session).

City staff regularly maintains and monitors the webpage to provide up-to-date information and to field submitted questions and comments through the anonymous comment in-box and a dedicated email account at GPUpdate2035@cityofirvine.org. See corresponding Appendix A-B for reference.

## C. Social Media and Email Outreach

The City, in coordination with the Public Information Office, has created content to promote the Housing Element Update workshops and public meetings on its social media accounts (i.e., Facebook, Instagram, Twitter, and nextdoor). The City posts social media content approximately two weeks prior to workshops to provide ample notice to the public followed by a secondary reminder several days before. As of June 9, 2021, analytics for City accounts show 90,429 social media impressions (i.e., the number of times the post was displayed to a user) and 1,161 engagements (i.e., the number of times users engaged with the post, such as reacting to, commenting on, sharing, or clicking on the post).

The City publicized the Housing Element Update community workshops through our weekly Community Link Newsletter, which is emailed to 17,176 recipients.

The City also advertised the Housing Element Update work efforts through email, which was sent out to our project interest list with over 5,200 email addresses of various stakeholders, including, major land owners, Building Industry Association of Southern California, Greater Irvine Chamber of Commerce, school districts, utility providers, residents, and other interested parties. See Appendix A-C for social media posts and related analytics, and notification list.

## D. Print Media

The City advertised the Housing Element Update in Inside Irvine, the official magazine and activity guide for Irvine that is published quarterly. Additionally, fliers were created and translated in seven additional languages, Chinese (Traditional and Simplified), Japanese, Korean, Vietnamese, Spanish, Farsi, and Arabic announcing the communitywide workshops consistent with Irvine's Limited English Proficiency plan (2019-2020 through 2024-2025) for the Community Development Block Grant (CDBG), Emergency Solutions Grant (ESG), and HOME Investment Partnerships Programs. The fliers were also featured on both the City's HEU webpage and disseminated via the City's social media accounts. See Appendix A-D for print media.

## E. Community Outreach Survey

As part of the City's General Plan Update, a separate ongoing effort, the City administered a statistically valid and demographically representative Community Outreach Survey in summer 2020 to a random sample of 1,253 adults who reside in the City of Irvine. The sample profile matched the City's US Census American Community Survey 2018 estimates for ethnicity, age, home ownership, child in the household, and senior in the household. The on-line survey included questions focused on housing issues to support the Housing Element public engagement effort. The survey was conducted in five languages: English, Spanish, Chinese, Korean, and Farsi. See Appendix A-E for the survey questions and results related to housing.

Subsequent to the survey, staff conducted focus groups to analyze housing in the City. The focus groups allowed for dedicated discussion that highlighted residents' perspectives on housing topics, including state-mandated housing and where such housing will be compatible in the City.

## F. Focus Groups

On January 26 and 27, 2021, the City conducted two evenings of focus groups to obtain qualitative data to augment the survey results, specifically housing. To accomplish this, staff collected data on residents' opinions about the City, with an emphasis on existing and future housing.

Due to the COVID-19 pandemic, the focus groups were administered through an online platform called Discuss IO. There were four focus groups totaling 16 participants (i.e., four people per group), and the duration of each meeting was approximately 90 minutes. Each focus group consisted of participants with diverse age, gender, ethnicity, home tenure, and length of residence. See Appendix A-F for focus group takeaways.

## G. Stakeholder Meetings with Major Property Owners

City staff, with their consultant, Harris & Associates, coordinated stakeholder meetings with major property owners in the City to discuss potential opportunity sites for the Housing Element.

On January 28, 2021 and March 18, 2021, the City held meetings with the Irvine Company to solicit input in meeting Irvine's RHNA and provide ongoing updates on the work effort. City staff presented the final RHNA numbers and HEU requirements to the Irvine Company and shared potential strategies and opportunity sites for affordable units. Potential strategies included residential overlays, converting market rate housing to affordable housing, extending the term of affordability on units due to expire, and mixed-use developments. As the site inventory

On February 17, 2021 and March 30, 2021, the City also held meetings with FivePoint to solicit input in meeting Irvine's RHNA. Similar to the Irvine Company, City staff shared potential strategies and opportunity sites for affordable units. Potential strategies included increasing density near transit, updating the Inclusionary Ordinance requirements and in-lieu fees, and density bonus incentives.

On May 6, 2021, the City held a follow-up meeting with FivePoint and the Irvine Company to continue discussions regarding potential housing policy considerations and the State mandated site inventory requirements.

On June 24, 2021 and June 25, 2021, the City met with the Irvine Company and FivePoint, respectively, to share progress on the site inventory.

## H. AB 52 and SB 18 – Tribal Consultation

To ensure compliance with Assembly Bill 52 (Chapter 532, Statutes of 2014) and Senate Bill 18 (Gov. Code Section 65352.3(a)(1) and Section 65562.5), the City contacted the Native American Heritage Commission to obtain the Tribal Consultation List. On February 8, 2021, City staff mailed letters to all California Native American tribes from the consultation list and City's AB 52 notification list notifying everyone about the 6$^{th}$ Cycle Housing Element Update.

Staff did not receive any letters of concern. See Appendix A-H for sample letter, mailing list, and responses received.

## I. City Council Scoping Session (February 9, 2021)

On February 9, 2021, the City held a City Council Scoping Session for the Housing Element Update in accordance with the General Plan amendment procedures in City Council Resolution No. 87-108.

The purpose of the Scoping Session was to introduce the 6th Cycle Housing Element Update and identify issues that should be addressed during the update process. During the Scoping Session, the City provided an overview of the update, which consisted of the draft 2021-2029 Regional Housing Needs Assessment (RHNA), potential Housing Element strategies, project timeline, and public outreach strategies.

The City advertised the scoping session through a citywide public meeting notice, which was posted at the public bulletin boards and published in the Irvine World News (IWN) on January 21, 2021.

See Appendix A-I for references to the HEU Scoping Session Presentation, staff report, public bulletin boards posting notice, and affidavit of publication, meeting agenda, and input received.

## J. Planning Commission Study Session (February 18, 2021)

On February 18, 2021, the City held a Planning Commission study session to introduce the project. Similar to the City Council Scoping Session, the purpose of the study session was to give an overview of the Housing Element Update process and requirements. The presentation consisted of the draft 2021-2029 RHNA, potential strategies, project timeline, and public participation efforts.

The City advertised the Planning Commission Study Session through press releases, social media accounts, email interest lists, the HEU website, and a citywide public notice. The citywide public notice was also published in the Irvine World News on January 21, 2021.

See Appendix A-J for references to the Study Session HEU PowerPoint Presentation, staff report, email interest list, press release, public notice, affidavit of publication, meeting agenda, and input received.

## K. Future Housing Sites Outreach Letters

In preparing for the Sites Inventory Analysis, City staff identified potential opportunity sites and mailed outreach letters to those property owners. The purpose of these letters was to gauge interest of property owners in either converting their site for residential purposes or developing residential homes in combination with their existing use, within the next eight years. The general and opportunity sites letters were translated in seven additional languages, including Chinese (Traditional and Simplified), Korean, Vietnamese, Japanese, Spanish, Farsi, and Arabic.

City staff mailed the outreach letters on the following dates:

- March 1, 2021 - The City sent out general outreach letters to 2,278 unique property owners in Planning Areas 32 through 36 (Irvine Spectrum and Irvine Business Complex areas).
- March 9, 2021 - The City sent out 30 additional opportunity sites letters targeting specific property owners of commercial offices, commercial recreation centers, manufacturing and industrial uses.
- March 26, 2021 - The City sent out letters to 100 religious institutions to gauge their interest in developing residential units in combination with their existing religious institution.
- May 3, 2021 - The City sent out 28 letters to hotels to gauge their interest in developing residential units on specific floors or the entire hotel, or policies to house hotel workers on-site.

See Appendix A-K for Outreach Letters and related mailing lists.

## L. Focused Community Workshop #1 (March 16, 2021)

As a follow-up to the future housing sites outreach letters, the City held a virtual community workshop on March 16, 2021 to present the 6$^{th}$ Cycle Housing Element Update. The workshop targeted stakeholders in the Irvine Business Complex (IBC) and Spectrum areas, specifically property owners, commercial real estate brokers, the Building Industry Association (BIA), Irvine Chamber of Commerce, and the general public. The City advertised the community workshop through an email notifications and the HEU website. All attendees were required to register prior to attending the workshop, and 29 attendees participated in the meeting.

The meeting was hosted over Zoom and featured a PowerPoint presentation summarizing the Housing Element Update process and work effort focusing on gauging property owner interest in being designated as a future housing site (i.e., opportunity site) as a precursor to developing the site inventory analysis. The workshop also consisted of a live Question and Answer (Q&A) segment. The City posted the PowerPoint presentation and Q&A handout on the City's HEU website. See Appendix A-L for further details, which also includes all correspondence with property owners/representatives expressing interest in their property being included for consideration in the housing element site inventory.

As a follow-up on May 4, 2021, City staff met with key IBC stakeholders in a smaller group setting to discuss potential housing strategies under consideration and next steps in the update process.

## M. Stakeholder Meeting with Irvine Unified School District (April 1, 2021)

On April 1, 2021, the City held a stakeholder meeting with the Irvine Unified School District (IUSD) to provide an overview of the project. The meeting included a robust discussion about the City's final RHNA allocation and its potential impact on school facilities and services. As a result, IUSD staff provided a presentation on the HEU/RHNA to the school district board at their special facilities study session meeting on May 18, 2021. Refer to Appendix A-M for further details.

## N. Stakeholder Meetings for Affordable Housing (April and May 2021)

City staff with their consultant, Harris & Associates, held meetings with various Affordable Housing developers to discuss housing policies that would encourage affordable housing in the City.

Staff met with the several developers on the following dates:

- April 22, 2021 – Related California
- April 29, 2021 -- Bridge Housing, Impact Housing, C&C Development, and Orange County Community Housing Corporation.
- April 29, 2021 – Innovative Housing Opportunities
- May 6, 2021 -- Jamboree Housing
- May 12 and May 20, 2021-- Irvine Community Land Trust (ICLT)

During the meetings, the City provided an overview of the Housing Element, which included the final RHNA allocation, potential site opportunities, and the Affirmatively Furthering Fair Housing (AFFH) requirements. Additionally, staff asked a series of questions related to the strategies, constraints, and challenges of providing affordable housing in the City to facilitate a broad and open dialogue. The meeting discussion guide included:

a) What are some challenges and opportunities you face as a developer while trying to develop affordable housing in Irvine?

b) Are there any constraints with obtaining loans (construction and/or permanent) for a project in Irvine?

c) Have you encountered any programs, procedures, or incentives in other cities that have significantly facilitated housing development?

d) Is funding for affordable housing severely limited and not sufficient for the need, what types of things can the City do to incentivize affordable housing projects (e.g., zoning, fee deferrals, streamlining, etc.)?

e) Have you considered a project in Irvine within the last 3 years? Why or why not?

f) In your opinion, what are some creative housing solutions that would help a city like Irvine develop more affordable housing? Would implementing a by-right affordable housing development overlay help?

g) Are you interested in potentially partnering with a church or religious institution for a project (per recently passed AB 1851)? What could the City do to assist?

See Appendix A-N for a summary of the discussions from the affordable housing stakeholder meetings. The summary is aggregated to maintain anonymity as requested by some participants.

## O. General Community Workshops #2 and #3 (April 22 and 29, 2021)

On April 22, 2021 and April 29, 2021, the City held virtual community-wide workshops to present the 6th Cycle Housing Element Update. The purpose was to capture all segments of the community including economic, cultural, age, and special needs.

The City advertised the community workshops through press releases, social media announcements, email notifications, the HEU website, and a flier, which was translated in Chinese (Traditional and Simplified), Korean, Japanese, Vietnamese, Spanish, Farsi, and Arabic. Copies of the community workshop fliers are included in Appendix Section A-D.

Additionally, Mayor Khan announced the upcoming workshops at the April 13, 2021 City Council meeting. Additional workshop announcements were made at various commissions and committee/board meetings such as the Senior Citizen Council and Sports Committee during their regular meetings in early- to mid-April 2021. Attendees registered on the City's HEU website prior to attending the workshop. However, attendees were also able to access the workshops via the link provided on the City's website. As an alternative, a phone dial-in option was offered.

On April 22, 2021, 105 participants attended the 10 a.m. workshop and on April 29, 2021, 92 participants attended the 5:30 p.m. workshop. Both meetings were hosted over Zoom and featured a PowerPoint presentation summarizing the Housing Element Update process and work effort. Additionally, the workshop allowed attendees to participate in live polling and a Q&A segment. The City also posted the PowerPoint presentations, meeting recordings, and polling results on the City's HEU website, www.cityofirvine.org/HEUpdate. See Appendix A-O for further details.

## P. At-Risk Affordable Housing Outreach

City staff mailed letters to all affordable housing providers (non-Irvine Company) identified as having affordable units expiring during the eight-year planning period (2021-2029) associated with the 6th cycle Housing Element. Five letters were mailed as follows: Families Forward (2), Harvard Manor, Jamboree Housing, and Orange County Community Housing Corporation.

As a result of these mailers, , City staff met with Families Forward representatives on May 20, 2021. There was a broad discussion about potential ways to preserve existing affordable housing by extending affordable housing covenants and related legal agreements. Staff also metwith Jamboree Housing representatives on June 30, 2021. City staff will continue the dialogue with Families Forward and other providers in the coming months and years. See Appendix A-P for more details.

## Q. Draft Housing Element Release to Public

City staff hosted several public meetings to introduce the draft Housing Element to appointed officials as well as to the public as follows:

Planning Commission:

- July 1, 2021: Public meeting to review 6th cycle Housing Element requirements including public outreach efforts, housing needs assessment and RHNA, site inventory analysis, constraints, Housing Plan with goals, policies, programs, and quantified objectives, and review of past programs in the 5th cycle Housing Element. Additionally, highlight the draft site inventory and goals, policies, and programs.
- July 9, 2021: Release date of draft Housing Element document to Planning Commission members via email. Posted draft Housing Element document on-line on July 12, 2021 to commence public review.
- July 15, 2021 and August 5, 2021: Return to request that the Planning Commission review and authorize submittal of the draft 2021-2029 Housing Element to HCD for initial review.

CEQA documentation:

- Late Fall 2021 (anticipated): Release of Notice of Intent to adopt Initial Study/ Negative Declaration (IS/ND) and commence 30-day public review period.

Copies of the staff reports, presentations, meeting comments analyses, and correspondence received on or after July 1, 2021 that were available at the time of publication of this document are included in Appendix A-Q. Additional documents will be added as they become available.

## R. ALUC Review (TBD)

Staff anticipates presenting the draft HEU to the Airport Land Use Commission for Orange County (ALUC) on TBD, consistent with California Public Utilities Code Section 21676(b) requirements.

Appendix A-R includes the staff report, presentation, meeting agenda (not available at the time of publication, but will be added when the documents become available), and ALUC letter.

## S. 6th Cycle Housing Element Adoption Hearings (anticipated Winter 2021/2022)

Subsequent to the completion of the mandatory 60-day pre-submittal review to HCD, staff anticipates presenting the final HEU and IS/MND in accordance with California Environmental Quality Act (CEQA) Guidelines and requirements. The draft IS/ND along with comments received during the public review period, will be considered by the City in conjunction with the project adoption review/approval process.

- Planning Commission review and recommendation hearing(s) for adoption
- City Council hearing for adoption

Appendix A-S includes the staff reports, presentations, public notices, IWN affidavit of publications, and meeting agendas (not available at the time of publication, but will be added when the documents become available).

## T. Ongoing Engagement

City staff anticipates ongoing engagement to engage the public and stakeholders in the implementation of the housing element as follows:

| DESCRIPTION OF EFFORT | FREQUENCY | AUDIENCE |
|---|---|---|
| Housing Division hotline at 949-724-6114 | During City Hall office hours:<br>Monday-Thursday: 7:30 a.m.–5:30 p.m.<br>Friday: 8 a.m.–5 p.m. | On demand for public |
| Notifications of affordable housing-related news and updates | News and information when pertinent | Public by subscription via govdelivery system |
| Irvine's affordable housing webpage: cityofirvine.org/affordable-housing | On-going | 24/7 on demand for public |
| Annual progress reports to track implementation of the programs | Yearly | Decision-makers and the public |
| Participation in SCAG Regional Council meetings. | Monthly | Staff |
| Participation in OCCOG Technical Advisory Committee and Board of Director meetings | Monthly | OCCOG members |

# Public Engagement – Appendix A

## Summary of Sections

A. Outreach Coordinator (none – see narrative section)
B. Housing Element Update Webpage
C. Social Media and Email Outreach
D. Print Media
E. Community Outreach Survey - Summer 2020
F. Focus Groups - January 26 and 27, 2021
G. Stakeholder Meetings with Major Property Owners (none – see narrative section)
H. AB 52 and SB 18 - Tribal Consultation (refer to CEQA documentation in Project File No. 00832121-PGA for complete package)
I. City Council Scoping Session – February 9, 2021
J. Planning Commission Study Session – February 18, 2021
K. Future Housing Sites Outreach Letters
L. Focused Community Workshop 1 on Future Housing Sites – March 16, 2021
M. Stakeholder Meeting with Irvine Unified School District – April 1, 2021
N. Stakeholder Meetings for Affordable Housing
O. General Community Workshops 2 and 3 – April 22 and 29, 2021
P. At-Risk Affordable Housing Outreach
Q. Draft Housing Element Release to Public
R. ALUC Review – anticipated January 2022
S. 6th Cycle Housing Element Adoption Hearings – December 2021/January 2022
T. Ongoing Engagement (none – see narrative section)

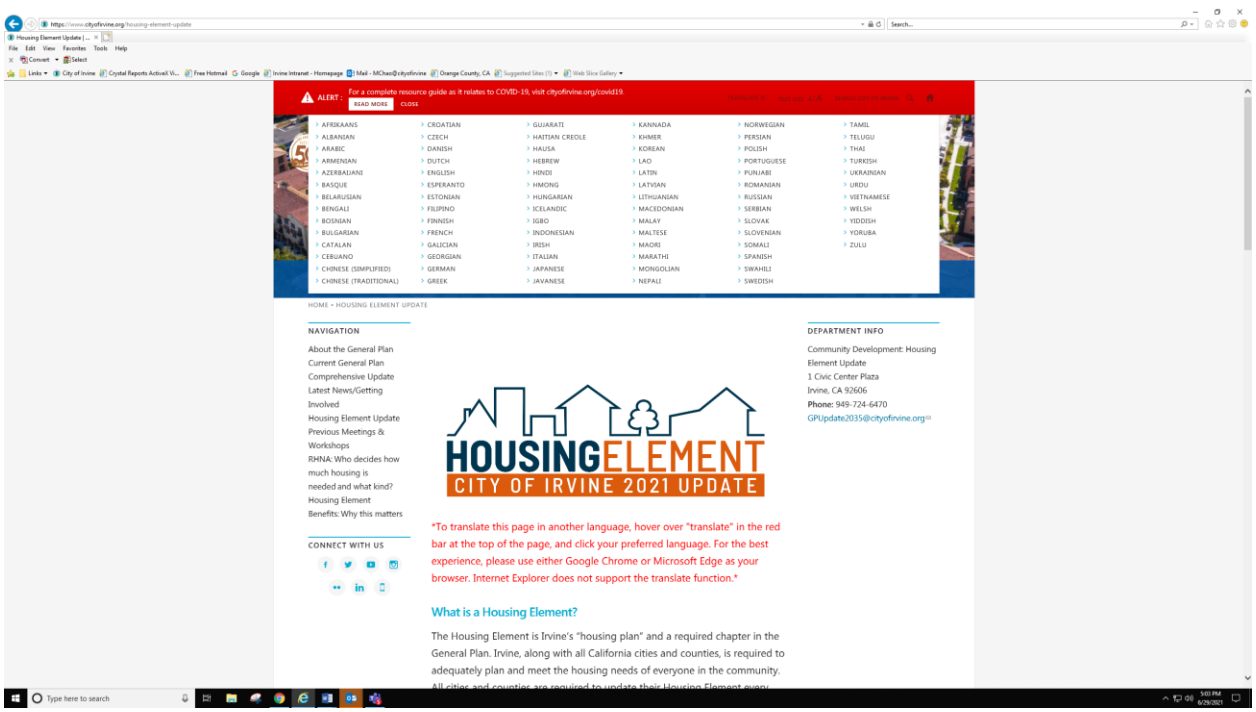
# Public Engagement

# Appendix A-B: Housing Element Update Webpage (www.cityofirvine.org/HEUpdate)

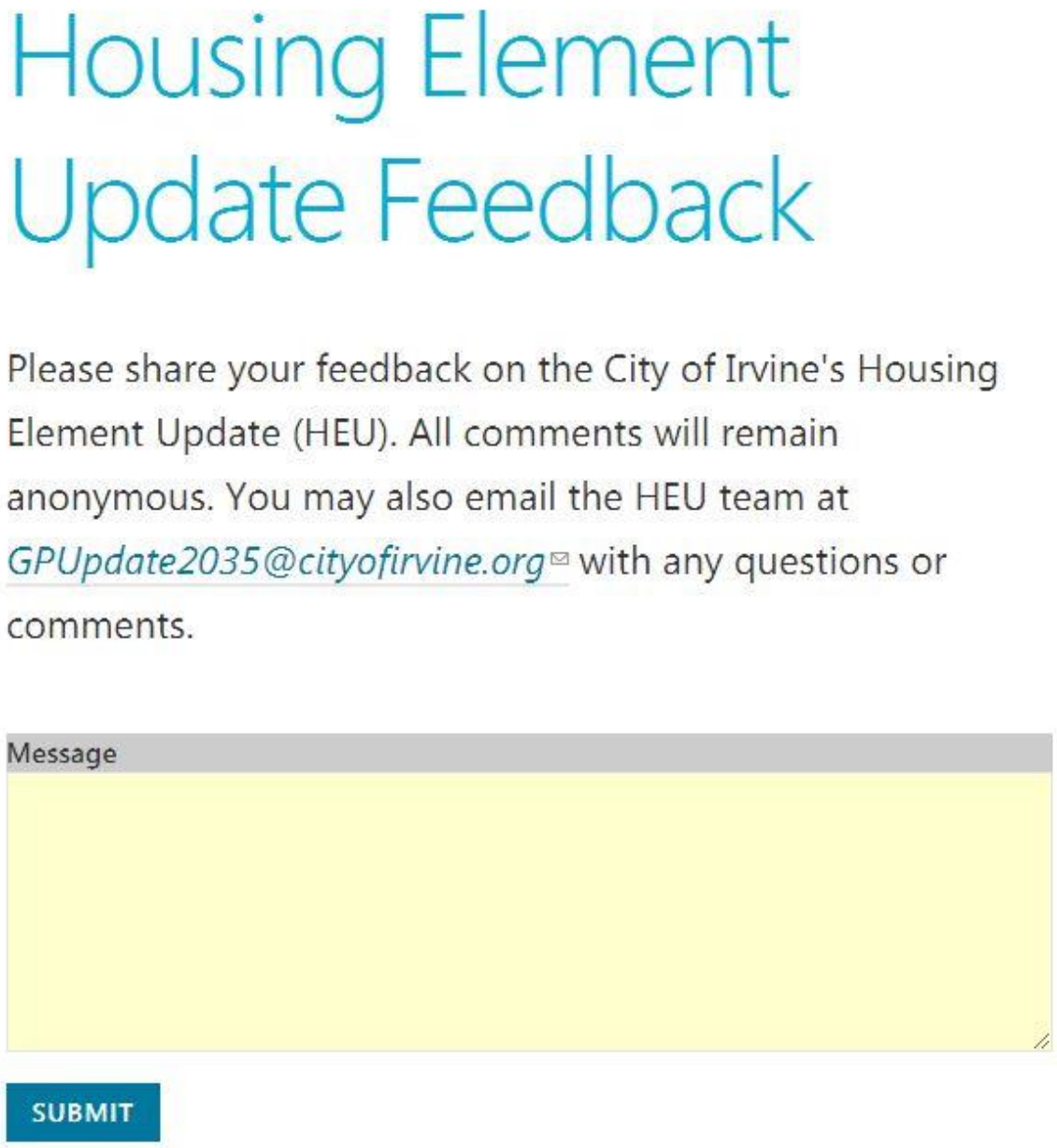
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2. Housing Element Update Comment Box
3. HEU Anonymous Comment Box - Comments Analysis
4. General Project Correspondence, including GPUpdate2035@cityofirvine.org emails

# 1. Website Translation Menu



## 2. Housing Element Update Comment Box



# 3. HEU Comment Box Comments Analysis

| Anonymous Comments and Questions Received (as of June 9, 2021) | How Comment was Addressed in HE |
|---|---|
| Create many opportunities for low-income families to buy houses in Irvine. | The policy and program under Goal 6 of the Housing Plan chapter encourages homeownership through educational programs and resources. |
| In order to serve those Irvine residents with developmental disabilities, it will be important to increase the Inclusionary Housing percentage from 15 - 20%. More units in the 25-35% median income range would also greatly benefit this group of Irvine residents. Enabling families to plan, long range, for their disabled children and allow this group to stay in Irvine would be a tremendous gift that benefits the entire city.<br><br>Thank you for your consideration.<br><br>Carol | Program PP-E.3, Inclusionary Housing Ordinance Update, of the Housing Plan chapter involves conducting a feasibility study to support increasing the existing inclusionary housing requirement from 15% (5% very low, 5% low, and 5% moderate) to 20% inclusionary where 15% will be split between very low and low income levels (TBD) and the remaining 5% for moderate income levels. Additionally, the Inclusionary Housing Ordinance reflect the 20% requirement, corresponding updated in-lieu fee (paid if affordable units are not provided on-site) to reflect current land and construction costs, and other related updates.<br><br>Additionally, Program PP-I.3 will leverage all funding options to ensure housing options include reasonable accommodations and supportive services for people with disabilities. |

# 4. General Project Correspondence including GPUpdate 2035@cityofirvine.org emails

St. Joseph Hospital

August 17, 2020

Dear City of Irvine:

St. Joseph Hospital is an acute-care not-for-profit faith-based hospital founded in 1929 by the Sisters of St. Joseph of Orange, located in the City of Orange, California. St. Joseph Hospital has 465 licensed beds, 379 of which are currently available, and a campus that is approximately 38 acres in size. The hospital's Primary Service Area includes the cities of Orange, Santa Ana, Tustin, Anaheim, Garden Grove, Villa Park, and Westminster. Major programs and services include cardiac care, critical care, diagnostic imaging, emergency medicine, obstetrics and behavioral/psychiatric services. St. Joseph Hospital dedicates resources to improve the health and quality of life for the communities it serves, with special emphasis on the needs of the economically poor and vulnerable.

Over the past two years, St. Joseph Hospital along with 13 other Community-based Organizations have been working together to address the issues of Economic Development, Housing, and Mental Health. In Central Orange County. The goal is to impact systemic change and determinants of health. In addition, St. Joseph Hospital has identified Homeless & Housing as one its key priorities of focus over the next three years. We will develop strategies to address lack of affordable housing under the framework of equity and racial disparities. We firmly believe that in order for communities to thrive, there must be equitable systems in place that support social consciousness, economic stability, and diverse development.

As you are aware, Housing Elements for the 6th cycle period (2021-29) are due to the California Department of Housing and Community Development by October 2021. St. Joseph Hospital understands the importance of each city's Housing Element in guiding housing programs, policies, zoning, and funding, as well as in reducing current obstacles to affordable housing development. We also understand the importance of Housing Elements in addressing racial equity in housing, particularly with the new statutory requirements mandating the inclusion of programs that affirmatively further fair housing in 6th cycle Housing Elements.[1] Together with local housing advocate groups, we support their efforts on ensuring that each jurisdiction increases affordable housing opportunities by implementing proven strategies, policies, and incentives that encourage affordable housing development.

St. Joseph Hospital seeks to ensure that jurisdictions engage the public in revising their Housing Elements. Public engagement is a necessary component of the Housing Element process as California Housing Element law states: "The local government shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element..." Broad participation and true engagement of the public increases the likelihood that the community members involved in the discussion and planning processes will support new housing strategies and housing developments. Public engagement should include participation from residents of diverse communities, housing consumers, service providers, and advocates.

As the City embarks upon the 2021-29 Housing Element update, St. Joseph Hospital requests that the City include us and our local housing advocates in the upcoming Housing Element review and evaluation of the current 5th cycle planning period goals, policies, and accomplishments.

St. Joseph Hospital further requests that the City conduct a robust public participation process for the 6th cycle Housing Element update and that it incorporate St. Joseph Hospital, affordable housing advocates, and residents of low-income communities in this process. We believe that you will achieve a stronger Housing Element update through diverse community participation, outreach and community planning process.

To ensure adequate public participation St. Joseph Hospital recommends the following:

1. The City should engage community participation and feedback at all stages of the Housing Element review and update. Participation should not be limited to public hearings.
2. The City should allow for various methods of engagement to encourage public participation. For instance, for members of the public who may not have access to the internet or a computer, or who are unable to use video applications, consistently provide an adequate telephone option – available in multiple languages – and generally ensure that members of the community who lack adequate technology can participate in meetings about the Housing Element review.
3. The City's public participation and outreach opportunities should be meaningful and create various platforms (for example, virtual, written, workshops, webinars, community meetings, and public hearings) for the engagement of community members who reside in lower-income communities, affordable housing partners, Legal Aid organizations, and advocates.
4. The City should create a diverse Housing Element Working Group to evaluate the current Housing Element policies and accomplishments. This Working Group could help create policies and recommendations for the new Housing Element update to ensure that you meet the housing needs of those who are most vulnerable in the City.
5. The City should include affordable housing advocates in any anticipated Housing Element Work Group and provide the opportunity for them to provide their analysis on 5th cycle RHNA progress and be a part of developing policy recommendations on the 6th cycle update.
6. The City should engage community organizations representing and advocating for families and individuals residing in lower-income communities to ensure that members of these communities can directly participate and that the City considers their perspective as part of the evaluation and creation of policies that create affordable housing.

We would appreciate the City giving us notice of any public meetings regarding the Housing Element. We look forward to working with the City to encourage effective housing policies that will help create balanced housing development and create much-needed affordable housing in our local communities. If you have any questions, please feel free to contact me at (714) 771-8000 Ext. 17535 or Cecilia.Bustamante-Pixa@stjoe.org.

Sincerely,

Cecilia Bustamante Pixa

Cecilia Bustamante Pixa, MPH, MHCML
Director, Community Health Investment

[1]California Government Code § 8899.50 (Assembly Bill 686).

August 18, 2020

www.kennedycommission.org
17701 Cowan Ave., Suite 200
Irvine, CA 92614
949 250 0909

City of Irvine
1 Civic Center Plaza
Irvine, CA 92606-5207

Dear City of Irvine:

The Kennedy Commission (the Commission), a broad-based coalition of residents and community organizations, advocates for the production of homes affordable for families earning less than $20,000 annually in Orange County. Formed in 2001, the Commission has successfully partnered and worked with Orange County jurisdictions to create effective housing and land-use policies that have led to the new construction of homes affordable to lower-income working families.

As you are aware, Housing Elements for the 6th cycle planning period (2021-29) are due to the California Department of Housing and Community Development by October 2021. The Commission understands the importance of each city's Housing Element in guiding housing programs, policies, zoning, and funding, as well as in reducing current obstacles to affordable housing development. We also understand the importance of Housing Elements in addressing racial equity in housing, particularly with the new statutory requirements mandating the inclusion of programs that affirmatively further fair housing in 6th cycle Housing Elements.[1] Our work focuses on ensuring that each jurisdiction increases affordable housing opportunities by implementing proven strategies, policies, and incentives that encourage affordable housing development.

Further, the Commission seeks to ensure that jurisdictions engage the public in revising their Housing Elements. Public engagement is a necessary component of the Housing Element process as California Housing Element law states: "The local government shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element..." Broad participation and true engagement of the public increases the likelihood that the community members involved in the discussion and planning processes will support new housing strategies and housing developments. Public engagement should include participation from residents of diverse communities, housing consumers, service providers, and advocates.

As the City embarks upon the 2021-29 Housing Element update, the Commission requests that the City include us in the upcoming Housing Element review and evaluation of the current 5th cycle planning period goals, policies, and accomplishments. The Commission further requests that the City conduct a robust public participation process for the 6th cycle Housing Element update and that it incorporate the Commission, affordable housing advocates, and residents of low-income communities in this process. We believe that you will achieve a stronger Housing Element update through diverse community participation, outreach, and community planning process.

To ensure adequate public participation the Commission recommends the following:

[1] California Government Code § 8899.50 (Assembly Bill 686).

1. **The City should engage community participation and feedback at <u>all</u> stages of the Housing Element review and update. Participation should not be limited to public hearings.**

2. **The City should allow for various methods of engagement to encourage public participation. For instance, for members of the public who may not have access to the internet or a computer, or who are unable to use video applications, consistently provide an adequate telephone option – available in multiple languages – and generally ensure that members of the community who lack adequate technology can participate in meetings about the Housing Element review.**

3. **The City's public participation and outreach opportunities should be meaningful and create various platforms (for example, virtual, written, workshops, webinars, community meetings, and public hearings) for the engagement of community members who reside in lower-income communities, affordable housing partners, Legal Aid organizations, and advocates.**

4. **The City should create a diverse Housing Element Working Group to evaluate the current Housing Element policies and accomplishments. This Working Group could help create policies and recommendations for the new Housing Element update to ensure that you meet the housing needs of those who are most vulnerable in the City.**

5. **The City should include The Commission in any anticipated Housing Element Working Group and provide the opportunity for the Commission to provide its analysis on 5th cycle RHNA progress and be a part of developing policy recommendations on the 6th cycle update.**

6. **The City should engage community organizations representing and advocating for families and individuals residing in lower-income communities to ensure that members of these communities can directly participate and that the City considers their perspective as part of the evaluation and creation of policies that create affordable housing.**

We would appreciate the City giving us notice of any public meetings regarding the Housing Element. We look forward to working with the City of Irvine to encourage effective housing policies that will help create balanced housing development and create much-needed affordable housing in our local communities. If you have any questions, please free to contact me at (949) 250-0909 or cesarc@kennedycommission.org.

Sincerely,

Cesar Covarrubias
Executive Director

**From:** Marika Poynter
**To:** Melissa Chao
**Subject:** FW: RHNA - 6th Cycle Housing Element
**Date:** Tuesday, January 19, 2021 12:22:43 PM
**Attachments:** image001.png

---

Melissa,

Could you add them to our interested parties list for the HEU? I don't think it needs to go any farther than that. We have a consultant to help us with the HE site inventory and don't need another consultant doing that work. They can provide their input at the public hearings.

Marika

**MARIKA A POYNTER, AICP** | PRINCIPAL PLANNER | CITY OF IRVINE
949-724-6456 | 1 Civic Center Plaza, Irvine, CA 92606 | mpoynter@cityofirvine.org

**From:** Brittany Irvin <birvin@provincegroup.com>
**Sent:** Tuesday, January 19, 2021 11:37 AM
**To:** Marika Poynter <mpoynter@cityofirvine.org>
**Cc:** Mark Kerslake <mkerslake@provincegroup.com>; Dean Maners <dmaners@provincegroup.com>
**Subject:** RHNA - 6th Cycle Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Marika,

My name is Brittany Irvin and I am writing to you about potential residential and mixed-use development opportunities in your City to satisfy your RHNA objectives. I work for the Province Group, which has been in business for 30 years and has an extensive entitlement and development track record of high quality for-sale and for-rent projects.

With the publication of Regional Housing Needs Assessment numbers, we are meeting with cities to identify and develop housing opportunity sites. I was hoping to set up a call or meeting with you to discuss your RHNA process and opportunities you may have. Do you or one of your senior staff members have any availability for a meeting or call with us over the next few days?

Also, if you have started the process to update your Housing Element for the new RHNA numbers, we'd appreciate being added to your public participation

list to receive notices of meetings, documents, etc. Could your staff please add us to the list?

Please feel free to reach out to myself or Dean Maners. Also, you can visit our webpage at www.ProvinceGroup.com for more information on our company. I look forward to hearing from you.

Thank you.

Brittany Irvin
***Province Group/Newport Equities LLC***
26 Corporate Plaza, Suite 260
Newport Beach, California 92660
Phone (949) 553-4800 ext. 8209
Fax (949) 706-7979
birvin@provincegroup.com



**From:** Dominic Mazza
**To:** GPUpdate 2035
**Subject:** RE: Housing Element Meetings
**Date:** Monday, January 25, 2021 4:12:42 PM
**Attachments:** image001.png
image003.png
image004.png

---

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Thanks Melissa. Yes, I would be interested in that stakeholder meeting.

**Dominic Mazza | Acquisitions & Development Associate**
dir 949.757.8473 | cel 310.633.0361

INTRACORP SW, LLC | 895 Dove, Suite 400 | Newport Beach CA 92660 | www.intracorphomes.com

**From:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Sent:** Monday, January 25, 2021 4:04 PM
**To:** Dominic Mazza <dmazza@intracorphomes.com>; GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** RE: Housing Element Meetings

Dear Dominic:

I can add you to the general HEU interest list.

Additionally, are you interested in participating in a future stakeholder meeting for the Irvine Business Complex area?

We are in the process of revamping the project webpage at www.cityofirvine.org/housingelementupdate, including adding an anticipated project timeline.

In the meantime, attached are two public meeting notices: one for the Feb 9 City Council scoping session and another for the Feb. 18 Planning Commission study session.

Please feel free to contact me with any questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Dominic Mazza <dmazza@intracorphomes.com>

**Sent:** Monday, January 25, 2021 2:39 PM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** Housing Element Meetings

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi,

Where can I find or sign up to see the schedule of meetings for the Housing Element update?

Thank you,

**Dominic Mazza | Acquisitions & Development Associate**
dir 949.757.8473 | cel 310.633.0361

INTRACORP SW, LLC | 895 Dove, Suite 400 | Newport Beach CA 92660 | www.intracorphomes.com

Hi,

**From:** GPUpdate 2035
**To:** B. Smith; GPUpdate 2035
**Subject:** RE: 6th Cycle Housing Elements
**Date:** Sunday, March 7, 2021 4:19:55 PM

Hi B. Smith:

I apologize for the typo. The draft HEU won't be available for review until Summer 2021.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** B. Smith <bsmith786@gmail.com>
**Sent:** Saturday, March 6, 2021 3:58 AM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** Re: 6th Cycle Housing Elements

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I'm not sure if this is a typo but you said that a draft was released summer 2020 that has passed does that mean that there's a draft available for me to review? If so please send me a link to it.

On Fri, Mar 5, 2021, 9:33 PM GPUpdate 2035 <GPUpdate2035@cityofirvine.org> wrote:

> Hi B. Smith:
>
> We anticipate releasing a draft Housing Element Update for public review in Summer 2020. The State deadline for submitting our Housing Element for certification is October 15, 2021. I will check with my colleagues on when the 6th cycle HEU becomes effective and get back to you. My understanding is that any residential building permits issued on or after July 1, 2021 are counted towards the 6th cycle RHNA allocation.
>
> For more information, please go to www.cityofirvine.org/housingelementupdate. We will update the webpages with more specific dates as work progresses and get closer to completing each task.
>
> Would you like to be added to the project email notification list?
>
> Thank you,
>
> **MELISSA CHAO | SENIOR PLANNER**
> P 949-724-6395 I F 949-724-6440
> mchao@cityofirvine.org

**From:** B. Smith <bsmith786@gmail.com>
**Sent:** Friday, March 5, 2021 1:41 PM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** 6th Cycle Housing Elements

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

On what date will the 6th cycle Housing Element be published & on what date will it become effective?

Thank You,
B. Smith

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 15, 2021 9:22 AM
**To:** 'TIM SHAW'
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: HEU Interest List

Hi Tim:

Thank you for reaching out. I have added you to the HEU project interest list.

City staff and our housing consultant are hosting a virtual meeting tomorrow. Please feel free to join us if you are interested and happen to be available at 3 p.m. There will be general community workshops in throughout April as well.

Thanks,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. Feel free to send this to others who may be interested.

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

Join Us for a Virtual Meeting

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on Tuesday, March 16, 2021 at 3 – 4:30 p.m. The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

Meeting Link:

Register in advance for this webinar:
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser.

Webinar ID:
958 7121 5807
Webinar Passcode:
City

If you would like to join by phone, dial one of the following numbers and use the Webinar ID and Passcode

US: +1 669-900-6833 or +1 346-248-7799
Webinar ID: 958 7121 5807
Passcode: 400813

MELISSA CHAO | SENIOR PLANNER
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

-----Original Message-----
From: TIM SHAW <tshaw265@gmail.com>
Sent: Saturday, March 13, 2021 9:21 AM
To: Melissa Chao <MChao@cityofirvine.org>
Subject: HEU Interest List

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please add me to the HEU interest list. Thanks Tim Shaw
11 Misty Run

Irvine CA 92614
(949) 300-9154

## Melissa Chao

**From:** GPUpdate 2035
**Sent:** Thursday, March 25, 2021 7:05 PM
**To:** Eduardo Santana; GPUpdate 2035; Amy Mullay; Charles Kovac
**Cc:** Gissell Garcia
**Subject:** RE: RHNA numbers

Hi Eduardo:

I added you and Gissell to the list.

If you know of any affordable developers that would be interested in participating, please forward their contact information/email to me.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Eduardo Santana <esantana@ihousing.us>
**Sent:** Thursday, March 25, 2021 12:46 PM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>; Amy Mullay <amullay@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Gissell Garcia <ggarcia@ihousing.us>
**Subject:** RE: RHNA numbers

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Yes, absolutely. Please include us.

**Eduardo "Edu" Santana**
**Impact Housing**
m: 213-479-0564

**From:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Sent:** Thursday, March 25, 2021 12:23 PM
**To:** Eduardo Santana <esantana@ihousing.us>; Amy Mullay <amullay@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Gissell Garcia <ggarcia@ihousing.us>
**Subject:** RE: RHNA numbers

Hi Eduardo

By the way as part of the housing element update, we are in the process of planning some affordable housing virtual meetings. Would that be something you and Gissell would be interested in participating in?

For more information on the housing element update, please click www.cityofirvine.org/housingelementupdate.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Eduardo Santana <esantana@ihousing.us>
**Sent:** Wednesday, March 24, 2021 5:46 PM
**To:** Amy Mullay <amullay@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Gissell Garcia <ggarcia@ihousing.us>
**Subject:** RE: RHNA numbers

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you Melissa. Moving you to bcc to spare your inbox.

Hello Amy and Charles,
Can we set up a short call in the next couple of days?

Thanks,
Edu

**From:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Sent:** Wednesday, March 24, 2021 5:19 PM
**To:** Eduardo Santana <esantana@ihousing.us>; GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Amy Mullay <amullay@cityofirvine.org>
**Subject:** RE: RHNA numbers

Hi Eduardo:

I've copied Charles Kovac, Housing Administrator, and Amy Mullay, Senior Planner, in our housing and neighborhoods team. They can assist you with this question.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Eduardo Santana <esantana@ihousing.us>
**Sent:** Wednesday, March 24, 2021 2:56 PM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** RHNA numbers

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi, my company builds unsubsidized low- and moderate-income housing. We have done some research to see what cities have reported significant numbers of moderate-income housing production in the current RHNA cycle and were surprised to find that Irvine has reported 13,000 units this cycle. I'd like to gain a better understanding of the composition of that housing stock and to know how the numbers were calculated.

Is there someone I can speak to about this?

Thanks,
Eduardo Santana
Impact Housing
213-479-0564

**From:** GPUpdate 2035
**To:** Shirley Marcum
**Cc:** GPUpdate 2035
**Subject:** RE: Housing Element city of Irvine2021 virtual workshops
**Date:** Tuesday, April 13, 2021 1:08:07 PM
**Attachments:** HEU Community Workshops Flier.pdf

Hi Shirley:

Attached is the community workshop flier. If you prefer, you can actually listen in via phone too. Please go to www.cityofirvine.org/HEUpdate for instructions on how to call in (instead of tuning in via Zoom virtual meeting). Once the two workshops are completed, we will also post the entire presentation online.

Staff is cognizant of the need for senior living and all its different levels of independent living.

Please don't hesitate email us with any thoughts and/or questions. I added you to the project interest list for notifications.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Shirley Marcum <shirlmar88@gmail.com>
**Sent:** Tuesday, April 13, 2021 9:30 AM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** Housing Element city of Irvine2021 virtual workshops

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Unfortunately I cannot view these workshops, but am very interested in them . If there are any 4-22nd and 4-29th brochures ,etc, kindly send some to me. I am a long time resident of Irvine since the early 70's and love Irvine. I feel that many of us are now seniors and we need new housing here for us too, such as senior apartments, senior independent living and on up to new Assisted Living places, too. I am hopeful that your committees will consider these places as well.
Thank you, Shirley Marcum shirlmar88@gmail.com

# Housing Element Update: Virtual Community Workshops



## We Need Your Input

The City of Irvine Housing Element is one of the seven mandated elements of the City's General Plan. It sets forth Irvine's strategy to preserve and enhance the community's residential character, expand housing opportunities for all economic segments, and provide guidance and direction for local government decision-making in all matters related to housing.

The City is currently updating the Housing Element for the 2021-2029 planning period, as required, to meet the housing needs of everyone in our community. We encourage all Irvine residents and stakeholders to help us plan the City's future housing needs and priorities.

Our interactive virtual workshops will provide a detailed overview of the Housing Element and update process, and ask for feedback on various topics including what the Housing Element Update goals should be for the 2021-2029 period.

To register for a virtual meeting and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate or call 949-724-6395.

## Virtual Workshops

Dates and times via Zoom:

**April 22, 2021**
10 a.m.–noon

**April 29, 2021**
5:30–7:30 p.m.

Workshops will be presented in English and include a presentation on the Housing Element and a discussion about the update. These meetings will be interactive and conducted online. Meeting participants can join by desktop, tablet, or phone. If you need language assistance, please email *mchao@cityofirvine.org* by April 30 to schedule an individualized meeting.

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

WE ARE IRVINE 1971-2021 50th Anniversary

**From:** Stephanie Takigawa
**To:** M J
**Cc:** GPUpdate 2035
**Subject:** RE:
**Date:** Tuesday, April 13, 2021 1:25:16 PM

---

Good afternoon MJ,

Thank you for reaching out. I've listed information on how to qualify for affordable housing, apply for affordable housing and information on developments under construction. Note that there is a lengthy wait time and the City of Irvine does not play a role in placing people into units. You will need to contact the apartment complexes individually to inquire about availability and to put your name on to the waitlist.

**To qualify:**

It is based on HUD assigned income limit (2020) and household size.

**To apply:**

The City of Irvine does not have any application as the City does not own any affordable units, or manage the waitlist and does not play a role in placing people into units. To obtain an application or inquire about availability, you will need to contact the existing rental properties in Irvine with affordable units individually. You can access detailed information on the property (i.e. phone number, address, number of units, etc.) by using the affordable housing interactive map or the affordable housing guide. Note that there's a pretty lengthy wait time for the existing properties with affordable units.

**Developments under construction:**

Currently there are no open interest lists. Once developers near construction completion of the upcoming developments, an interest list will become available and prospective tenants will be selected from the interest list through a lottery selection. For future interest lists, you can sign up to receive notifications of an interest list being available by subscribing here or checking thy City's affordable housing website for updates. A list of the upcoming developments can be found here.

If you're amenable to living in a City besides Irvine, please review the Orange County comprehensive listing which can be found here.

Best Regards,

**STEPHANIE TAKIGAWA** | HOUSING ANALYST | CITY OF IRVINE
949-724-7456 | 1 Civic Center Plaza, Irvine, CA 92606 | stakigawa@cityofirvine.org

**From:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Sent:** Tuesday, April 13, 2021 1:23 PM
**To:** M J <marjanjohari63@gmail.com>; GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Cc:** Stephanie Takigawa <STakigawa@cityofirvine.org>
**Subject:** RE:

Hi MJ:

This meeting does not address the waiting list for affordable housing, instead it is for future planning of housing in Irvine, including affordable units.

Please visit https://www.cityofirvine.org/affordable-housing or contact Stephanie Takigawa, Housing Specialist, at the above email for further assistance.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** M J <marjanjohari63@gmail.com>
**Sent:** Tuesday, April 13, 2021 10:32 AM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:**

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello. Could I ask a question? Is this meeting help me to solve my problem about affordable housing? Actually I need to live in affordable houses but I couldn't find any open list for this. Thank you.

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, May 4, 2021 9:26 AM
**To:** jeanajkim
**Cc:** Melissa Chao
**Subject:** RE: Request : City of Irvine to Host Housing Element Update Virtual Community Workshops.. Korean

Hi Jeana:

I wanted to check back with you to see if you would like to set-up a separate meeting with a Korean translator to discuss the Housing Element Update.

Please let me know by Friday, May 7, 2021.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, April 27, 2021 11:44 AM
**To:** jeanajkim <jeanajkim@gmail.com>
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Request : City of Irvine to Host Housing Element Update Virtual Community Workshops.. Korean

Hi Jeana:

I forgot to add earlier, please let me know if you would like to set-up a separate meeting to discuss.

Thanks again,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, April 27, 2021 11:41 AM
**To:** jeanajkim <jeanajkim@gmail.com>
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Request : City of Irvine to Host Housing Element Update Virtual Community Workshops.. Korean

Hi Jeana:

The April 29 community workshop itself will not be conducted in Korean.

We will need to set-up a separate meeting with a translator. The meeting will occur after April 30 because I need to wait to see if I receive additional requests for Korean language assistance.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** jeanajkim <jeanajkim@gmail.com>
**Sent:** Tuesday, April 27, 2021 11:24 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Request : City of Irvine to Host Housing Element Update Virtual Community Workshops.. Korean

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi.
I want to attend in City of Irvine to Host Housing Element Update Virtual Community Workshops.
Do you have a plan for Korean?
If you have it, let me know, please.
Thank you.

**From:** GPUpdate 2035
**To:** Brian Schmid; GPUpdate 2035
**Subject:** RE: Housing Element Update Site Inventory
**Date:** Friday, May 7, 2021 1:45:48 PM

Hi Brian:

The draft site inventory and housing element plan is anticipated to be released for public review in early summer. City staff and our consultant are currently preparing the documents.

I added your contact information to the HEU project email notification list.

Please feel free to contact me with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Brian Schmid <brianschmid43@gmail.com>
**Sent:** Friday, May 7, 2021 9:44 AM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** Housing Element Update Site Inventory

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning,

I'm interested in Irvine's new site inventory for the upcoming sixth cycle housing element update, but I can't find any clear guidance on the website, do you have anything that shows the inventory a little more clearly that you could send my way? Thank you!

Best,
Brian

Brian Schmid
Surface Warfare Officer | US Navy
C: 919.649.9456

## Melissa Chao

**From:** Emily Yau <emilyyau2020@yahoo.com>
**Sent:** Monday, June 21, 2021 10:45 AM
**To:** Melissa Chao
**Subject:** Re: Housing element update

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the update!

Emily Yau

On Monday, June 21, 2021, 09:52:02 AM PDT, Melissa Chao <mchao@cityofirvine.org> wrote:

Hi Emily:

Staff is anticipating releasing the draft HE document around the second week in July.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440

mchao@cityofirvine.org

**From:** Emily Yau <emilyyau2020@yahoo.com>
**Sent:** Monday, June 21, 2021 9:22 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing element update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Good morning.

I would like to check if there is any update info regarding the housing element. According to previous meetings and mentioned time lines, the public review of draft housing element should be around June 2021. Please correct me if I am wrong with the timeline. Also, if you have any updated info, please let us know.

Thank you,

Emily Yau

2152 Dupont Dr., Suite 200

Irvine, CA 92612

## Public Engagement

## Appendix A-C: Social Media and Email Outreach

## Table of Contents

1. Social Media Posts
2. Social Media Analytics
3. Community Link Newsletter
4. Project Email Notification List

# 1. Social Media Posts

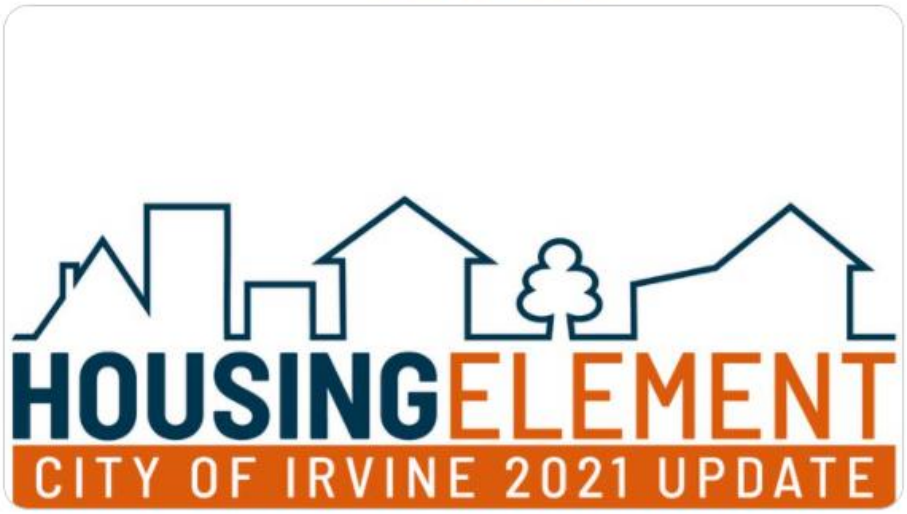
## Facebook



## Twitter

**City of Irvine**
@City_of_Irvine

The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study Session tomorrow, Feb. 18, at 5:30 p.m. regarding the Housing Element Update. To tune in and submit comments, visit bit.ly/2M0uxjf.




8:25 PM · Feb 17, 2021 · Twitter Web App

## Instagram


HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE
cityofirvine
cityofirvine Did you know? Every eight years the state requires cities and counties to update their Housing Element to adequately plan to meet the housing needs of everyone in the community.
The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study
Liked by orangecountyevents and others
FEBRUARY 17
Add a comment...
Post

# Nextdoor

City of Irvine
Public Information Office Linda Fontes • 17 Feb




**Planning Commission Study Session for the 6th Cycle Housing Element Update.**
Did you know? Every eight years the state requires cities and counties to update their Housing Element to adequately plan to meet the housing needs of everyone in the community.

The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study Session tomorrow, February 18, at 5:30 p.m. regarding the Housing Element Update.

To tune in to the Planning Commission meeting through WebEx or via a dial-in conference call line, visit bit.ly/2M0uxjf. The meeting agenda and details on how to submit comments on agenda items are also available on the webpage.

Posted to **Subscribers of City of Irvine**

# 2. Social Media Analytics

| DATE | SOCIAL MEDIA | POST | IMPRESSIONS | ENGAGEMENT | REACTIONS | CLICKS |
|---|---|---|---|---|---|---|
| 2.17.21 | Facebook | Did you know? Every eight years the state requires cities and counties to update their Housing Element to adequately plan to meet the housing needs of everyone in the community. The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study Session tomorrow, February 18, at 5:30 p.m. regarding the Housing Element Update. To tune in to the Planning Commission meeting through WebEx or via a dial-in conference call line, visit bit.ly/2M0uxjf. The meeting agenda and details on how to submit comments on agenda items are also available on the webpage. | 1,537 | 45 | | |
| 2.17.21 | Twitter | The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study Session tomorrow, Feb. 18, at 5:30 p.m. regarding the Housing Element Update. To tune in and submit comments, visit http://bit.ly/2M0uxjf. | 4,403 | 120 | | |
| 2.17.21 | Instagram | Did you know? Every eight years the state requires cities and counties to update their Housing Element to adequately plan to meet the housing needs of everyone in the community. The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study Session tomorrow, February 18, at 5:30 p.m. regarding the Housing Element Update. To tune in to the Planning Commission meeting through WebEx or via a dial-in conference call line, visit the link in bio. You can also find the meeting agenda and details on how to submit comments on agenda items at the link. . . . #housingelement #housingelementupdate #irvine #cityofirvine | 6,449 | 74 | | |
| 2.17.21 | Nextdoor | Did you know? Every eight years the state requires cities and counties to update their Housing Element to adequately plan to meet the housing needs of everyone in the community.<br><br>The City of Irvine is beginning the process of updating its Housing Element, and the Planning Commission is holding a Study Session tomorrow, February 18, at 5:30 p.m. regarding the Housing Element Update.<br><br>To tune in to the Planning Commission meeting through WebEx or via a dial-in conference call line, visit bit.ly/2M0uxjf. The meeting agenda and details on how to submit comments on agenda items are also available on the webpage. | 2,166 | 1 | | |
| 4.12.21 | Facebook Event | The City of Irvine is updating the Housing Element for the 2021-29 planning period and will be hosting two virtual community workshops. All Irvine residents and stakeholders are encouraged to attend the virtual workshops to help plan the City's future housing needs and priorities.<br><br>The community workshops will be hosted by Irvine's Community Development department and will include a presentation on the Housing Element and an open discussion about the update. The public is invited to attend the meetings.<br><br>Virtual Community Workshop dates and times via Zoom:<br>April 22, 10 a.m. to noon<br>April 29, 5:30 p.m. to 7:30 p.m.<br><br>To register for a virtual meeting and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate or call 949-724-6395. If you need language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.<br><br>In addition to English, program information is available on the website in Chinese, Korean, Spanish, Vietnamese, Arabic, Japanese, and Farsi. | 1,347 | 19 | | 10 |
| 4.12.21 | Instagram | We are updating the Housing Element for the 2021-29 planning period and we want your input.<br><br>Please attend one of the following virtual community workshops to help plan the City's future housing needs and priorities:<br>🏠 April 22, 10 a.m. to noon<br>🏠 April 29, 5:30 p.m. to 7:30 p.m.<br><br>The community workshops will include a presentation on the Housing Element and an open discussion about the update<br><br>To register for a workshop, and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate or call 949-724-6395. For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.<br><br>In addition to English, program information is available on the website in Chinese, Korean, Spanish, Vietnamese, Arabic, Japanese, and Farsi.<br>.<br>.<br>.<br>#housingelement #housingelementupdate #housing #communityworkshop #shareyourinput #irvine #cityofirvine | 6,773 | 80 | | |
| 4.12.21 | Twitter | We're updating the Housing Element for 2021-29 & we want your input. Please attend one of these virtual community workshops to help plan the City's future housing needs and priorities:<br>🏠April 22, 10 a.m. to noon<br>🏠April 29, 5:30 p.m. to 7:30 p.m.<br><br>http://cityofirvine.org/HEUpdate | 4,367 | 72 | | |
| 4.12.21 | Nextdoor | The City of Irvine is updating the Housing Element for the 2021-29 planning period and will be hosting two virtual community workshops. All Irvine residents and stakeholders are encouraged to attend the virtual workshops to help plan the City's future housing needs and priorities. The community workshops will be hosted by Irvine's Community Development department and will include a presentation on the Housing Element and an open discussion about the update. The public is invited to attend the meetings. Virtual Community Workshop dates and times via Zoom: April 22, 10 a.m. to noon April 29, 5:30 p.m. to 7:30 p.m. To register for a virtual meeting and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate or call 949-724-6395. If you need language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. In addition to English, program information is available on the website in Chinese, Korean, Spanish, Vietnamese, Arabic, Japanese, and Farsi. | 1,943 | 2 | | |
| 4.13.21 | Twitter | We invite you to attend a virtual community workshop this month to help plan the City's future housing needs and priorities. Details on the Housing Element Update are available in multiple languages at http://cityofirvine.org/HEUpdate. Please join us and share your input! | 3,393 | 38 | | |
| 4.16.21 | Facebook | Help plan the City's future housing needs and priorities. Attend one of our virtual workshops to learn about and share input on the City's Housing Element Update:<br>April 22, 10 a.m. to noon<br>April 29, 5:30 p.m. to 7:30 p.m.<br><br>To register for a workshop, and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.<br><br>For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. | 1,177 | 14 | | |
| 4.16.21 | Twitter | Help plan the City's future housing needs and priorities. Attend a virtual workshop on April 22 or April 29 to learn about and share input on the City's Housing Element Update. Information is available in multiple languages at http://cityofirvine.org/HEUpdate. | 4,757 | 76 | | |

| | | | | | |
|---|---|---|---|---|---|
| 4.16.21 | Instagram | Help plan the City's future housing needs and priorities. Attend one of our virtual workshops to learn about and share input on the City's Housing Element Update:<br><br>🏠 April 22, 10 a.m. to noon<br>🏠 April 29, 5:30 p.m. to 7:30 p.m.<br><br>To register for a workshop, and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.<br><br>For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.<br>.<br>.<br>.<br>#housingelementupdate #housingelement #housingneeds #communityworkshop #irvine #cityofirvine | 5,902 | 61 | |
| 4.19.21 | Facebook | We are updating the City's Housing Element and we need your input. Help plan for future housing needs and priorities in our community by attending one of these virtual workshops:<br>April 22, 10 a.m. to noon<br>April 29, 5:30 p.m. to 7:30 p.m.<br><br>To register for a workshop, and for additional information about the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.<br><br>For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. | 1,016 | 12 | |
| 4.19.21 | Twitter | We are updating the City's Housing Element and we need your input. Help plan for future housing needs and priorities in our community by attending one of these virtual workshops:<br><br>🏠 April 22, 10 a.m. to noon<br>🏠 April 29, 5:30 p.m. to 7:30 p.m.<br><br>http://cityofirvine.org/HEUpdate | 4,287 | 84 | |
| 4.19.21 | Instagram | We are updating the City's Housing Element and we need your input.<br><br>Help plan for future housing needs and priorities in our community by attending one of these virtual workshops:<br>🏠 April 22, 10 a.m. to noon<br>🏠 April 29, 5:30 p.m. to 7:30 p.m.<br><br>To register for a workshop, and for additional information about the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages. For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.<br>.<br>.<br>.<br>#housingelementupdate #housingelement #housingneeds #communityworkshop #irvine #cityofirvine | 5,745 | 57 | |
| 4.19.21 | Nextdoor | We are updating the City's Housing Element and we need your input. Help plan for future housing needs and priorities in our community by attending one of these virtual workshops:<br><br>ðŸ April 22, 10 a.m. to noon<br>ðŸ April 29, 5:30 p.m. to 7:30 p.m.<br><br>To register for a workshop, and for additional information about the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.<br><br>For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. | 2,001 | 0 | |
| 4.20.21 | Facebook Stories | | 329 | | 11 |
| 4.20.21 | Instagram Stories | We need your input! Join us April 22 or April 29 to help plan for future housing needs in Irvine. | 2,117 | 60 Taps Back | |
| 4.21.21 | Instagram Stories | SWIPE UP TO REGISTER THURSDAY, APRIL 22 10 A.M. TO NOON HELP PLAN THE FUTURE OF HOUSING IN IRVINE! | 3,070 | 218 Story Taps Back | |
| 4.21.21 | Facebook Stories | | 179 | | 8 |
| 4.25.21 | Facebook | Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m. The workshop will include a presentation on the Housing Element and an open discussion about the update. To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages. For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. #WeAreIrvine | 1,205 | 15 | |
| 4.25.21 | Twitter | Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m. To register for the workshop and learn more, visit http://cityofirvine.org/HEUpdate . Information is available in multiple languages. #WeAreIrvine | 13,176 | 260 | |
| 4.25.21 | Instagram | Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m. The workshop will include a presentation on the Housing Element and an open discussion about the update. To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages. For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. . . . .<br>#WeAreIrvine #HousingElementUpdate #Housing #HousingWorkshop #Irvine #CityOfirvine | 6,053 | 59 | |
| 4.25.21 | Nextdoor | Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m.<br><br>The workshop will include a presentation on the Housing Element and an open discussion about the update.<br><br>To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.<br><br>For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. | 1,991 | 0 | |
| 4.28.21 | Twitter | Help us plan Irvine's future housing needs & priorities at a virtual workshop tomorrow! 🗓April 29 5:30 to 7:30 p.m. To register and learn more, visit http://cityofirvine.org/HEUpdate . Information is available in multiple languages. #WeAreIrvine | 4,139 | 72 | |
| 4.28.21 | Facebook Stories | | 251 | | 12 |
| 4.28.21 | Nextdoor | Help us plan our future housing needs and priorities at a virtual workshop tomorrow, April 29, 5:30 to 7:30 p.m.<br><br>The workshop will include a presentation on the Housing Element and an open discussion about the update.<br><br>To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.<br><br>For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting. | 2599 | 2 | |

# 3. Community Link Newsletter (17,176 email recipients)



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**Subscribe to updates from City of Irvine**

Email Address e.g. name@example.com

Subscribe

**Share Bulletin**

## Community Link Newsletter

City of Irvine sent this bulletin at 04/16/2021 03:00 PM PDT




Mayor **Farrah N. Khan** ▫ Vice Mayor **Tammy Kim** ▫ Councilmember **Larry Agran** ▫ Councilmember **Mike Carroll** ▫ Councilmember **Anthony Kuo**

**April 16, 2021 | Edition 16**

### Welcome to the Community Link Newsletter

Our weekly newsletter aims to keep residents and businesses connected to us and all that is going on in and throughout the City. You can connect with us and learn more by visiting our website at *cityofirvine.org*, and following us on our social media channels, listed at the bottom of this email. We look forward to connecting with you.




### Housing Element Update Virtual Community Workshops

The City of Irvine is updating the Housing Element for the 2021-2029 planning period and will be hosting two virtual community workshops in April. All Irvine residents and stakeholders are encouraged to attend the virtual workshops to help plan the City's future housing needs and priorities.

The workshops will be held April 22, from 10 a.m. to noon; and April 29, from 5:30 to 7:30 p.m. via Zoom. Visit *cityofirvine.org/HEUpdate* to register for a meeting, view program material in eight languages, and learn more. If you need language assistance, please email *mchao@cityofirvine.org* by April 30 to schedule an individual meeting.




### Participate in the National Mayor's Challenge for Water Conservation

Mayor Farrah N. Khan is joining mayors across the country for the 10th Anniversary of the National Mayor's Challenge for Water Conservation by asking residents to make a long-term commitment to manage water resources more wisely.

The annual challenge, April 1- 30, is a nonprofit national community service campaign that encourages leaders to inspire their residents to make a series of simple pledges to use water more efficiently, reduce pollution, and save energy. Visit *mywaterpledge.com* to take the pledge.

# 4. Project Email Notification List (5,233 emails)

As of May 4, 2021, there are 4,883 subscribers for the General Plan Update (GPU), which includes the Housing Element Update work effort. Based on stated City privacy policies for the GovDelivery system, provided emails are used by the City only for purposes of developing statistics related to the questions asked in any GPU surveys and for future communications concerning the GPU. Therefore, the GPU email list has not been included.

As of June 30, 2021, the HEU project interest list is as follows:

**Outreach Efforts (172 emails and/or mailing addresses):**

| | |
|---|---|
| Cecilia Bustamante Pixa, MPH, MHCML | Cecilia.Bustamante-Pixa@stjoe.org |
| Cesar Covarrubias | cesarc@kennedycommission.org |
| Mildred Elizabeth Perez | mildredp@kennedycommission.org |
| Brittany Irvin | birvin@provincegroup.com |
| Dean Maners | dmaners@provincegroup.com |
| Dominic Mazza | dmazza@intracorphomes.com |
| Tim Shaw | tshaw265@gmail.com |
| Daisy Cruz | daisyc@kennedycommission.org |
| Ryan Aeh | ryan@cityventures.com |
| Tim Strader | tj@starpointeventures.com |
| Kurt Cutler | kurtc@socalgrading.com |
| Stan Gardner | sgardner@tgfcpas.com |
| Russell Fluter | fluterproperties@gmail.com |
| Karsen Wang | karsen@actionsales.com |
| Terence Wong | terence@actionsales.com |
| Dale Lyon | |
| Emily Yau | emilyyau2020@yahoo.com |
| Jennifer Amaya | jenniferawon@yahoo.com |
| Mark Dershem | markdershem@gmail.com |
| Mark Dershem | rapidfire1@cox.net |
| Judith and Howard Julinek | judithjelinek@icloud.com |
| Ygal Sonenshine | ygal@sonenshineenterprises.com |
| Farhad Abdollahi | farhad@duramar.com |
| Armad Nahidi (sp?) | |
| John Robert Bercaw | |
| Albert Lee | |
| June Sands | |
| John | john@telxpress.com |
| Junghwan Choi | kubdoc@yahoo.com |

| | |
|---|---|
| Lele Kyles | huxieally@hotmail.com |
| Alex Gill | agill@intracorphomes.com |
| Adam Habibi | |
| Nasir Javed | njaved@princetonusa.com |
| Ray Daitch | njaved@princetonusa.com |
| Steve Espinosa | espo@lightingcompany.net |
| Kim Espinosa | cdmhunytea@roadrunner.com |
| Gary Wang | gwang@derbyholdings.com |
| Oliver Chee | ochee@derbyholdings.com |
| Diane Clark | diane.clark@kidder.com |
| Andrea Maloney | amaloney@sapettorealestate.com |
| Pam Sapetto | psapetto@sapettorealestate.com |
| Steve Kane | skane@ckdcounsel.com |
| Izzak Mireles | IMireles@avcity.org |
| Jeremy Dean Carver | CarverJ@pripd.com |
| Doug Sterner | SternerDM@Pripd.com |
| George Joseph P | georgejp@pacific-aa.com |
| Matthew Toh | matthewtoh@pacificpharma.biz |
| Subhranshu Tripathy | subhran@pacificpharma.com |
| Michelle Le | michelle.le@pacificpharma.com |
| Alex Portney | sbl.alex@gmail.com |
| Lilia Luo | calsources@msn.com |
| Tim Shaw | tshaw265@gmail.com |
| Sam Kabab | sam@4optima.com |
| Andy White | andy.white@colliers.com |
| Fred Karam | karam.matt@gmail.com |
| Jennifer Deppe Karam | jdepkaram@cox.net |
| Mark Zadeh | fly@villatravel.com |
| Mike Misera | mike@spcnb.com |
| Agnes Slater | aslater@griffincapital.com |
| Mitch Bloom | mitchb@crownassoc.com |
| Michael Brewer | brewer647@gmail.com |
| Kyle Brown | kylebrown@ngwellness.com |
| Steven Brown | stevenbrown@ngwellness.com |
| Terry Lee | terry@apccusa.com |
| Sidika Kilic | kilicsidika@gmail.com |
| Scott Peotter | speotter@aslanco.com |
| Erin Oskorus | erinoskorus@savala.com |
| Massis Chahbazian | massis@theprintery.com |

| | |
|---|---|
| B. Smith | bsmith786@gmail.com |
| Dave Barisic | dave@brandywine-homes.com |
| USED | awood@bildfoundation.org |
| USED | agill@intracorpcompanies.com |
| USED | larry.schuler@cbre.com |
| USED | debra@developersedge.com |
| USED | leonard@roseequities.com |
| USED | brent@roseequities.com |
| USED | ryan@cityventures.com |
| USED | larry.schuler@cbre.com |
| USED | rpuffer@intracorphomes.com |
| USED | psapetto@sapettorealestate.com |
| USED | karen@pacificplanninggroup.com |
| USED | JSDavis@irvinecompany.com |
| USED | ps@starpointeventures.com |
| USED | dmazza@intracorphomes.com |
| USED | carverj@pripd.com |
| USED | todd@c-cdev.com |
| USED | karsen@actionsales.com |
| USED | josh.goldman@gemdaleusa.com |
| USED | emilyyau2020@yahoo.com |
| USED | andoniudevelopment@gmail.com |
| USED | mark@irvineclt.org |
| USED | dgehman@danielian.com |
| USED | tj@starpointeventures.com |
| USED | joel.lc@uci.edu |
| USED | sylvia_walker@hotmail.com |
| USED | izzakmireles@yahoo.com |
| USED | stevengeier412@gmail.com |
| USED | chuongv@gmail.com |
| USED | jorden@sms-arch.com |
| USED | cesarc@kennedycommission.org |
| USED | cody.mendoza@mail.house.gov |
| USED | farhad@duramar.com |
| USED | sbl.alex@gmail.com |
| USED | markdershem@gmail.com |
| USED | josh.goldman@gemdaleusa.com |
| USED | terence@actionsales.com |
| USED | judithjelinek@icloud.com |
| USED | ygal@sonenshineenterprises.com |
| USED | farhad@duramar.com |

| | |
|---|---|
| USED | john@telxpress.com |
| USED | agill@intracorphomes.com |
| USED | SternerDM@Pripd.com |
| USED | CarverJ@Pripd.com |
| USED | cpierson@intracorphomes.com |
| USED | amaloney@sapettorealestate.com |
| USED | mark@irvineclt.org |
| USED | brent@roseequities.com |
| USED | rpuffer@intracorphomes.com |
| USED | john@telxpress.com |
| USED | jtreinen@griffincapital.com |
| USED | dgehman@danielian.com |
| USED | karsen@actionsales.com |
| USED | carverj@pripd.com |
| USED | elizabeth@peopleforhousing.org |
| USED | huixinz2@uci.edu |
| USED | felicitynf@aol.com |
| USED | tshaw265@gmail.com |
| USED | pat7oaks@gmail.com |
| USED | lreyesru@uci.edu |
| USED | Lizzie.Cootsona@asm.ca.gov |
| Karen Murphy | karen@pacificplanninggroup.com |
| USED | cesarc@kennedycommission.org |
| USED | larry.schuler@cbre.com |
| USED | sbl.alex@gmail.com |
| USED | andoniudevelopment@gmail.com |
| USED | matthew.macher@gemdaleusa.com |
| USED | josh.goldman@gemdaleusa.com |
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| USED | dmazza@intracorphomes.com |
| Erik Pfahler | erik@borsteinenterprises.com |
| Craig Borstein | Craig@borsteinenterprises.com |
| Loren Borstein | Loren@borsteinenterprises.com |
| John Brand | jbrand@sentre.com |
| Mia Stele | mstele@pacificwest.cc |
| Hadi | hadioc@gmail.com |
| Sean Cao | sean.cao@camphorpartners.com |
| Patrick Rios | patrick.rios@camphorpartners.com |
| Pastor Isaac Jang | isaacjang645@yahoo.com |
| Cindy Wong | cindiawong@hotmail.com |
| Megan Chen | megannchen@yahoo.com |

| | |
|---|---|
| Jason Chen | jason_chen@kingston.com |
| Josh Goldman | josh.goldman@gemdaleusa.com |
| Jim Steman | jim.steman@gemdaleusa.com |
| Matthew Macher | matthew.macher@GEMDALEUSA.COM |
| Pam Nathanson | pam@universitysynagogue.org |
| Lora Taleb | lora@connectecco.com |
| Tom Nemat, Esq | tnemat@nematlaw.com |
| Azad Sabounjian | Azad.sabounjian@promartinc.com |
| Sam Sabounjian | Sam.Sabounjian@promartinc.com |
| Cecil Spearman | sms@spearmanclubs.com |
| Scott Spearman | CES@spearmanclubs.com |
| Shirley Marcum | shirlmar88@gmail.com |
| Jose Armando Jauregui | jajaureg@uci.edu |
| MJ | marjanjohari63@gmail.com |
| Brendan McCracken | McCracken@eqoffice.com |
| Michael Wang | mwang@venquest.com |
| John Wang | johnwang@pcrscorp.com |
| Brian Schmid | brianschmid43@gmail.com |
| Brandon Young | brandon@mitchtsailaw.com |
| Mitchell Tsai | mitch@mitchtsailaw.com |
| Leon Ramsey, Jr | leon@mitchtsailaw.com |
| Greg Sonstein | greg@mitchtsailaw.com |

**City Commission Members and Committee Members Notification List (107 emails – information withheld due to privacy)**

| | |
|---|---|
| Ken Montgomery | Transportation Commission |
| Ken Montgomery | Transportation Commission |
| Shilpa Patel | Transportation Commission |
| Shilpa Patel | Transportation Commission |
| Avinder Chawla | Transportation Commission |
| Avinder Chawla | Transportation Commission |
| Sidney Wu | Transportation Commission |
| Sidney Wu | Transportation Commission |
| Marty Reiner | Transportation Commission |
| Marty Reiner | Transportation Commission |
| Chair John Park | Finance Commission |
| Vice Chair Faruk Bhagani | Finance Commission |
| Commissioner Genest | Finance Commission |
| Commissioner Johnson-Norris | Finance Commission |
| Commissioner Yang | Finance Commission |

| | |
|---|---|
| Kevin Trussell, Chair | Community Services Commission |
| Soha Vazirnia, Vice Chair | Community Services Commission |
| Soha Vazirnia, Vice Chair | Community Services Commission |
| Dick Owens | Community Services Commission |
| Naz Hamid | Community Services Commission |
| Jing Sun | Community Services Commission |
| Dr. Dina Eletreby | ICYFAC |
| Ajay Mohan | ICYFAC |
| Ense Kwan | ICYFAC |
| Dr. Phyllis Agran | ICYFAC |
| Brooke Cazier | ICYFAC |
| Jing Sun | ICYFAC |
| Diane Gale | ICYFAC |
| Christine Ito | ICYFAC |
| Shelby Clatterbuck | ICYFAC |
| Wendy Bokota | ICYFAC |
| Dr. Luz Arellano | ICYFAC |
| Lily Freeman | ICYFAC |
| Jada Ulep | ICYFAC |
| Dave Klug | ICYFAC |
| Corey Lakin | ICYFAC |
| Marcy Backhus | ICYFAC |
| Traci Stubbler | ICYFAC |
| Debbie Brunn | ICYFAC |
| Adam Buchanan | ICYFAC |
| Ryan Painter | ICYFAC |
| Christine Knowland | Planning Commission |
| Jong Limb | Planning Commission |
| Mary Ann Gaido | Planning Commission |
| Mary Ann Gaido | Planning Commission |
| Stephen Huang | Planning Commission |
| Jeffrey L. Pierson | Planning Commission |
| Jeffrey L. Pierson | Planning Commission |
| ICCC Chair Donna Schwartze | Irvine Child Care Committee |
| Adam Buchanan | Irvine Child Care Committee - CS Reps |
| Debby Platt | Irvine Child Care Committee - CS Reps |
| Scott Ayers | Owner, Spectrum Montessori |
| Amal Baradehi | Senior Council |
| Jerry Chang | Senior Council |
| Cal Hibrawi | Senior Council |
| Carolyn Inmon | Senior Council |

| | |
|---|---|
| Greta Jacobs | Senior Council |
| Bill Sandlin | Senior Council |
| Myung Suh | Senior Council |
| Pamela Baird | City of Irvine |
| Cory Hilderbrand | City of Irvine |
| Sandra Salcedo | City of Irvine |
| Denise Bennett-Arabatzis | City of Irvine |
| Ed Kaleikini | City of Irvine |
| Amber Castrey | City of Irvine |
| Damion Coran | City of Irvine |
| Kristen Reid | City of Irvine |
| Lucy Tseng | City of Irvine |
| Caryn Kawamoto | City of Irvine |
| Athena Martinez | City of Irvine |
| Meena Chockalingam | IRDAB |
| Brenda Deeley | IRDAB |
| Andrea Drayer | IRDAB |
| David Gibbons | IRDAB |
| Kay Kalra | IRDAB |
| Jennifer Kim | IRDAB |
| James Morgan | IRDAB |
| Dennis Niggl | IRDAB |
| Barbara Stern | IRDAB |
| Ryan McGraw | City of Irvine |
| Cory Pawar | City of Irvine |
| Vice Mayor Tammy Kim | Green Ribbon Environmental Committee |
| Mayor Farrah N. Khan | Green Ribbon Environmental Committee |
| Christine Knowland - Planning Commission | Green Ribbon Environmental Committee |
| Kathleen Treseder | Green Ribbon Environmental Committee |
| Bemmy Maharramli | Green Ribbon Environmental Committee |
| Kevork Abazajian | Green Ribbon Environmental Committee |
| Steven Allison | Green Ribbon Environmental Committee |
| Scott Schultz | Green Ribbon Environmental Committee |
| Senait Forthal | Green Ribbon Environmental Committee |
| William Von Blasingame | Green Ribbon Environmental Committee |

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|---|---|
| Mary Ann Gaido - Alternate Planning Commission | Green Ribbon Environmental Committee |
| Amil Aaron, Chair | Ad Hoc Diversity, Equity, and Inclusion Committee |
| Rebekah Thomas, Co-Chair | Ad Hoc Diversity, Equity, and Inclusion Committee |
| Yulan Chang | Ad Hoc Diversity, Equity, and Inclusion Committee |
| Sidney Wu | Ad Hoc Diversity, Equity, and Inclusion Committee |
| Dr. Kevork Abazajian | Ad Hoc Diversity, Equity, and Inclusion Committee |
| Chair Kim Hoesterey, Irvine Aquatics | Irvine Aquatics Advisory Board |
| Vice Chair Lizzie Howard, Irvine Swim League | Irvine Aquatics Advisory Board |
| Nick Baba, Irvine Youth Water Polo | Irvine Aquatics Advisory Board |
| Ed Carrera, North Irvine Water Polo | Irvine Aquatics Advisory Board |
| Alex Nieto, Irvine Unifed School District | Irvine Aquatics Advisory Board |
| Ray Wong, Irvine Unified School District | Irvine Aquatics Advisory Board |
| Ryan Berger | Irvine Aquatics Advisory Board |
| Liza Krassner | Irvine Aquatics Advisory Board |
| Tala Fazeli | Irvine Aquatics Advisory Board |
| Patricia Daley | Irvine Aquatics Advisory Board |

**External contacts (71 emails – information withheld due to privacy concerns)**

| | | |
|---|---|---|
| Kellie Welch | IRWD | Water Resources Manager |
| Eric Akiyoshi | IRWD | Engineering Manager for Planning |
| Jacob Moeder | IRWD | Senior Engineer - Capital Projects |
| Belisario Rios, PE | IRWD | Senior Engineer - Development Services |
| Karalee Darnell | SCE | SCE Government Relations Manager |
| Jenny Pezda | So Cal Gas | SoCalGas Environmental Policy Advisor |
| Cristina Perez | WMOC | Recycling Outreach and Education Manager |
| Hashem Shokair | WMOC | Regional Public Sector Manager |
| Lea Choum | ALUC | Executive Officer |
| Julie Fitch | ALUC | |
| Tim Kerbrat | OCFA | |
| Captain Daniel Yeh | OCFA | |

| | | |
|---|---|---|
| Bobby Simmons | PS | |
| Bruce Ramm | PS | |
| Mike McCoy | PS | |
| Jeremy Cogan | SAUSD | Director of Facilities and Planning |
| Jose Contreras | TUSD | Manager of Facilities and Planning |
| Kelvin Okino | IUSD | Executive Dir. of Facilities Planning & Construction |
| Jesse Barron | IUSD | Assistant Director of Facilities Planning |
| Doug Monfils | SVUSD | Construction Manager |
| Gina Barraza | SVUSD | Fiscal Services - Account Clerk I |
| Greg Walker, CIA, CISA | Transportation Corridor Agencies | Manager, Internal Audit |
| Irvine Rotary Club | Irvine Rotary | |
| | Families Forward | |
| Madelynn Hirneise | Families Forward | Chief Executive Officer |
| Brian Arzate | Families Forward | |
| Nishtha Mohendra | Families Forward | |
| Danielle Deberg | Families Forward | |
| | Habitat for Humanity | |
| Laura Archuletta | Jamboree Housing Corporation | President & CEO |
| Andrea Hickman | Jamboree Housing Corporation | Executive Assistant |
| Roger Kinoshita | Jamboree Housing Corporation | Senior Director - Business Development |
| Rochelle Mills | Innovative Housing Opportunities | |
| Michele Rinehart | Innovative Housing Opportunities | Director of Operations |
| Luz Toro Farmer | Innovative Housing Opportunities | |
| Miguel Garcia | Innovative Housing Opportunities | Real Estate development |
| Mark Asturias | Irvine Community Land Trust | |
| Frank Chang | Amcal | VP of Acquisitions for AMWA |
| Todd Cottle | C&C Development | |
| Letty Plascencia | Orange County Community Housing Corporation | Director of Homeownership Development |
| Nora Mendez | Orange County Community Housing Corporation | |
| Eduardo "Edu" Santana | Impact Housing | |
| Gissell Garcia | Impact Housing | |
| Liane Takano | Related California | |
| Gail Fee | Related California | Vice President, Administration |
| Kim McKay | Bridge Housing | Executive VP - Real Estate Development |

| | | |
|---|---|---|
| Jonathan Stern | Bridge Housing | |
| Mario A. Ortega | Abrazar | CEO |
| Mary Anne Foo, MPH | Orange County Asian and Pacific Islander Community Alliance | Executive Director |
| Michelle Murphy, MSW | Orange County United Way | Director, Public Affairs |
| Andrew Salas, Chairman | Gabrieleno Band of Mission Indians - Kizh Nation | |
| Andrew Salas, Chairman | Gabrieleno Band of Mission Indians - Kizh Nation | |
| Anthony Morales, Chairperson | Gabrieleno/Tongva San Gabriel Band of Mission Indians | |
| Joyce Stanfield Perry, Tribal Manager | Juaneno Band of Mission Indians - Acjachemen Nation | |
| Joseph Ontiveros, Cultural Reource Director | Soboba Band of Luiseno Indians | |
| Ralph Goff, Chairperson | Campo Band of Diegueno Mission Indians | |
| Michael Garcia, Vice Chairperson | Ewiiaapaayp Band of Kumeyaay Indians | |
| Robert Pinto, Chairperson | Ewiiaapaayp Band of Kumeyaay Indians | |
| Sandonne Goad, Chairperson | Gabrieleno/Tongva Nation | |
| Robert Dorame, Chairperson | Gabrieleno Tongva Indians of California Tribal Council | |
| Charles Alvarez | Gabrieleno-Tongva Tribe | |
| Matias Belardes, Chairperson | Juaneno Band of Mission Indians Acjachemen Nation - Belardes | |
| Javaughn Miller, Tribal Administrator | La Posta Band of Diegueno Mission Indians | |
| Gwendolyn Parada, Chairperson | La Posta Band of Diegueno Mission Indians | |
| Angela Elliot Santos, Chairperson | Manzanita Band of Kumeyaay Nation | |
| Michael Linton, Chairperson | Mesa Grande Band of Diegueno Mission Indians | |
| Shasta Gaughen, Tribal Historic Preservation Officer | Pala Band of Mission Indians | |
| Lovina Redner, Tribal Chair | Santa Rosa Band of Calhuilla Indians | |
| Scott Cozart, Chairperson | Sobaba Band of Luiseno Indians | |
| Cody Martinez, Chairperson | Sycuan Band of the Kumeyaay Nation | |
| Suyama Bodhinayake | American Institute of Architects (AIA) - Orange County Chapter | Sustainability Director |

## Public Engagement

## Appendix A-D: Print Media

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    - Arabic
    - Japanese
    - Korean
    - Vietnamese
    - Spanish

# 1. Press Release for HEU Kick-Off

# NEWS RELEASE

**FOR IMMEDIATE RELEASE**

**CONTACT:** Kristina Perrigoue
Public Information Officer
949-724-6212
kperrigoue@cityofirvine.org

**City of Irvine Announces Sixth Cycle Housing Element Update**
*For October 2021 to October 2029*

**IRVINE, Calif. (Feb. 10, 2021):** The City of Irvine is required to adequately plan and meet the housing needs of everyone in the community by updating its Housing Element every eight years. In the update, the City must identify enough potentially developable land suitable for residential use to meet Irvine's new Regional Housing Needs Assessment (RHNA) allocation.

The Housing Element is Irvine's "housing plan" and a required chapter in the General Plan. Irvine, along with all California cities and counties, is required to adequately plan and meet the housing needs of everyone in the community. The Housing Element must provide goals, objectives, policies, and implementation programs demonstrating how Irvine will meet its existing and future housing needs for all income levels. The Housing Element must also address recent housing legislation adopted in response to the state's housing crisis.

All cities and counties are required to update their Housing Element every eight years for State certification. The City's last Housing Element update, referred to as the Fifth Cycle Housing Element covers October 2013 to October 2021.

Although the City does not build the housing, the Housing Element does create a plan and regulatory framework, which provides opportunities for the private sector to do so, where market conditions determine when and where housing is built.

The Housing Element Update team will be holding virtual community workshops in spring 2021.The next meeting will be held:

Planning Commission Study Session
Date: Thursday, February 18, 2021
Time: 5:30 p.m.

For more information on the Housing Element Update, including an anticipated project timeline, please visit *cityofirvine.org/housingelementupdate* or email *GPUpdate2035@cityofirvine.org*.

*Since its incorporation in 1971, Irvine has become a nationally recognized city, with a population of 281,707 that spans 66 square miles and is recognized as one of America's safest and most successful master-planned urban communities. Top-rated educational institutions, an enterprising business atmosphere, sound environmental stewardship, and respect for diversity all contribute to Irvine's enviable quality of life. This family-friendly city features more than 16,000 acres of parks, sports fields and dedicated open space and is the home of the Orange County Great Park. For more information, please visit cityofirvine.org.*

# # #

## Press Release Distribution List:

Korea Daily, Chinese Daily News, Japanese Daily Sun, Viet Daily News, Korea Times, Korea Central Daily, West Coast Jewish News, Sing Tao Daily, Hanin News, Para Todos, Korea Times, Jewish Life, India Journal, Koreatown Daily –Los Angeles Edition, Maeil Business Newspaper, Korea Times – Orange County Edition, Keyan Pang – US News Express, SUC Song News, Impacto USA, Yon Hap News, Islamic Center of Irvine, United Times, Rafu Shimpo Japanese Newspaper, China Press, Nguoi Viet Daily News, Azteca News, Los Angeles Times, Hoy Deportes, KBS America, MY Sweet Irvine, Radio Korea LA, Woori Radio News, Korean Radio, Orange County Register

Irvine Homeowners Associations list: https://www.cityofirvine.org/community-development/irvine-homeowners-associations

## 2. Inside Irvine Summer 2021 Article

# Irvine's Housing Element Update












The City of Irvine is in the process of updating its housing plan. Known as the **Housing Element**, it is a chapter in the City's General Plan and it is required by the State to be updated every eight years. The current update, referred to as the 6th Cycle Housing Element, is for October 2021 through October 2029. Learn more about the Housing Element Update and what it means for our community.

### What is a Housing Element?

Irvine, along with all California cities and counties, is required to adequately plan for and meet the housing needs of everyone in the community. In the Housing Element Update, the City must identify enough potentially developable land suitable for residential use to meet the Regional Housing Needs Assessment (RHNA) allocation outlined by the State.

### What are the benefits of the Housing Element?

Providing housing to meet the needs of all income levels is critical to the long-term social, environmental, and economic health of Irvine. By planning for future housing, the City can work to protect the quality of life we enjoy in Irvine.

### Who decides how much and what kind of housing is needed?

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating the Housing Element. RHNA determines how many housing units are needed within each jurisdiction during specified planning periods.

During each Housing Element Update cycle, the California Department of Housing and Community Development (HCD) estimates each region's housing need for all income groups for the upcoming eight years.

HCD has determined the housing need for the Southern California region to be 1.3 million units. In turn, the Southern California Association of Governments (SCAG), which is the Metropolitan Planning Organization serving Orange, Imperial, Los Angeles, Riverside, San Bernardino, and Ventura counties, has taken this number and allocated each city and county in the region with its share using a developed methodology.

### How many housing units is Irvine required to add?

The City of Irvine's portion of SCAG's RHNA for the 2021–2029 Housing Element is 23,610 units.

### How is the City planning for the number of units that need to be built?

The Housing Element Update plays a vital part in the City's planning process. Through this effort, the City is conducting an assessment of where future housing could exist in Irvine and identifying constraints to housing production.

### How can I participate in the Housing Element Update process?

Sign up to receive emails about the Housing Element Update and stay informed of upcoming meetings and developments.

Project briefings will be provided to the Planning Commission and City Council in June. The draft Housing Element Update will be available for the public to review in the summer before it goes to the City Council for approval in fall. ▪

HOUSING ELEMENT
CITY OF IRVINE 2021 UPDATE

WE ARE IRVINE 1971-2021 50

**For more information on the Housing Element Update and to subscribe for updates, visit** *cityofirvine.org/heupdate*

## 3. Communitywide Workshop Flier

# Housing Element Update: Virtual Community Workshops



## We Need Your Input

The City of Irvine Housing Element is one of the seven mandated elements of the City's General Plan. It sets forth Irvine's strategy to preserve and enhance the community's residential character, expand housing opportunities for all economic segments, and provide guidance and direction for local government decision-making in all matters related to housing.

The City is currently updating the Housing Element for the 2021-2029 planning period, as required, to meet the housing needs of everyone in our community. We encourage all Irvine residents and stakeholders to help us plan the City's future housing needs and priorities.

Our interactive virtual workshops will provide a detailed overview of the Housing Element and update process, and ask for feedback on various topics including what the Housing Element Update goals should be for the 2021-2029 period.

To register for a virtual meeting and for additional information on the Housing Element Update, visit *cityofirvine.org/HEUpdate* or call 949-724-6395.

## Virtual Workshops

Dates and times via Zoom:

**April 22, 2021**
10 a.m.–noon

**April 29, 2021**
5:30–7:30 p.m.

Workshops will be presented in English and include a presentation on the Housing Element and a discussion about the update. These meetings will be interactive and conducted online. Meeting participants can join by desktop, tablet, or phone. If you need language assistance, please email *mchao@cityofirvine.org* by April 30 to schedule an individualized meeting.

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

WE ARE IRVINE 1971-2021 50 50th Anniversary

# 住宅要素更新：虛擬社區研討會



## 徵求您的意見

爾灣市住宅要素是本市整體規劃的七大規定要素之一。此為爾灣市提出的策略，內容旨在保護與加強社區居住特色、為各個經濟階層擴大住房的機會，以及為當地政府在所有住房相關的決策上提供參考與指引。

本市目前正在更新 2021-2029 年度計畫期間的住宅要素，力求符合社區內所有人的住宅需求。 我們鼓勵所有爾灣市居民與利益相關者協助參與規劃本市未來的住宅需求與優先項目。

我們的互動式虛擬研討會將提供詳細的住宅要素概覽及更新進度，徵求多種不同主題的意見反應，包含 2021-2029 年期間的住宅要素目標。

若要加入虛擬會議，瞭解住宅要素更新的其他資訊，請造訪 cityofirvine.org/HEUpdate 或致電 949-724-6395。

### 虛擬研討會

透過 Zoom 進行，日期與時間如下：

**2021 年 4 月 22 日**
**早上 10:00 至中午 12:00**

**2021 年 4 月 29 日**
**下午 5:30 至晚上 7:30**

研討會將以英語進行並提供住宅要素報告與討論更新進度。會議將以互動方式於線上進行。與會人員可以透過桌上型電腦、平板電腦或電話參與。如果您需要翻譯協助，請在 4 月 30 日前傳送電子郵件至 **mchao@cityofirvine.org**，以便安排個人會議。

住 宅 要 素
爾灣市2021年更新資訊

# 住宅要素更新：虚拟社区研讨会



## 征求您的意见

尔湾市住宅要素是本市整体规划的七大规定要素之一。此为尔湾市提出的策略，内容旨在保护与加强社区居住特色、为各个经济阶层扩大住房的机会，以及为当地政府在所有住房相关的决策上提供参考与指引。

本市目前正在更新 2021-2029 年度计划期间的住宅要素，力求符合社区内所有人的住宅需求。我们鼓励所有尔湾市居民与利益相关者协助参与规划本市未来的住宅需求与优先项目。

我们的交互式虚拟研讨会将提供详细的住宅要素概览及更新进度，征求多种不同主题的意见反应，包含 2021-2029 年期间的住宅要素目标。

若要加入虚拟会议，了解住宅要素更新的其他信息，请造访 cityofirvine.org/HEUpdate 或致電 949-724-6395。

## 虚拟研讨会

通过 Zoom 进行，日期与时间如下：

**2021 年 4 月 22 日**
**早上 10:00 至中午 12:00**

**2021 年 4 月 29 日**
**下午 5:30 至晚上 7:30**

研讨会将以英语进行并提供住宅要素报告与讨论更新进度。会议将以互动方式于在线进行。与会人员可以透过桌上型计算机、平板计算机或电话参与。如果您需要翻译协助，请在 4 月 30 日前传送电子邮件至 mchao@cityofirvine.org，以便安排个人会议。

住 宅 要 素
尔湾市2021年更新信息

# به روز رسانی لمان مسکن:
# کارگاه های مجازی جامعه



## به بازخورد شما نیاز داریم

بخش مسکن شهر Irvine یکی از هفت المان اصلی «طرح عمومی شهر» است. این المان عنوان‌کننده راهبرد Irvine در حفظ و ارتقای هویت مسکونی جامعه است، ضمن اینکه باعث فرصت‌های تأمین مسکن برای کلیه بخش‌های اقتصادی شده، و رهنمودهایی برای تصمیم گیری دولت محلی در کلیه مسائل مرتبط با مسکن فراهم می‌کند.

شهر بنا به الزامات مقرر درحال بەروزرسانی المان مسکن برای دوره برنامەریزی 2021-2029 است تا نیازهای همه افراد جامعه ما در زمینه مسکن مرتفع گردد. ما از کلیه ساکنان و سهام داران Irvine دعوت می کنیم در برنامه ریزی نیازها و اولیت هایی شهر در زمینه مسکن به ما کمک کنند.

کارگاه‌های مجازی و تعاملی ما علاوه بر ارائه خلاصه‌ای دقیق از المان مسکن و رویه بەروزرسانی، بازخورد افراد را در موضوعات مختلف جویا می شود، از جمله اینکه چه اهدافی باید برای به روز رسانی المان مسکن دوره 2021-2029 تعیین شود.

برای ثبتنام در جلسات مجازی و کسب اطلاعات بیشتر در زمینه به روز رسانی المان مسکن، به آدرس cityofirvine.org/HEUpdate یا با شماره 6395-724-949 تماس بگیرید.

## کارگاه‌های مجازی

تاریخ و ساعت برگزاری در Zoom:

**22 آوریل 2021**
**10 صبح تا ظهر**

**29 آوریل 2021**
**5:30 الی 7:30 عصر**

کارگاه‌ها به زبان انگلیسی برگزار خواهد شد و دربرگیرنده ارائه‌ای در زمینه المان مسکن و گفتگوی درمورد می باشد. به روز رسانی ها این جلسات بەروشی تعاملی و بەصورت آنلاین صورت خواهد گرفت. شرکت‌کنندگان می توانند با رایانه، تبلت یا تلفن همراه در جلسات شرکت کنند. اگر نیاز به خدمات کمک زبانی دارید، لطفاً تا 30 آوریل به mchao@cityofirvine.org ایمیل بزنید تا یک جلسه انفرادی برایتان تعیین شود.

المانمسکن
بەروزرسانی 2021 شهر IRVINE

# تحديث حول بند الإسكان:
# ورش عمل مجتمعية افتراضية



## نحن نحتاج إلى إسهاماتك

بند الإسكان في مدينة إيرفين هو واحد من البنود السبعة المكلف بها في الخطة العامة للمدينة. وهو يُحدد استراتيجية إيرفين المتبعة للحفاظ على الطابع السكني للمجتمع وتوسيع فرص الإسكان لجميع الشرائح الاقتصادية وتوفير الإرشاد والتوجيه لصناعة القرارات الحكومية المحلية في جميع الأمور المتعلقة بالإسكان.

وتقوم المدينة حاليًا بإجراء تحديثاتٍ على بند الإسكان لفترة التخطيط بين عامي *2021* و*2029* حسب المطلوب، وذلك من أجل تلبية احتياجات الإسكان للجميع في مجتمعنا. ونحن نشجع جميع سكان إيرفين وأصحاب المصلحة على مساعدتنا في التخطيط للاحتياجات والأولويات المستقبلية المتعلقة بالإسكان لدى المدينة.

إن ورش العمل الافتراضية التفاعلية لدينا ستقدم نظرة عامة مفصلة على بند الإسكان وعملية التحديث، وستطلب تقديم الإسهامات والأفكار حول موضوعات متعددة تتضمن الأهداف التي ينبغي وضعها لتحديث بند الإسكان للفترة بين عامي *2021* و*2029*.

للتسجيل من أجل انعقاد اجتماع افتراضي وللحصول على مزيد من المعلومات حول تحديث بند الإسكان، يُرجى زيارة *cityofirvine.org/HEUpdate* أو الاتصال على *949-724-6395*.

## ورش العمل الافتراضية

التواريخ والأوقات عبر Zoom:

**22 أبريل 2021**
**10 صباحًا حتى الظهيرة**

**29 أبريل 2021**
**5:30 إلى 7:30 مساءً**

ستُقدم ورش العمل باللغة الإنجليزية وستتضمن عرضًا تقديميًا حول بند الإسكان وإجراء نقاش حول التحديث. وستكون هذه الاجتماعات تفاعلية وسيتم إجراؤها عبر الإنترنت. يمكن للمشاركين في الاجتماع أن ينضموا إليه عبر أجهزة الكمبيوتر المكتبية أو الأجهزة اللوحية أو الهواتف. إذا كنت بحاجة إلى مساعدة لغوية، فيُرجى التواصل عبر البريد الإلكتروني **mchao@cityofirvine.org** بحلول 30 أبريل من أجل تحديد موعد لإجراء اجتماع فردي.

بند الإسكان
تحديث لسنة 2021 من مدينة إيرفين

# 住宅基本計画の更新について：
# 地域バーチャルワークショップ



## ご意見をお寄せください

アーバイン市住宅基本計画は、報告義務を負う7つの基本計画です。これは、地域の住宅の性格を維持・強化し、すべての経済セグメント向けに住宅の取得（入居）をより一層促進し、住宅に関連する様々な項目において地方自治体の意思決定のためのガイダンスとその方向性を示すためにアーバイン市の戦略として定められたものです。

市は現在、すべての住民の住宅ニーズを満たすよう、必要に応じて2021～2029年の住宅計画期間の基本計画を更新しているところです。アーバイン市のすべての住民や利害関係者の皆さまに、市の将来の住宅ニーズと優先順位付けに関する計画立案にご協力ください。

対話的なバーチャルワークショップでは、住宅要素と更新手続きの詳細な概要を紹介し、2021～2029年の住宅基本計画の更新における目標を含め、さまざまなトピックについてのご意見を求めます。

仮想会議へのご登録や、住宅基本計画の更新に関する追加情報については、cityofirvine.org/HEUpdate にアクセスするか、または電話：949-724-6395でご確認ください。

## バーチャルワークショップ

Zoomによる開催日時：

**2021年4月22日**
**午前10時～正午**

**2021年4月29日**
**午後5時30分～午後7時30分**

ワークショップは英語で開催され、住宅基本計画に関するプレゼンテーション、およびその更新に関するディスカッションが行われます。この会議は対話形式であり、オンラインで開かれます。会議には、パソコン、タブレット電話からご参加ください。言語サポートが必要な場合は、4月30日までに mchao@cityofirvine.orgにメールを送り、個々に会議をご予約ください。

住宅基本計画
アーバイン市 2021年の更新について

WE ARE IRVINE 1971-2021 50th Anniversary

# 주택 요건 업데이트
# 가상 커뮤니티 워크숍



## 귀하의 의견을 알려주세요.

City of Irvine 주택 요건은 시의 일반 계획가운데 일곱 가지 필수 요소 중 하나입니다. 이는 커뮤니티의 거주 특성을 보존하고 강화하며, 모든 경제적 계층에 거주 기회를 확장할 뿐만 아니라, 주택과 관련한 모든 사안에 대한 지방 정부의 의사 결정에 대해 지침 및 방향성을 제공하는 Irvine의 전략을 제시합니다.

현재 시에서는 커뮤니티 모든 구성원의 주택 요구를 충족하기 위해 2021~2029년 계획 기간에 대한 주택 요건을 업데이트 중입니다. 모든 Irvine 주민과 이해 당사자 여러분이 시의 미래 주택 요구 및 우선순위 계획을 도와주시기 바랍니다.

상호형 가상 워크숍에서는 주택 요건에 대한 자세한 내용 및 업데이트 절차를 제공하고 2021~2029년 기간에 대한 주택 요건 업데이트 목표에 무엇이 들어가야 하는지를 포함하여 다양한 주제에 대한 피드백을 요청드릴 예정입니다.

가상 회의에 등록하고 싶거나 주택 요건 업데이트에 대한 추가 정보가 필요한 경우,
cityofirvine.org/HEUpdate 에 방문하시거나
949-724-6395 번으로 전화해주십시오.

## 가상 워크숍

Zoom 날짜 및 시각:

**2021-04-22**
**오전 10시-정오**

**2021-04-29**
**오후 5:30~7:30**

워크숍은 영어로 진행되며 주택 요건 프레젠테이션과 업데이트에 대한 토론으로 구성될 예정입니다. 이 회의는 상호형으로 이뤄지며 온라인으로 진행됩니다. 회의 참가자는 데스크톱, 태블릿, 휴대전화로 참가할 수 있습니다. 언어 지원이 필요한 경우, 개별 회의를 예약할 수 있도록 4월 30일까지 mchao@cityofirvine.org 에 이메일을 보내주시기 바랍니다.

주 택 요 건
CITY OF IRVINE 2021 업데이트

WE ARE IRVINE 1971-2021 50th Anniversary

# Cập Nhật Những Yếu Tố Nhà Ở:
# Buổi Hội Thảo Cộng Đồng Qua Trực Tuyến



## Chúng Tôi Cần Thông Tin Từ Quý Vị

Yếu Tố Nhà Ở của Thành Phố Irvine là một trong bảy yếu tố bắt buộc trong Quy Hoạch Tổng Thể của Thành Phố. Yếu tố này đề ra chiến lược của Thành phố Irvine nhằm bảo tồn và nâng cao đặc điểm dân cư của cộng đồng, mở rộng cơ hội nhà ở cho mọi phân khúc kinh tế, đồng thời cũng đưa ra hướng dẫn và định hướng cho việc ra quyết định của chính quyền địa phương trong tất cả các vấn đề liên quan đến nhà ở.

Thành Phố hiện đang cập nhật Yếu Tố Nhà Ở cho giai đoạn quy hoạch từ năm 2021-2029 theo yêu cầu nhằm đáp ứng các nhu cầu về nhà ở của tất cả mọi người trong cộng đồng của chúng ta. Chúng tôi khuyến khích tất cả cư dân Irvine cùng các bên hữu quan giúp đỡ chúng tôi trong việc quy hoạch các nhu cầu và ưu tiên về nhà ở trong tương lai.

Các hội thảo tương tác qua mạng của Thành Phố sẽ cung cấp thông tin tổng quan chi tiết về Yếu Tố Nhà Ở và quy trình cập nhật, đồng thời trưng cầu ý kiến phản hồi về các chủ đề khác nhau bao gồm Cập Nhật Yếu Tố Nhà Ở cho giai đoạn năm 2021-2029 nên bao gồm những mục đích gì.

Để ghi danh tham dự hội thảo qua mạng và để biết thêm thông tin về Cập Nhật Yếu Tố Nhà Ở, hãy truy cập cityofirvine.org/HEUpdate hoặc gọi số điện thoại 949-724-6395.

## Hội Thảo Trực Tuyến

Ngày giờ tổ chức trên Zoom:

**Ngày 22 tháng 4 năm 2021**
**10 giờ sáng - 12 giờ trưa**

**Ngày 29 tháng 4 năm 2021**
**5 giờ30 chiều – 7 giờ30 tối**

Các buổi hội thảo sẽ được trình bày bằng tiếng Anh và có bao gồm một bài trình bày về Yếu Tố Nhà Ở cùng với một cuộc thảo luận về quá trình cập nhật. Đây là các buổi hội thảo tương tác và được tổ chức trực tuyến. Người tham dự buổi hội thảo có thể tham dự bằng máy tính bàn, máy tính bảng hoặc điện thoại. Nếu quý vị cần trợ giúp, xin vui lòng gửi email đến **mchao@cityofirvine.org** trễ nhất là vào ngày 30 tháng 4 để sắp xếp lịch họp riêng.

HỢP PHẦN NHÀ Ở
THÀNH PHỐ IRVINE, CẬP NHẬT NĂM 2021

WE ARE IRVINE 1971-2021 50th Anniversary

# Actualización del elemento de vivienda: Talleres virtuales comunitarios



## Necesitamos su opinión

El Elemento de vivienda de la ciudad de Irvine es uno de los siete elementos del mandato del Plan de general de la ciudad. Establece la estrategia de Irvine para preservar y mejorar el carácter residencial de la comunidad, ampliar las oportunidades de vivienda para todos los segmentos económicos y dar orientación y dirección para la toma de decisiones del gobierno local en todos los asuntos relacionados con la vivienda.

La ciudad está actualizando el Elemento de vivienda para el período de planificación 2021-2029, según sea necesario, para cubrir las necesidades de vivienda de todos en nuestra comunidad. Animamos a todos los residentes y partes interesadas de Irvine a que nos ayuden a planificar las futuras necesidades y prioridades de vivienda de la ciudad.

Nuestros talleres virtuales interactivos darán un resumen detallado del Elemento de vivienda y proceso de actualización, y pedirán comentarios sobre varios temas, incluyendo cuáles deberían ser los objetivos de Actualización del elemento de vivienda para el período 2021-2029.

Para registrarse para una reunión virtual y para obtener información adicional sobre la Actualización del elemento de vivienda, visite **cityofirvine.org/HEUpdate** o llame al 949-724-6395.

## Talleres virtuales

Fechas y horas por Zoom:

**22 de abril de 2021**
**10 a.m. – mediodía**

**29 de abril de 2021**
**5:30 – 7:30 p.m.**

Los talleres se presentarán en inglés e incluirán una presentación sobre el Elemento de vivienda y una charla sobre la actualización. Estas reuniones serán interactivas y se harán en línea. Los participantes de la reunión pueden unirse por computadora, tablet o teléfono. Si necesita ayuda con el idioma, envíe un email a **mchao@cityofirvine.org** antes del 30 de abril para programar una reunión individualizada.

ELEMENTO DE VIVIENDA
ACTUALIZACIÓN DE LA CIUDAD DE IRVINE 2021

WE ARE IRVINE 1971-2021 50 50th Anniversary

# Public Engagement

# Appendix A-E: Community Outreach Survey

## Table of Contents

1. Community Outreach Survey Excerpt

# Community Outreach Survey Excerpt

| | | | |
|---|---|---|---|
| Q8 | California State law requires that all cities, towns and counties must plan for the housing needs of their residents. With a general shortage of housing in southern California, it is expected that the next Regional Housing Needs Allocation will require the City of Irvine to add several thousand new housing units.<br><br>Understanding that Irvine will be required by law to add several thousand new homes, would you prefer that these homes: _____ OR _____ OR _____? *Randomize order of options 1 & 2, but always present 3 last.* | | |
| | 1 | Be **concentrated** in one or two business districts in the City such as the Spectrum and IBC areas | 24% |
| | 2 | Be **spread** throughout the City in smaller developments and infill projects within existing residential neighborhoods | 18% |
| | 3 | Be a **mix** of both strategies – with some homes concentrated in both business districts, and others spread throughout the City in small developments and infill projects within existing residential neighborhoods | 50% |
| | 98 | Not sure | 6% |
| | 99 | Prefer not to answer | 2% |
| Q9 | Understanding that Irvine would be required by law to add several thousand new homes, would you prefer that these homes: _____ OR _____? *Randomize order of options 1 & 2.* | | |
| | 1 | Be built along with their own neighborhood services, restaurants, shops, and public transit | 52% |
| | 2 | Be built near existing services, restaurants, shops, and public transit | 34% |
| | 98 | Not sure | 12% |
| | 99 | Prefer not to answer | 2% |
| Q10 | Understanding that Irvine would be required by law to add several thousand new homes, would you prefer that these homes: _____ OR _____ OR _____? *Randomize order of options 1 & 2, but always present 3 last.* | | |
| | 1 | Be **mostly** single-family homes, which will require more land | 24% |
| | 2 | Be **mostly** condominiums and apartments, which will require less land | 17% |
| | 3 | Be an **even** mix of single-family homes, condominiums and apartments | 55% |
| | 98 | Not sure | 3% |
| | 99 | Prefer not to answer | 1% |

## *Section 4: Land Use & Housing*

Now I'd like to ask you a few questions about land use in Irvine.

**Q7** There are a variety of properties in Irvine that have yet to be developed, but will be developed in the future for residential and commercial purposes. There are also existing properties that can be redeveloped to serve a different purpose.

As I read the following list of development types, please tell me whether you feel there is currently too much, about the right amount, or too little of this type of development in Irvine.

| | *Randomize* | Too Much | About Right | Too Little | Not Sure | Prefer not to answer |
|---|---|---|---|---|---|---|
| A | Big box retail stores | 19% | 68% | 8% | 4% | 1% |
| B | Chain restaurants | 32% | 56% | 8% | 3% | 1% |
| C | Smaller, boutique retail stores | 5% | 40% | 49% | 6% | 1% |
| D | Non-chain restaurants | 5% | 37% | 52% | 5% | 1% |
| E | Single Family Homes | 16% | 57% | 21% | 5% | 1% |
| F | Condominiums | 30% | 48% | 12% | 10% | 0% |
| G | Apartments | 45% | 39% | 10% | 5% | 1% |
| H | Multi-family workforce housing that is affordable for middle-income families | 11% | 32% | 45% | 11% | 1% |
| I | Multi-family housing that is affordable to low-income families | 16% | 26% | 44% | 13% | 1% |
| J | Multi-family housing that is located close to public transit services | 13% | 34% | 33% | 18% | 1% |
| K | Commercial offices | 24% | 62% | 5% | 8% | 1% |
| L | Entertainment uses such as movie houses, music and arts | 5% | 56% | 35% | 3% | 1% |
| M | Hotels | 11% | 67% | 12% | 10% | 1% |
| N | Warehouse and distribution facilities | 13% | 56% | 6% | 24% | 2% |
| O | Mixed-use, by which I mean residential housing units built on top of – or next to – office, retail and restaurant businesses | 17% | 36% | 27% | 19% | 1% |
| P | Housing that is dedicated to specific groups like seniors, students, and those with special needs | 7% | 37% | 38% | 18% | 1% |

# Public Engagement

# Appendix A-F: Focus Groups

## Table of Contents

1. Focus Group Takeaways

# 1. Focus Group Takeaways

The City held four focus groups with 16 participants (four people per group), and the duration of each meeting was approximately 90 minutes. Each focus group consisted of participants with diverse age, gender, ethnicity, home tenure, and length of residence.

Below are the takeaways from the focus groups:

- When residents were asked, “Why did [they] choose to live in Irvine?”, residents said for the safety, cleanliness, high-quality schools, and well-planned family-friendly communities.
- When told about California’s requirement for Irvine to plan for more housing, participants said it will create more traffic and pollution, hurt property values, and will cause longtime residents to leave. Some also said more housing could be OK if the City first builds the infrastructure to accommodate it.
- When residents were asked about building high-rise housing as a strategy for adding units, participants said it would create crowding and traffic, it would be too dense, and there would need to be a mix of owner and rental units.
- When residents were asked about on converting under-performing commercial properties into housing, participants had a positive reaction and said it was also a good strategy to retain commercial space on lower floors.
- When asked what the City should keep in mind as guiding principles when adding new housing, participants said safety, education, transportation, parking, preservation res of parks/open space, and trails, and protection of existing neighborhoods.

## Public Engagement

## **Appendix A-H: Tribal Consultation** (refer to project CEQA documentation for the complete AB 52/SB 18 package)

## Table of Contents

1. Sample Letter
2. Mailing List
3. Responses Received

# 1. Sample Letter

February 8, 2021

Sent via certified mail and
email to rgoff@campo-nsn.gov

Mr. Ralph Goff
Chairperson
Campo Band of Diegueno Mission Indians
36190 Church Road, Suite 1
Campo, CA 91606

**Subject: Irvine 6th Cycle Housing Element Update, City Irvine, Orange County, California**

Dear Mr. Goff:

The City of Irvine is preparing an update to its Housing Element, which is one topical chapter in the City of Irvine General Plan that is required to be updated every eight years for State certification. All California cities and counties are required to adequately plan to meet the housing needs of everyone in the community and to accommodate its Regional Housing Needs Assessment (RHNA) allocation for the 2021-2019 planning period from the Southern California Associate of Governments (SCAG) or their respective metropolitan planning organization.

Note the Housing Element Update creates a plan and regulatory framework that provides opportunities for housing to be built by the private sector, where market conditions ultimately determine when and where housing is built. The Housing Element does not authorize construction on sites as projects still need to go through the Irvine's development review process in the future.

Your tribe has notified the City of Irvine pursuant Public Resources Code Section 21080.3.1(b) that the City is within the geographic area with which the tribe is traditionally and culturally affiliated. To ensure compliance with Assembly Bill 52 (Chapter 532, Statutes of 2014) and Senate Bill 18 (Gov. Code Section 65352.3(a)(1) and Section 65562.5), we are asking if you have any knowledge of cultural resources within the project vicinity and/or if you would like to request consultation with the City of Irvine regarding the proposed project. If the tribe wishes to consult with the City of Irvine

about cultural resources in the project vicinity, please contact my office in the next 30 days.

In accordance with the Code of Public Resources, Section 21082.3(c), information that is submitted by a California Native American tribe during the environmental review process will not be included in the environmental document or otherwise disclosed by the lead agency without the prior consent of the tribe that provided the information.

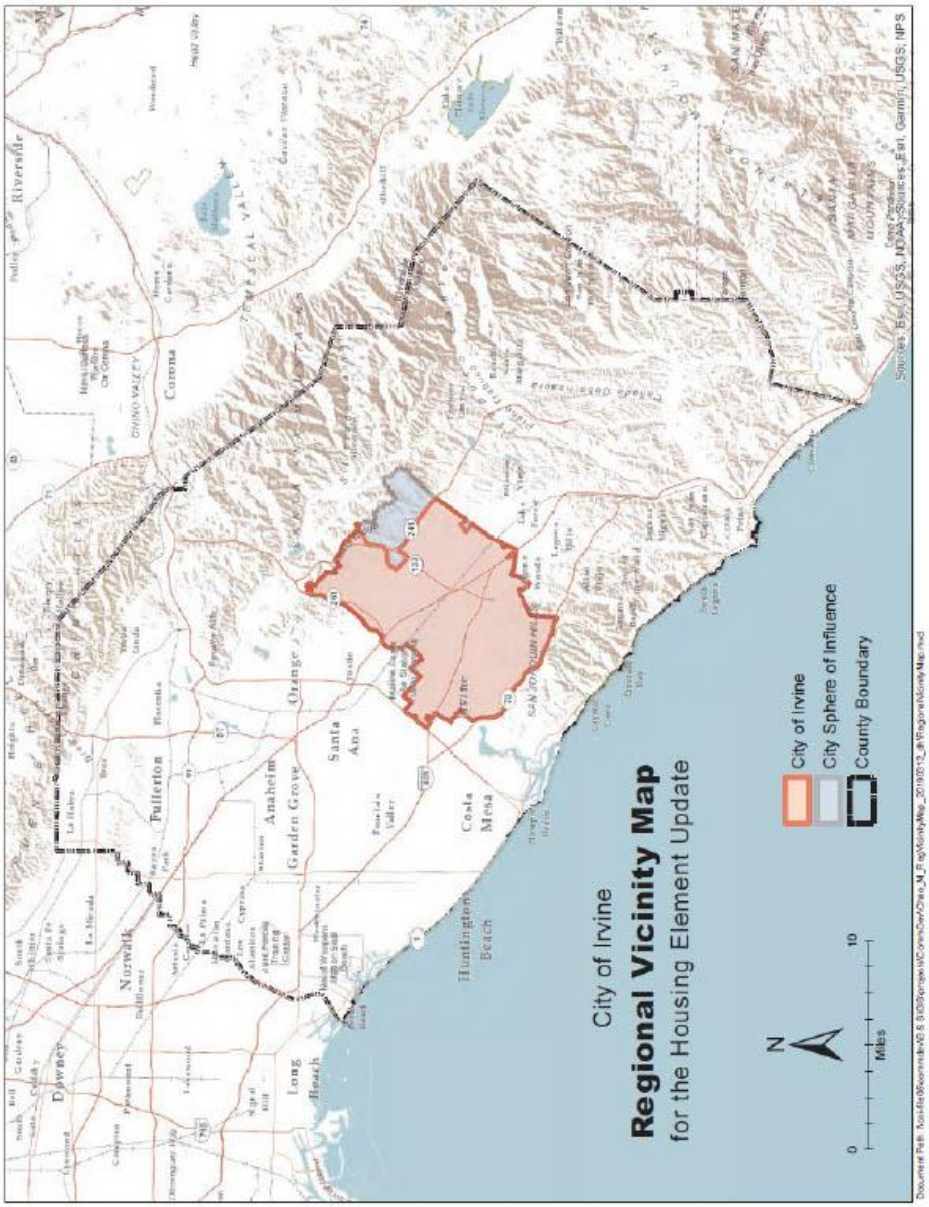
If you require any additional information or have any questions, please contact me via email at mchao@cityofirvine.org or at 949-724-6395. Thank you for your assistance.

Sincerely,

Melissa Chao

Melissa Chao
Senior Planner

Enclosure:
Regional Vicinity Map


City of Irvine
Regional Vicinity Map
for the Housing Element Update
City of Irvine
City Sphere of Influence
County Boundary
N
0
10
Miles
Riverside
Corona
Norwalk
Fullerton
Anaheim
Garden Grove
Orange
Santa Ana
Irvine
Costa Mesa
Huntington Beach
Long Beach
Downey

# 2. Tribal Notification Mailing List

| | | | | | | |
|---|---|---|---|---|---|---|
| Andrew Salas, Chairman | Gabrieleno Band of Mission Indians - Kizh Nation | P.O. Box 393 | Covina | CA | 91723 | admin@gabrielenoindians.org<br>gabrielenoindians@yahoo.com |
| Anthony Morales, Chairperson | Gabrieleno/Tongva San Gabriel Band of Mission Indians | P.O. Box 693 | San Gabriel | CA | 91778 | GTTribalcouncil@aol.com |
| Joyce Stanfield Perry, Tribal Manager | Juaneno Band of Mission Indians - Acjachemen Nation | 4955 Paseo Segovia | Irvine | CA | 92603 | kaamalam@gmail.com |
| Joseph Ontiveros, Cultural Reource Director | Soboba Band of Luiseno Indians | P.O. Box 487 | San Jacinto | CA | 92581 | jontiveros@sobaba-nsn.gov |
| Ralph Goff, Chairperson | Campo Band of Diegueno Mission Indians | 36190 Church Road, Suite 1 | Campo | CA | 91606 | rgoff@campo-nsn.gov |
| Michael Garcia, Vice Chairperson | Ewiiaapaayp Band of Kumeyaay Indians | 4054 Willows Road | Alpine | CA | 91901 | michaelg@leaningrock.net |
| Robert Pinto, Chairperson | Ewiiaapaayp Band of Kumeyaay Indians | 4054 Willows Road | Alpine | CA | 91901 | wmicklin@leaningrock.net |
| Sandonne Goad, Chairperson | Gabrieleno/Tongva Nation | 106 1/2 Judge John Aiso St., #231 | Los Angeles | CA | 90012 | sgoad@gabrielino-tongva.com |
| Robert Dorame, Chairperson | Gabrieleno Tongva Indians of California Tribal Council | P.O. Box 490 | Bellflower | CA | 90707 | gtongva@gmail.com |
| Charles Alvarez | Gabrieleno-Tongva Tribe | 23454 Vanowen Street | West Hills | CA | 91307 | roadkingcharles@gmail.com |
| Matias Belardes, Chairperson | Juaneno Band of Mission Indians<br>Acjachemen Nation - Belardes | 32161 Avenida Los Amigos | San Juan Capistrano | CA | 92675 | kaamalam@gmail.com |
| Javaughn Miller, Tribal Administrator | La Posta Band of Diegueno Mission Indians | 8 Crestwood Road | Boulevard | CA | 91905 | jmiller@LPtribe.net |
| Gwendolyn Parada, Chairperson | La Posta Band of Diegueno Mission Indians | 8 Crestwood Road | Boulevard | CA | 91905 | LP13boots@aol.com |
| Angela Elliot Santos, Chairperson | Manzanita Band of Kumeyaay Nation | P.O. Box 1302 | Boulevard | CA | 91905 | None |
| Michael Linton, Chairperson | Mesa Grande Band of Diegueno Mission Indians | P.O. Box 270 | Santa Ysabel | CA | 92070 | mesagrandeband@msn.com |
| Shasta Gaughen<br>Tribal Historic Preservation Officer | Pala Band of Mission Indians | PMB 50, 35008 Pala Temecula Rd. | Pala | CA | 92059 | sgaughen@palatribe.com |
| Lovina Redner, Tribal Chair | Santa Rosa Band of Calhuilla Indians | P.O. Box 391820 | Anza | CA | 92539 | lsaul@santarosa-nsn.gov |
| Scott Cozart, Chairperson | Sobaba Band of Luiseno Indians | P.O. Box 487 | San Jacinto | CA | 92583 | jontiveros@sobaba-nsn.gov |
| Cody Martinez, Chairperson | Sycuan Band of the Kumeyaay Nation | 1 Kwaaypaay Court | El Cajon | CA | 92019 | ssilva@sycuan-nsn.gov |

# 3. Responses Received

**From:** Gabrieleno Administration
**To:** Justin Equina
**Subject:** Re: Meeting with Andrew Salas
**Date:** Thursday, April 8, 2021 1:40:31 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Justin

Since there will not be any ground disturbance taking place there will be no need for consultation. We please ask that you notify us in the future when there will be ground disturbance taking place.

Thank you

Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

*The region where Gabrieleño culture thrived for more than eight centuries encompassed most of Los Angeles County, more than half of Orange County and portions of Riverside and San Bernardino counties. It was the labor of the Gabrieleño who built the missions, ranchos and the pueblos of Los Angeles. They were trained in the trades, and they did the construction and maintenance, as well as the farming and managing of herds of livestock. "The Gabrieleño are the ones who did all this work, and they really are the foundation of the early economy of the Los Angeles area ". "That's a contribution that Los Angeles has not recognized–the fact that in its early decades, without the Gabrieleño, the community simply would not have survived."*

On Thu, Apr 8, 2021 at 1:37 PM Gabrieleno Administration <admin@gabrielenoindians.org> wrote:

Hello Justin

I just want to confirm that there will be ground disturbance taking place regarding the project.
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

*The region where Gabrieleño culture thrived for more than eight centuries encompassed most of Los Angeles County, more than half of Orange County and portions of Riverside and San Bernardino counties. It was the labor of the Gabrieleño who built the missions, ranchos and the pueblos of Los Angeles. They were trained in the trades, and they did the construction and maintenance, as well as the farming and managing of herds of livestock. "The Gabrieleño are the ones who did all this work, and they really are the foundation of the early economy of the Los Angeles area ". "That's a contribution that Los Angeles has not recognized–the fact that in its early decades, without the Gabrieleño, the community simply would not have survived."*

On Wed, Apr 7, 2021 at 1:16 PM Justin Equina <jequina@cityofirvine.org> wrote:

Hello:

The Housing Element Update is a Citywide project and is not necessarily related to a specific property. For more information please visit our Housing Element Update website:

https://www.cityofirvine.org/housing-element-update#:~:text=In%20the%20update%2C%20the%20City,Needs%20Assessment%20(RHNA)%20allocation.&text=The%20Housing%20Element%20must%20also,to%20the%20state's%20housing%20crisis.

Thank you for the call number. I'll keep that in mind when calling tomorrow.

JUSTIN EQUINA | ASSOCIATE PLANNER | CITY OF IRVINE
949-724-6364 | 1 Civic Center Plaza, Irvine, CA 92606 | jequina@cityofirvine.org

**From:** Gabrieleno Administration <admin@gabrielenoindians.org>
**Sent:** Wednesday, April 7, 2021 12:55 PM
**To:** Justin Equina <jequina@cityofirvine.org>
**Subject:** Re: Meeting with Andrew Salas

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Justin

Thank you for your email. Yes we still have you down for a phone consultation on April 8th at 3pm. Can you please provide a project map? Also here is our call in number (626)343-5588 Passcode 1234.

Thank you

Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723

Office: 844-390-0787

website: www.gabrielenoindians.org



*The region where Gabrieleño culture thrived for more than eight centuries encompassed most of Los Angeles County, more than half of Orange County and portions of Riverside and San Bernardino counties. It was the labor of the Gabrieleños who built the missions, ranchos and the pueblos of Los Angeles. They were trained in the trades, and they did the construction and maintenance, as well as the farming and managing of herds of livestock. "The Gabrieleño are the ones who did all this work, and they really are the foundation of the early economy of the Los Angeles area ". "That's a contribution that Los Angeles has not recognized--the fact that in its early decades, without the Gabrieleño, the community simply would not have survived."*

On Wed, Apr 7, 2021 at 9:33 AM Justin Equina <jequina@cityofirvine.org> wrote:

> Hello:
>
> I wanted to confirm my phone meeting with Mr. Andrew Salas tomorrow at 3pm. The meeting is in regards to the City of Irvine's Housing Element Update. I called on March 3rd to schedule a meeting, but have not received confirmation since then.
>
> Thank you,
>
> Justin
>
> JUSTIN EQUINA | ASSOCIATE PLANNER | CITY OF IRVINE
> 949-724-6344 | 1 Civic Center Plaza, Irvine, CA 92606 | jequina@cityofirvine.org
>
> **From:** Justin Equina
> **Sent:** Thursday, March 4, 2021 2:50 PM
> **To:** 'admin@gabrielenoindians.org' <admin@gabrielenoindians.org>
> **Subject:** FW: Meeting with Andrew Salas
>
> Hello:
>
> Yesterday, I called to coordinate a meeting with Andrew Salas for the City of Irvine's Housing Element Update. I was scheduled to speak with him on 4/8/21 at 3:00 pm. I wanted to forward a meeting invite to confirm the date. Please let me know if you have any questions.
>
> Thank you,
>
> Justin
>
> JUSTIN EQUINA | ASSOCIATE PLANNER | CITY OF IRVINE
> 949-724-6344 | 1 Civic Center Plaza, Irvine, CA 92606 | jequina@cityofirvine.org

**From:** Joyce Perry
**To:** Thea Errickson
**Cc:** Melissa Chao
**Subject:** Re: Irvine 6th Cycle Housing Element Update - Juaneno Band of Mission Indians Acjachemen Nation - Belardes
**Date:** Wednesday, February 10, 2021 10:52:06 AM

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for your letter. We have no concerns at this time, but ask to be consulted whenever any new development occurs.

Húu'uni 'óomaqati yáamaqati.
Teach peace
Joyce Stanfield Perry
Payomkawichum Kaamalam - President
Juaneño Band of Mission Indians, Acjachemen Nation
Tribal Manager, Cultural Resource Director

On Wed, Feb 10, 2021 at 10:37 AM Thea Errickson <terrickson@cityofirvine.org> wrote:

> Mr. Matias Belardes:
>
> Please see the attached letter regarding the Irvine 6th Cycle Housing Element Update, City Irvine, Orange County, California. If you have any questions, please contact Senior Planner Melissa Chao at mchao@cityofirvine.org.
>
> Sincerely,
>
> **Thea Errickson** | Senior Office Specialist | **City of Irvine**
> **Community Development Department** | Administration
> 949-724-6585 | 1 Civic Center Plaza | Irvine, CA 92606
> TErrickson@cityofirvine.org | *cityofirvine.org*

## Public Engagement

## Appendix A-I: City Council Scoping Session (February 9, 2021)

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1. Meeting Agenda
2. Staff Report
3. Presentation
4. Public Notice
5. Affidavit of Publication
6. Comment Summary and Analysis

# 1. Meeting Agenda

Farrah N. Khan
Mayor

Tammy Kim
Vice Mayor

Larry Agran
Councilmember

Mike Carroll
Councilmember

Anthony Kuo
Councilmember

# AGENDA

## CITY COUNCIL
## SPECIAL MEETING

**February 9, 2021**
**3:00 PM**
**City Council Chamber**
One Civic Center Plaza
Irvine, CA 92606

**IMPORTANT PUBLIC HEALTH AND SAFETY MESSAGE REGARDING PARTICIPATION AT CITY COUNCIL MEETINGS**

AS A RESULT OF THE COVID-19 VIRUS, AND RESULTING ORDERS AND DIRECTION FROM THE PRESIDENT OF THE UNITED STATES, THE GOVERNOR OF THE STATE OF CALIFORNIA, AND THE ORANGE COUNTY HEALTH CARE AGENCY, AS WELL AS THE CITY OF IRVINE EMERGENCY DECLARATION, THE PUBLIC WILL NOT BE PERMITTED TO PHYSICALLY ATTEND THE IRVINE CITY COUNCIL MEETING TO WHICH THIS AGENDA APPLIES.

MEETINGS ARE BROADCAST LIVE ON ICTV, COX COMMUNICATIONS LOCAL ACCESS CHANNEL 30, AND AT&T U-VERSE CHANNEL 99, AND LIVESTREAMED ONLINE AT CITYOFIRVINE.ORG/ICTV. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: CITY COUNCIL," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO CLERK@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/ICTV. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO CITY COUNCILMEMBERS AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/ICTV AND SELECT "CITY COUNCIL MEETINGS."

PLEASE NOTE: THE CITY COUNCIL IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE CITY CLERK'S OFFICE AT 949-724-6205, OR VIA EMAIL AT CLERK@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

Scan this QR code for an electronic copy of the City Council Special Meeting Agenda.

**CALL TO ORDER**

**ROLL CALL**

## 1. SCOPING SESSION

### *1.1 GENERAL PLAN AMENDMENT SCOPING SESSION FOR THE 6TH CYCLE HOUSING ELEMENT UPDATE*

**ACTION:**
Provide input and direction to staff on the Housing Element Update.

## ADJOURNMENT

**NOTICE TO THE PUBLIC**
**LIVE BROADCASTING AND REBROADCASTING**

Regular City Council meetings are broadcast live every 2nd and 4th Tuesday of the month at 4 p.m. and are replayed on Tuesdays at 4 p.m. (in weeks in which there is not a live City Council meeting), Sundays at 11 a.m., Wednesdays at 7 p.m., and Thursdays at 10 a.m. until the next City Council meeting. All broadcasts can be viewed on Cox Communications Local Access Channel 30 and U-Verse Channel 99. City Council meetings are also available via live webcast and at any time for replaying through the City's ICTV webpage at cityofirvine.org/ictv. For more information, please contact the City Clerk's office at (949) 724-6205.

**STAFF REPORTS**

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the City Clerk and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular City Council meeting). Staff reports can also be downloaded from the City's website at cityofirvine.org at least 12 days prior to the scheduled City Council meeting on Tuesday.

In addition, meetings can be viewed live at the time posted on the agenda and related staff reports can be opened and viewed simultaneously along with the streaming of the meeting. To view the meeting, go to *cityofirvine.org/ictv*.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk staff at (949)724-6205.

**SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA**

Any supplemental writings or documents distributed to a majority of the City Council regarding any item on this agenda after the posting of the agenda will be available for public review in the City Clerk's Office, One Civic Center Plaza, Irvine, California, during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk staff at (949)724-6205.

## SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

Media Types and Guidelines

Written Materials/Handouts:

Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting. This information will be disseminated to the City Council.

## CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans With Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the City Clerk's Office at (949)724-6205.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II)

## CHALLENGING CITY DECISIONS

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitations period is specified by any other provision. Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge that is not filed within this 90-day period will be barred.

If a person wishes to challenge the nature of the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of Irvine, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

## COMMUNICATION AND ELECTRONIC DEVICES

To minimize distractions, please be sure all personal communication and electronic devices are turned off or on silent mode.

## MEETING SCHEDULE

Regular meetings of the City Council are held on the second and fourth Tuesdays of each month at 4:00 p.m. Study Sessions and/or Closed Sessions are periodically held prior to the start of the regular meeting. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at www.ci.irvine.ca.us

I hereby certify that the agenda for the Special City Council meeting was posted in accordance with law in the posting book located in the Public Safety Lobby and at the entrance of City Hall, One Civic Center Plaza, Irvine, California on January 29, 2021 by 8pm as well as on the City's web page.

Carl Petersen, MPA, CMC
Interim City Clerk

Prepared by the City Clerk's Office

# 2. Staff Report

## REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** FEBRUARY 9, 2021

**TITLE:** GENERAL PLAN AMENDMENT SCOPING SESSION FOR THE 6TH CYCLE HOUSING ELEMENT UPDATE

Director of Community Development

Interim City Manager

**RECOMMENDED ACTION**

Provide input and direction to staff on the Housing Element Update.

**EXECUTIVE SUMMARY**

City Council Resolution No. 87-108 requires a "Scoping Session" for all General Plan Amendment (GPA) applications. The purpose of this Scoping Session is to provide advance knowledge of the proposed 6th Cycle Housing Element Update (HEU) and to provide an opportunity to the City Council to identify and define issues to be addressed during the HEU review process, including providing input on the draft Community Outreach plan.

Every eight years the state requires that each jurisdiction update its Housing Element to adequately plan to meet the housing needs of everyone in the community. The State Department of Housing and Community Development (HCD) is responsible for tracking and determining compliance with the state housing law and ultimately certifying each jurisdiction's Housing Element. The City must have an HCD certified Housing Element to be eligible for certain state funding opportunities and to avoid a shortened Housing Element cycle of every four years rather than every eight years going forward .

The HEU will demonstrate that the City is providing opportunities for the provision and development of housing in accordance with state mandates. Additionally, the update to the Housing Element incorporates the new Regional Housing Needs Allocation (RHNA) for 2021-2029 (known as the "6th cycle"), which has been significantly increased from the current allocation issued by the Southern California Association of Governments (SCAG) for 2013-2021 (known as the "5th cycle"). It is important to note that for the City to be compliant with Housing Element law the City must demonstrate that it has the land capacity to address RHNA through a site inventory analysis, which is a required component of the update. This will be a challenging component of the HEU and will require the City to draw upon several strategies to meet the RHNA obligations.

**COMMISSION/BOARD/COMMITTEE RECOMMENDATION**

Not applicable.

**ANALYSIS**

*Housing Element Basics*

The Housing Element is a state-mandated policy document within the General Plan that identifies the City's housing conditions and needs, establishes the goals, objectives, and policies that are the foundation of the City's housing strategy. The Housing Element also provides an array of programs to create sustainable, mixed-income neighborhoods across the City to create a "housing plan." Irvine's existing and future housing needs will be addressed by:

- Conserving and improving existing housing and neighborhoods;
- Assisting in development and provision of affordable housing;
- Providing adequate residential sites to address fair share housing needs;
- Removing governmental constraints to housing development; and
- Promoting equal housing opportunities

Although the City does not build housing, the Housing Element does create a plan and regulatory framework that provides opportunities for housing to be built by the private sector, where market conditions ultimately determine when and where housing is built.

*Progress Under the Existing 5th Cycle Housing Element*

On July 30, 2013, HCD certified the City's 5th Cycle Housing Element for 2013-2021 and it is available at https://www.cityofirvine.org/community-development/current-general-plan.

Some highlights under the current housing element include:

| Income Category (% of County *Area Median Income (AMI)) | Allocated Units (2013-2021) | Actual Units Built (2013-2019) |
|---|---|---|
| Extremely Low/ Very Low/ (0% - 50% AMI ) | 2,817 | 1,127 |
| Low (51% - 80% AMI) | 2,034 | 37 |
| Moderate (81% - 120% AMI) | 2,239 | 12,998 |
| Above Moderate (120% AMI or above, which is considered market rate) | 5,059 | 14,863 |
| **TOTAL** | **12,149** | **29,025** |

In addition to the 29,025 actual units built represented in the above table, two affordable housing projects (Montaira and Salerno) were built in 2020 with a combined total of 245 Extremely Low/Very Low units. Leasing is underway for these 245 units.

*2021-2029 Regional Housing Needs Assessment*

The driving force for the HEU is the RHNA allocation. For the upcoming eight years, HCD has determined the housing need for the region to be 1,341,827 units. SCAG has taken this number and, using their developed methodology, allocated each city and county in the region with its respective share.

On September 4, 2020, SCAG officially released the draft RHNA allocation to each jurisdiction. The RHNA represents the minimum number of housing units Irvine is required to plan for in its Housing Element by providing "adequate sites" through its General Plan and Zoning Ordinance. The City of Irvine's portion of the RHNA for the 2021-2029 Housing Element is 23,554 units, of which 10,604 are allocated to low- and very low-income categories. Although more affordable housing has been built in Irvine than in any other City in Orange County, the total number of RHNA units in the 6th cycle represents a 94 percent increase from the 5th cycle and a 126 percent increase in extremely low and very low-income units. The following table summarizes the draft allocation by income category:

| Income Category (% of County Area Median Income (AMI)) | Units |
|---|---|
| Extremely Low / Very Low (0% - 50% AMI) | 6,379 |
| Low (51% - 80% AMI) | 4,225 |
| Moderate (81% - 120% AMI) | 4,299 |
| Above Moderate (120% AMI or above, which is considered market rate) | 8,651 |
| **TOTAL** | **23,554** |

A challenge for Irvine will be meeting the Extremely Low/Very Low to Low-income unit allocations. It is anticipated that substantially more units than the total RHNA allocation of 23,554 units will need to be planned for to adequately incentivize the private sector to deliver the required affordable units.

On October 26, 2020, the City filed an appeal of its RHNA allocation to reduce the allocation by 8,259 total units. The appeal is posted at https://www.cityofirvine.org/news-media/news-article/city-irvine-regional-housing-needs-assessment-update. Following the completion of the RHNA appeal process, SCAG plans to adopt the final allocation in February 2021.

*Potential Housing Element Update Strategies*

The HEU must demonstrate that the City has the land capacity to address RHNA through a site inventory analysis in order to meet Housing Element law. This will be the most difficult component of the HEU due to the limited amount of developable vacant land and the size of the RHNA obligation. Staff and Consultant will need to be creative while working with stakeholders and the community to explore and develop strategies that will address the RHNA. Although staff is in the early stages of formulating strategies, and will work with stakeholders and the community to develop strategies, some potential concepts are listed below:

- Rezoning for additional and higher density housing in the Irvine Business Complex, the area adjacent to the Irvine Transportation Center (train station), and Spectrum areas.
- Redevelopment of older/underperforming properties, which can be converted to a mixed-use or residential use.

- Conversion of market rate apartment units to help the City meet the lower income categories of RHNA.
- Evaluation of existing affordable housing policies and the City's Inclusionary Housing Ordinance to ensure that adequate housing at the lowest income levels is being provided. Currently the Inclusionary Ordinance requires that 15 percent of residential units that are built are at an affordable price point. This could be expanded to require a higher percentage of units to be affordable.

These concepts may develop into more detailed strategies to help meet the RHNA number but would be subject to Planning Commission review and City Council approval.

*Draft Community Outreach Plan*

Cities are required to make a diligent effort to achieve public participation involving all economic segments of the community in the Housing Element update process. To fulfill this requirement, the City will solicit input from community stakeholders and the general public.. Meetings will be publicized in various media platforms including print, social media, email notification, and on the City's project web page. As detailed in Attachment 1 and summarized below, the Community Outreach Plan will consist of the following components:

1. **City Council Scoping Session –** In compliance with General Plan amendment procedures as required by City Council Resolution No. 87-108, introduce the HEU process, provide RHNA overview, anticipated next steps, and solicit City Council input on draft Community Outreach Plan and HEU issues.

2. **Planning Commission Study Session —** The intent is to introduce the HEU process and requirements, provide RHNA overview, anticipated next steps, solicit input on draft Community Outreach Plan and HEU issues.

3. **Community Workshops –**The purpose is to have several open discussion forums with the community regarding HEU information and issues, questions and answers, and to solicit input. These meetings will most likely be conducted in a virtual format or a combination of virtual and in-person to comply with regulations pertaining to the COVID-19 pandemic in effect at that time.

4. **Public Review of Draft HEU and Associated CEQA Documentation –** The purpose is to solicit written comments and will be conducted concurrently with HCD pre-submittal review process for the HEU.

5. **Project Briefings with Planning Commission and City Council —** The purpose is to provide project status updates and solicit input, if necessary.

6. **On-Demand Engagement via City's Project Webpage —** The purpose is to educate and encourage participation in HEU process with on-going updates to webpage content and videos, as well as links to the draft and final HEU documents.

7. **Social Media –**The intent is to promote awareness and encourage participation by coordinating announcements through the Public Information Office.

8. **Language Considerations –** Staff will utilize the bilingual services staff as necessary to ensure effective and multi-lingual communication with the community.

In addition to the draft Community Outreach Plan outlined above and detailed in Attachment 1, City staff and Consultant will utilize all tools available for community outreach, including resources provided by HCD and SCAG.

*Anticipated Next Steps*

As part of the update process, staff and Consultant will complete a review of demographics, population, and housing to understand current conditions, and complete an adequate site analysis for the 2021-2029 RHNA allocation.

The update process includes is outlined below and includes a variety of opportunities to for public involvement (noted with an asterisk)

| | |
|---|---|
| Winter 2020-21 | • Introduction to the Irvine HEU –<br>City Council General Plan Amendment Scoping Session* (February 9, 2021)<br>Planning Commission Study Session* (February 18, 2021)<br>• Stakeholder outreach<br>• Develop site inventory<br>• Assess and develop draft HEU goals, policies, and objectives<br>• Develop draft implementation program |
| Spring 2021 | • Community workshops*<br>• Stakeholder outreach<br>• Finalize site inventory<br>• Prepare draft HEU and environmental review for CEQA |
| Summer 2021 | • HCD pre-submittal review of draft HEU<br>• Public review of draft HEU and CEQA documentation*<br>• Project briefings with Planning Commission and City Council*<br>• Finalize HEU and CEQA documentation |
| Fall 2021 | Adoption hearings:<br>• Planning Commission*<br>• City Council* |
| State Due Date | October 15, 2021 (for certification) |

**ENVIRONMENTAL REVIEW**

This Scoping Session is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15262, Feasibility and Planning Studies. The direction is not a final action or approval in regard to the Housing Element Update and does not have a legally binding effect on any possible future discretionary action.

**ALTERNATIVES CONSIDERED**

No alternatives were considered as the 6th Cycle HEU is due to HCD for certification by October 15, 2021. Jurisdictions that do not maintain a compliant Housing Element are at risk of significant repercussions including, but not limited to, ineligibility for critical state and federal funding, potential loss of land use control in which the state disallows the issuance of building permits, substantial fines and penalties including a four-year RHNA/HEU cycle (instead of the customary eight-year cycle), and exposure to litigation based on a legally inadequate General Plan.

**FINANCIAL IMPACT**

The funding for the HEU is within the approved Fiscal Year 2019-2021 biennial general fund budget, and will be supplemented by State Senate Bill 2 reimbursement funding up to $200,000.

**REPORT PREPARED BY** Charles G. Kovac, Housing Administrator
Amy Mullay, Senior Planner

**ATTACHMENTS**
1. Draft 6th Cycle HEU Community Outreach Plan

ec: Hitta Mosesman, Harris & Associates
Kerwin Lau, Manager of Planning Services
Marika Poynter, Principal Planner
Melissa Chao, Senior Planner
Justin Equina, Associate Planner
Stephanie Takigawa, Housing Specialist

cc: File 00832121-PGA

**6th Cycle Housing Element Update**
**Community Outreach Plan - DRAFT**
February 9, 2021

**Goal:**

Inform and involve the community in the Housing Element Update (HEU) process to help solve issues and/or make informed, sustainable decisions (i.e., technically feasible, economically viable, publicly acceptable, and environmentally compatible).

**Stakeholders:**

1. Residents and interest groups (e.g., environmental and cultural)
2. Business community and Greater Irvine Chamber of Commerce
3. Developers (nonprofit and for profit), homebuilders, Building Industry Association of Southern California (BIA-OC), property owners, and real estate brokers
4. Irvine Community Land Trust
5. Homeowner Associations
6. Students and educational organizations (UCI, CUI, IVC, IUSD, TUSD, SAUSD, SVUSD)
7. Community service providers and organizations (e.g., Rotary, Kiwanis, and Elks Clubs)
8. Seniors, residents experiencing or at risk of housing insecurity, and persons with disabilities - coordinate with Community Services staff, local food banks, and faith-based organizations as necessary
9. Project interest list (e.g., St. Joseph Hospital, The Kennedy Commission)
10. Utility providers
11. Planning Commission and City Council
12. Other ?

**Major Components:**

Prior to the anticipated adoption hearings with the Planning Commission and City Council in Fall 2021 to meet the October 2021 state deadline, staff intends to implement a robust outreach plan using a multi-pronged approach of meetings, workshops, and briefings supplemented with the project webpage, handouts, email notifications, and social media announcements.

The major components of the outreach process are summarized as follows:

1. **HEU Scoping Session with City Council - February 9, 2021**

    - Purpose: Provide opportunity to identify issues to be addressed during the HEU review/development process in accordance with the General Plan amendment procedures in City Council Resolution No. 87-108

ATTACHMENT 1

- Kick-off the HEU and introduce the HEU process and requirements, provide Regional Housing Needs Assessment (RHNA) overview, anticipated next steps, solicit input on the draft Community Outreach Plan, and Q&A
- In collaboration with the HEU Consultant, solicit input/direction on any known priority issues at that time

2. **Planning Commission Study Session – February 18, 2021**
   Purpose: Introduce the HEU process and requirements, provide RHNA overview and appeal update, anticipated next steps, solicit input on the HEU, and Q&A

3. **Targeted Stakeholder Meetings – On-going throughout HEU process as necessary**

   - Purpose: Solicit input and collaborate on developing the HEU
   - Customized meetings designed for individual stakeholders or small groups of related stakeholders in a roundtable format

4. **Community Workshops (up to three; time-permitting) – Anticipated Spring 2021**

   - Purpose: Prior to developing and releasing the public review draft of the HEU document, provide open discussion forum for the community regarding HEU information, issues, and opportunities, as well as hosting Q&A and soliciting input
   - These workshops will most likely be conducted in a virtual format, or a combination of virtual and in-person, in order to comply with regulations pertaining to COVID-19 in place at this time
   - Workshops will be hosted on multiple days and at different times
   - Workshop content will generally overlap, but will be refined and/or customized if necessary as meetings are hosted (possibly by geographic areas such as Spectrum/Great Park Neighborhoods/Irvine Station, Irvine Business Complex, and traditional residential core)
   - Will work with Consultant to select the most effective online tool(s) to conduct virtual outreach and how to best connect with audience (e.g., anonymous interactive polling, chat box for questions, and open microphone for comments/Q&A). Will ensure concurrent access to meeting via phone. If possible, will record workshops and post on the project webpage

5. **Public Review of Draft HEU and Associated CEQA Documentation – Anticipated Summer 2021**

   - Purpose: Solicit written comments through the project website, www.cityofirvine.org/housingelementupdate
   - Conduct public review of draft HEU document concurrently with State Department of Housing and Community Development Department (HCD) pre-submittal review process for the HEU

- Announcements regarding availability of draft HEU and CEQA documentation made via email notification through City's govdelivery system, project interest list, and project webpage
- Distribute and post notice of intent to adopt an initial study/negative declaration or mitigated negative declaration per CEQA

6. **Project Briefings with Planning Commission and City Council – Anticipated Summer 2021**

   - Purpose: Provide project status updates and solicit input as necessary
   - Meetings will be open to the public to allow for comments and questions

7. **On-demand Engagement via Project Webpage at www.cityofirvine.org/housingelementupdate - On-going throughout process**

   - Purpose: Educate and encourage participation in HEU process
   - On-going updates to webpage content
   - Draft HEU and CEQA documentation will be posted here for written feedback and comment
   - Final HEU and CEQA documentation will be posted here
   - Develop informational fact sheets and/or printed fliers/materials as necessary
   - Posting short HEU-related topical videos developed by Orange County Council of Governments (OCCOG)
   - Dedicated project email for inquiries and comments, GPUpdate2035@cityofirvine.org

8. **Social Media – On-going throughout process**
   - Purpose: Promote awareness and encourage participation
   - Coordinate announcements through Public Information Office
   - Anticipated email notifications through the City's govdelivery system and announcements using the City's various social media accounts (e.g., Twitter, Instagram, Facebook, and flickr)

9. **Language Considerations**
   - Bilingual services staff will be utilized as necessary to ensure effective and culturally diverse communication with the community

# 3. Presentation




## Overview

- What is the Regional Housing Needs Assessment (RHNA)
- Housing Element Purpose and Basics
- Potential Housing Element Update Strategies
- Next Steps
- Q & A

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE



## Regional Housing Needs Assessment

- RHNA: A minimum number of units by income category each community is required to provide through "adequate sites" and zoning – Mandated by the State
- RHNA for Southern California: 1,341,827
- SCAG responsible for developing methodology and assigning RHNA to Southern CA cities and counties







## Draft RHNA Allocation

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,379 |
| Category 2 (51 – 80% AMI) | 4,225 |
| Category 3 (81 – 120% AMI) | 4,299 |
| Category 4 (120% AMI or above; considered "market rate") | 8,651 |
| **TOTAL** | **23,554** |

- RHNA Appeal hearings – City appeals denied
- Final RHNA allocation – anticipated March 2021 (slight increase anticipated)
- Actual number needed is anticipated to exceed allocation



## Housing Element Purpose

**State-mandated policy document that:**

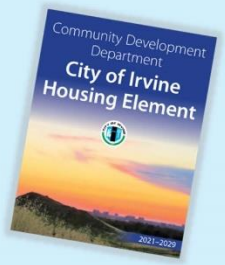
- Provides direction for implementation of various programs to meet existing and future housing needs for all income levels in the City
- Provides goals, policies, programs, and objectives that accommodate opportunities for the preservation of existing housing and development of new housing
- Demonstrates how the City will accommodate its RHNA allocation





## Housing Element Basics

- 5 Major Components:
  - Review of accomplishments
  - Housing needs assessment
  - Evaluation of constraints to housing
  - Identification of housing sites
  - Program strategy to address needs for 2021-2029
- Required to be updated every eight years
- Reviewed by State for compliance with State law






## The Housing Element DOES NOT

- Require the City to build the units
- Provide funding
- Authorize construction
  - Projects still need to go through the development review process







## Housing Element Update Goals

- Accommodate RHNA allocation by income category
- Develop effective housing policies and programs, including strategic implementation
- Incorporate changes required by state laws/regulations and guidance
- Ensure that a high quality of life is maintained as the community matures and evolves



## Benefits of State Compliance

- Continue local authority to issue building permits
- Protect against lawsuits
- Maintain eligibility for State funding opportunities
- Keep customary eight-year cycle
- Avoid substantial fines and penalties







## Potential Housing Element Strategies

- Rezone for more homes
- Redevelop older/underutilized properties
- Develop residential in open space subject to voter approval
- Convert market rate to affordable units
- Change affordable housing policies
- Expand inclusionary housing ordinance
- Ease restrictive development standards
- Encourage innovative design





## Next Steps

Winter 2020-21:

- **City Council GPA Scoping Session for Housing Element Update**
- ***Planning Commission Study Session (February 18, 2021)***
- Stakeholder outreach (development community)
- Develop site inventory
- Assess goals, policies, and objectives

Spring 2021:

- ***Community workshops***
  - ***Advertised on social media; information provided in multiple languages***
- Finalize site inventory
- Prepare draft Housing Element and supporting documentation





## Next Steps (continued)

Summer 2021:

- ***Public review of draft Housing Element***
- State preliminary review of the draft
- ***Project briefings with Planning Commission and City Council***
- Finalize Housing Element and supporting documentation

Fall 2021 – Adoption Hearings:

- ***Planning Commission***
- ***City Council***

**State Due Date – October 15, 2021 for certification**



## Questions?

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

www.cityofirvine.org/housingelementupdate



Housing Element Update

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# 4. Public Notice

CCL No. 21-01

## HOUSING ELEMENT UPDATE SCOPING SESSION

City Council Meeting
February 9, 2021

**PROJECT DESCRIPTION:**

**NOTICE IS HEREBY GIVEN that on Tuesday, February 9, 2021, at the hour of 4 p.m.,** or as soon thereafter as possible, the City Council of the City of Irvine will conduct a public meeting in the City Council Chamber, One Civic Center Plaza, Irvine, California, to host a General Plan Amendment scoping session for the 6th cycle Housing Element Update for 2021-2029 planning period. The Update must comply with the state's requirements and accommodate Irvine's new Regional Housing Needs Assessment (RHNA) allocation. The purpose of the scoping session is to solicit input on the upcoming HEU work effort.

**LOCATION:**

Citywide

**INFORMATION AVAILABLE:**

Copies of the staff report and other project information will be available for review by 8 p.m. on Thursday, January 28, 2020, with the City Clerk, One Civic Center Plaza, Irvine (City Hall) or online at *cityofirvine.org*.

**CITIZEN INVOLVEMENT:**

Do you have any comments? Questions? Concerns? You are invited to observe and participate, via e-Comment, in a public meeting held by the Irvine City Council on **Tuesday, February 9, 2021**, at **4 p.m., or soon thereafter**, in the City Council Chamber at Irvine City Hall, One Civic Center Plaza, Irvine.

**AS A RESULT OF THE COVID-19 VIRUS, THE PUBLIC IS NOT PERMITTED TO PHYSICALLY ATTEND THE PUBLIC HEARING. YOU MAY SUBMIT COMMENTS IN WRITING VIA MAIL TO "ATTN: COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION" AT ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO CLERK@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT *CITYOFIRVINE.ORG/ICTV*. E-COMMENTS WILL BE READ INTO THE RECORD AT THE TIME DETERMINED BY THE MAYOR.**

**PLEASE NOTE: THE CITY COUNCIL IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. IT WOULD BE APPRECIATED IF COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING. IF THAT IS NOT POSSIBLE, EVERY EFFORT WILL BE MADE TO ATTEMPT TO REVIEW E-COMMENTS DURING THE COURSE OF THE MEETING. TOWARDS THIS END, THE MAYOR WILL ENDEAVOR TO TAKE A BRIEF PAUSE BEFORE ACTION IS TAKEN ON ANY AGENDA ITEM TO ALLOW THE CITY CLERK TO REVIEW E-COMMENTS, AND SHARE ANY E-COMMENTS RECEIVED DURING THE MEETING.**

**ADA COMPLIANCE:**

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act in all respects. If, as a participant and observer at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the City Clerk's office at 949-724-6205. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II)

**CITY CONTACT:** For more information, please contact Charles Kovac, Housing Administrator, via email at ckovac@cityofirvine.org or by phone at 949-724-7452 and/or Amy Mullay, Senior Planner, via email at amullay@cityofirvine.org or by phone at 949-724-7454.

**CASE NUMBER(S):** 00832121-PGA

**PUBLISH DATE:** *Irvine World News* – January 21, 2021

CITY OF IRVINE

By: _____

Carl Petersen, MPA, CMC
Interim City Clerk

# 5. Affidavit of Publication

**Irvine World News**
2190 S. Towne Centre Place Suite 100
Anaheim, CA 92806
714-796-2209

5191001

IRVINE, CITY OF- LEGALS
1 CIVIC CENTER PLZ
ATTN: ACCOUNTS PAYABLE
IRVINE, CA 92606-5208

**FILE NO. CCL No. 21-02**

**AFFIDAVIT OF PUBLICATION**

STATE OF CALIFORNIA, } SS.
County of Orange

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the Irvine World News, a newspaper that has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, on August 23, 1990, Case No. A-154653 in and for the City of Irvine, County of Orange, State of California; that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

**01/21/2021**

I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct:

Executed at Anaheim, Orange County, California, on Date: January 21, 2021.

Signature

CCL No

PROJECT DESCRIPTION:

NOTICE IS HEREBY GIVEN that on Tuesday, Fe
ary 9, 2021, at the hour of 4 p.m., or as soon thereaf
possible, the City Council of the City of Irvine will cond
public hearing in the City Council Chamber, One Civic C
Plaza, Irvine, California, to consider an amendment to th
ing Ordinance to change the frequency of the required up
to the Irvine Business Complex Residential/Mixed Use V
Plan Traffic Study from every two years to three years in
tion 9-36-14 Irvine Business Complex Traffic Improvemen
Program.

PLANNING COMMISSION ACTION:

On January 7, 2021, the Planning Commission voted una
mously, with all members present, to recommend the
Council adopt - AN ORDINANCE OF THE CITY COUNCIL
THE CITY OF IRVINE, CALIFORNIA, APPROVING A ZO
CHANGE TO THE ZONING ORDINANCE (00827079-P
CHAPTER 9-36 OF THE IRVINE ZONING ORDINANCE
CHANGE THE FREQUENCY OF THE REQUIRED
DATES TO THE IRVINE BUSINESS COMPL
RESIDENTIAL/MIXED USE VISION PLAN TRAF
STUDY FROM EVERY TWO YEARS TO THREE; FILED
THE CITY OF IRVINE PUBLIC WORKS AND TRANSP
TATION DEPARTMENT

LOCATION:

Planning Area 36 Irvine Business Complex

INFORMATION AVAILABLE:

Copies of the staff report and other project information will b
available for review by 8 p.m. on Thursday, January 28, 20
with the City Clerk, One Civic Center Plaza, Irvine (City Ha
or online at cityofirvine.org.

CITIZEN INVOLVEMENT:

Do you have any comments? Questions? Con-cerns? You a
invited to observe and participate, via Cox Communicatio
(Channel 30), AT&T U-Verse (Channel 99), online
cityofirvine.org/ictv, and/or e-Comment, a public hearing ha
by the Irvine City Council on **Tuesday, February 9, 2021, a**
**p.m.**, or soon thereafter, in the City Council Chamber at Irvi
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TRANSPORTATION DEPARTMENT" AT ONE CIVI
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THE TIME DETERMINED BY THE MAYOR.

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THIS END, THE MAYOR WILL ENDEAVOR TO TAKE
A BRIEF PAUSE BEFORE ACTION IS TAKEN ON ANY
AGENDA ITEM TO ALLOW THE CITY CLERK TO RE-
VIEW E-COMMENTS, AND SHARE ANY E-
COMMENTS RECEIVED DURING THE MEETING.

NOTE:

The City Council is the final decision-making body for this ap-
plication. If you challenge the City Council's action on this item
in court, you may be limited to raising only those issues which
you or someone else raised at this public hearing or in written
correspondence received by the City at, or prior to, the hear-
ing.

ADA COMPLIANCE:

It is the intention of the City of Irvine to comply with the Ameri-
cans with Disabilities Act in all respects. If, as a participant
and observer at this meeting, you will need special assistance
beyond what is normally provided, the City of Irvine will at-
tempt to accommodate you in every reasonable manner.
Please contact the City Clerk's office at 949-724-6205. Notifica-
tion 48 hours prior to the meeting will enable the City to make
reasonable arrangements to ensure accessibility to this meet-
ing. (28 CFR 35. 102-35. 104 ADA Title II)

CITY CONTACT:

For more information, please contact Supervising Transporta-
tion Analyst Lisa Thai via email at lthai@cityofirvine.org or by
phone at 949-724-7360.

CASE NUMBER(S): 00827079-PZC

PUBLISH DATE: Irvine World News - January 21, 2021

CITY OF IRVINE

By: /s/ Carl Petersen
Carl Petersen, CMC, MPA
Interim City Clerk

rLP1-12/15/16

# 6. City Council Scoping Session Comment Summary and Analysis

| Comments and Questions Received at Feb. 9 City Council Scoping Session | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Concern over sizeable RHNA and the methodology/process, especially when 1/3 of Irvine is designated as permanent open space and City has been master planned since its inception in 1971. | CM Carroll | Irvine received the 5th largest allocation in the Southern California region based on SCAG's RHNA methodology. The primary contributing factors are the presence of two major job centers, Spectrum and IBC, and the assumed population within proximity to two hypothetical bus rapid transit (BRT) routes along SR-55 and I-5 with four assumed stops a.k.a. as High Quality Transit Areas (HQTA).<br><br>The HEU accommodates the Final 6th Cycle RHNA allocation adopted by SCAG's Regional Council on March 4, 2021 as addressed in the Site Inventory section. |
| Concern over RHNA appeals process. | CM Carroll | RHNA law is very specific on what you can appeal on. Irvine mounted a thorough and valid appeal. However, the RHNA Appeals Board denied the City's appeal on January 25, 2021.<br><br>52 jurisdictions appealed (out of 196 jurisdictions total in SCAG) where only two appeals were upheld (i.e., City of Pico Rivera due to potential Whittier Dam inundation and County of Riverside in regards to the March Air Force Base). |
| Concern OCTA was not consulted by SCAG and why OCTA was unable/unwilling to go on record. | CM Carroll; CM Kuo | The City included this concern as a justification in its appeal of the draft RHNA allocation on October 26, 2020. However, the RHNA Appeals Board denied the City's appeal on January 25, 2021. |

| Comments and Questions Received at Feb. 9 City Council Scoping Session | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Understand 5th cycle progress by income level | CM Carroll; Mayor Khan | Addressed in Review of Previous Housing Element (2013-2021) section.<br><br>The 5th cycle RHNA allocation is 12,149 units comprised of:<br>VL: 2,817 (1,127 built)<br>L: 2,034 (37 built)<br>M: 2,239 (12,998 built)<br>AM: 5,059 (14,863 built)<br>A total of 29,025 units were built through 2019 during the 5th cycle. |
| Why the deficiency in very low and low income units? | Mayor Khan | Irvine's inclusionary housing ordinance has been very successful and has facilitated the development of the largest affordable housing portfolio in Orange County with over 4,800 units.<br><br>Under Objective HE-E.3 of the Housing Plan section in the HE, the inclusionary housing policies and fees will be evaluated and updated during the subsequent General Plan Update/Zoning Ordinance Amendment work effort. Any changes to the inclusionary housing policies and programs will facilitate units in deficient categories, including a potential increase, likely at the lowest affordability categories, to mandate 20 percent of new housing projects at affordable price points, rather than the current 15 percent. |
| Do Irvine Community Land Trust (ICLT) units count towards the affordable unit RHNA allocation? | Mayor Khan | Any residential unit developed with a deed restriction is counted, including ICLT units. |
| Does student housing at University of California, Irvine (UCI) count towards the RHNA allocation? | CM Kuo | No, dorms, faculty housing, and graduate student housing do not count towards the City's RHNA allocation at this time despite the UCI campus being within City limits.<br><br>The Site Inventory section includes existing UCI housing. The Site Inventory also includes a potential UCI residential project of approximately 400 units located on Irvine Boulevard for staff. |

| Comments and Questions Received at Feb. 9 City Council Scoping Session | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Do assisted living projects in the IBC count towards RHNA? | CM Kuo | Senior apartments count towards the RHNA allocation.<br><br>On the other hand, congregate care/convalescent facilities do not count towards RHNA and are treated similar to dorm or jail facilities (i.e., beds). |
| How did we deal with the 5th cycle RHNA allocation of 12,149 units? | CM Kuo | During the 5th cycle planning period, the City still had a significant amount of vacant land.<br><br>In addition to reduced land to develop, the 6th cycle is subject to new tighter housing laws to account for income levels as well as total units and use of sites previously included in the 4th and 5th cycle site inventories. |
| Is it possible that the State could override the voter approved initiative that protects 1/3 of the City's acreage as permanent open space | CM Kuo; CM Carroll | The real property documents (i.e., open space deeds) restrict the use of the property to open space only. Express State legislation would be needed to overcome these legal impediments.<br><br>The Site Inventory section does not include locally protected open space areas as staff focused on vacant sites and non-vacant sites for redevelopment/repurposing for a higher and better use (e.g., older office and/or industrial building stock, underutilized retail space, revitalizing other land uses by adding residential onsite).<br><br>It should be noted that the State only recognizes and exempts Federal and State protected open space areas only (i.e., NCCP and HCP) in the process. |
| What was the voting composition of the City Council when the 4th and 5th cycle Housing Elements were adopted? | CM Kuo; Vice Mayor Kim | The 4th cycle HE covering 2008-2012 was adopted on January 24, 2012 (due to a delay from the RHNA methodology lawsuit). It was unanimously approved by the City Council Agran, Choi, Krom, Lalloway, and Kang.<br><br>The 5th cycle HE covering 2013-2021 was adopted on September 10, 2013 by a unanimous vote of the City Council (i.e., Agran, Krom, Lalloway, Shea, and Choi). |

| Comments and Questions Received at Feb. 9 City Council Scoping Session | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Consider developing master affordable housing plan to be proactive based on the Irvine's historical planning concept of villages | CM Agran | The City will explore the feasibility of developing a master affordable housing plan during the subsequent General Plan Update/Zoning Ordinance Amendment work effort. It is anticipated that the future development of residential and mixed-use overlays will foster the village planning and walkable neighborhood concepts.<br><br>Unlike previous HE cycles, new Affirmatively Furthering Fair Housing or AFFH requirements (AB 686) for the 6th cycle require affordable units to be scattered throughout the City, not concentrated. This consideration is addressed in the AFFH section of the HE and will be addressed during subsequent General Plan and zoning efforts. |
| Is there any new State legislation that incentivizes developers to build affordable housing for low or very low income levels? | Mayor Khan | No grants or loans were available in the past few years.<br><br>In contrast, new SB2 Grant funding (a.k.a., Permanent Local Housing Allocation or "PLHA") will provide approximately an estimated $4.5 million dollars to Irvine over the course of five years with the first installment anticipated to be around $758,000. Additionally, tax credit (4% and 9%) processes are still available.<br><br>Goal 4 of the Housing Plan section includes policies, programs, and actions for securing and assisting with affordable housing funding. Additionally, PP-I.3 aims to leverage all funding options such as joining the Orange County Finance Trust (OCHFT), a joint power authority comprised of many Orange County cities. OCHFT can provide additional funding options for affordable housing developers. |
| Does the RHNA allocation distinguish between rental and ownership? | Vice Mayor Kim | RHNA does not distinguish between rental vs. ownership units. |

| Comments and Questions Received at Feb. 9 City Council Scoping Session | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Can office or retail space be converted to residential use? | Vice Mayor Kim | Yes, if the zoning allows for it. As indicated under Goals 1 and 2 of the Housing Plan section, it is anticipated that the subsequent General Plan Update and Zoning Ordinance Amendment work effort will maximize density near the Irvine Station with a residential overlay for transit-oriented development and expand the residential overlay and unit cap in the IBC which would facilitate the conversion of non-residential to residential uses. In addition, a proposed retail overlay would allow for residential uses to supplement or replace retail uses. |
| Concern how traffic impacts associated with new units will be mitigated. | Vice Mayor Kim | As part of the subsequent General Plan Update/Zoning Ordinance Amendment work effort, an Environmental Impact Report (EIR) with traffic study will be prepared. |
| Does workforce housing for UCI staff and faculty receive RHNA credit? | Vice Mayor Kim | No, faculty housing for UCI staff does not count towards the City's RHNA allocation at this time despite being within City limits.<br><br>However, City staff, is working with HCD (through state delegation and lobbyist) to allow existing and under construction housing at UCI to be counted toward meeting the City's RHNA allocation, consistent with practice at UC Santa Barbara and Santa Cruz. UCI is supportive of the City's efforts. University Hills (for sale and rent), Graduate/Family Housing, and the housing proposed by UCI off Irvine Boulevard is also included on the site inventory. |
| Concern that UCI operations is responsible for over 20,000 vehicles daily on local roads pre-COVID-19 pandemic. | CM Carroll | Although housing on UCI-owned property does not count at the time of preparation/publication of this document towards the City's RHNA allocation, related traffic generation is accounted for and analyzed in traffic impact analyses conducted for applicable development projects within the City and in environmental documents prepared by UCI. |

## Public Engagement

## Appendix A-J: Planning Commission Study Session (February 18, 2021)

## Table of Contents

1. Meeting Agenda
2. Staff Report
3. Presentation
4. Public Notice
5. Affidavit of Publication
6. Comment Summary and Analysis

# 1. Meeting Agenda



Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine
Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner

# AGENDA

## PLANNING COMMISSION REGULAR MEETING

**February 18, 2021**
**5:30 PM**

**City Council Chamber**
**One Civic Center Plaza**
**Irvine, CA 92606**

---

## IMPORTANT PUBLIC HEALTH AND SAFETY MESSAGE REGARDING PARTICIPATION IN PLANNING COMMISSION MEETINGS

AS A RESULT OF THE COVID-19 VIRUS, AND RESULTING ORDERS AND DIRECTION FROM THE PRESIDENT OF THE UNITED STATES, THE GOVERNOR OF THE STATE OF CALIFORNIA, AND THE ORANGE COUNTY HEALTH CARE AGENCY, AS WELL AS THE CITY OF IRVINE EMERGENCY DECLARATION, THE PUBLIC WILL NOT BE PERMITTED TO PHYSICALLY ATTEND THE IRVINE PLANNING COMMISSION MEETING TO WHICH THIS AGENDA APPLIES.

YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM, OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING BY MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT (SUBMIT COMMENTS BY CLICKING "E-COMMENT" NEXT TO THE ONLINE AGENDA LINK AT CITYOFIRVINE.ORG/PLANNNINGCOMMISSION). PUBLIC COMMENTS FOR AGENDA ITEMS WILL BE READ INTO THE RECORD AT THE TIME THE CHAIR OPENS THE FLOOR FOR PUBLIC COMMENTS. PLEASE HAVE ALL COMMENTS SUBMITTED BY THAT TIME.

**PLEASE NOTE:** THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW

THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. IT WOULD BE APPRECIATED IF COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING. AT LEAST 24 HOURS BEFORE THE MEETING, SPECIFIC DETAILS ABOUT HOW TO OBSERVE AND PARTICIPATE, WHICH MAY INCLUDE EITHER TELE-CONFERENCING, VIDEO-CONFERENCING, OR ANOTHER EQUIVALENT OPTION, WILL BE INCLUDED ON THE CITY'S WEBSITE.

---

**CALL TO ORDER**

**ROLL CALL**

**PLEDGE OF ALLEGIANCE**

**INTRODUCTIONS**

**ADDITIONS AND DELETIONS TO THE AGENDA**

**PUBLIC COMMENTS**

**COMMISSION BUSINESS**

1. MINUTES - JANUARY 7, 2021

   **RECOMMENDED ACTION:**
   Adopt the minutes of the regular Planning Commission meeting held on January 7, 2021.

   Minutes 1-7-2021

2. STUDY SESSION FOR THE 6TH CYCLE HOUSING ELEMENT UPDATE

   1) Receive staff presentation.

   2) Provide feedback.

   Staff Report

**PUBLIC HEARINGS**

3. ZONING ORDINANCE TECHNICAL UPDATE

   1) Conduct Public Hearing.

2) Continue the public hearing to the April 15, 2021, regular Planning Commission meeting.

Staff Report

4. CONDITIONAL USE PERMIT FOR UNCLE FOSSIL WINE AND SPIRITS LOCATED AT 2700 ALTON PARKWAY, SUITE 217, IN DIAMOND JAMBOREE, PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)

1) Conduct the public hearing.

2) Adopt RESOLUTION NO. 21-3812 - A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA APPROVING CONDITIONAL USE PERMIT (00827098-PCPU) FOR A CONVENIENCE, LIQUOR STORE AT 2700 ALTON PARKWAY, SUITE 217, IN DIAMOND JAMBOREE, PLANNING AREA 36; FILED BY NNARCHITECTS INC., ON BEHALF OF UNCLE FOSSIL GROUP

Staff Report

PC Attachment 1 - Vicinity Map

PC Attachment 2 - Information Sheet

PC Attachment 3 - Project Plans (Fourth Submittal)

PC Attachment 4 - Map of Census Tract

PC Attachment 5 - NOE

PC Attachment 6 - Resolution 21-3812

5. ICON SIGN PROGRAM FOR SECOND HARVEST FOOD BANK LOCATED AT 8014 MARINE WAY IN PLANNING AREA 51 (ORANGE COUNTY GREAT PARK)

1) Conduct the public hearing.

2) Adopt RESOLUTION NO. 21-3813 - A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A SIGN PROGRAM TO ALLOW

AN ICON SIGN (00831674-PSS) ON THE BUILDING FACADE AT SECOND HARVEST FOOD BANK, LOCATED AT 8014 MARINE WAY IN PLANNING AREA 51 (ORANGE COUNTY GREAT PARK); FILED BY SECOND HARVEST FOOD BANK ORANGE COUNTY INC

Staff Report

PC Attachment 1 - Vicinity Map

PC Attachment 2 - PC Information Sheet

PC Attachment 3 - Sign Program

PC Attachment 4 - Images

PC Attachment 5 - Environmental Determination

PC Attachment 6 - Resolution 21-3813

**STAFF REPORTS**

**PLANNING COMMISSION REPORTS**

**ADJOURNMENT**

## NOTICE TO THE PUBLIC

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission.

The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

## STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be downloaded from the City's website at cityofirvine.org/planningcommission at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions

on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

**SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA**

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

**SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS**

Media Types and Guidelines

1. Written Materials/Handouts:

Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings:

Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals:

Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

**CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS**

It is the intention of the City of Irvine to comply with the Americans With Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner.

Please contact the Planning Commission liaison at (949)724-6465.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II)

**MEETING SCHEDULE**

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on _____, by _____ as well as on the City's web page.

_____
Commission Liaison

# 2.Staff Report

## REQUEST FOR PLANNING COMMISSION ACTION

**MEETING DATE:** FEBRUARY 18, 2021

**TITLE:** STUDY SESSION FOR THE 6TH CYCLE HOUSING ELEMENT UPDATE

Director of Community Development

**RECOMMENDED ACTIONS**

1. Receive staff presentation.
2. Provide feedback.

**EXECUTIVE SUMMARY**

This study session will provide the Planning Commission with an overview of the housing element update requirements and proposed schedule. Every eight years the state requires that each jurisdiction update its Housing Element to adequately plan to meet the housing needs of everyone in the community. The State Department of Housing and Community Development (HCD) is responsible for tracking and determining compliance with the state housing law and ultimately certifying each jurisdiction's Housing Element. The City must have an HCD certified Housing Element to be eligible for certain state funding opportunities and to avoid a shortened Housing Element cycle of every four years rather than every eight years going forward.

The HEU will demonstrate that the City is providing opportunities for the provision and development of housing in accordance with state mandates. Additionally, the update to the Housing Element incorporates the new Regional Housing Needs Allocation (RHNA) for 2021-2029 (known as the "6th cycle"), which has been significantly increased from the current allocation issued by the Southern California Association of Governments (SCAG) for 2013-2021 (known as the "5th cycle"). For the City to be compliant with Housing Element law the City must demonstrate that it has the land capacity to address RHNA through a site inventory analysis, which is a required component of the update. This will be a challenging component of the HEU and will require the City to draw upon several strategies to meet the RHNA obligations.

A Scoping Session for this proposed General Plan Amendment (GPA) was presented to the City Council on February 9, 2021. A Scoping Session for GPA applications is required by City Council Resolution No. 87-108 to provide the City Council advance knowledge of the proposed GPA and the opportunity to identify issues to be addressed during the review process.

**COMMISSION/BOARD/COMMITTEE RECOMMENDATION**

Not applicable.

**ANALYSIS**

*Housing Element Basics*

The Housing Element is a state-mandated policy document within the General Plan that identifies the City's housing conditions and needs, establishes the goals, objectives, and policies that are the foundation of the City's housing strategy. The Housing Element also provides an array of programs to create sustainable, mixed-income neighborhoods across the City to create a "housing plan." Irvine's existing and future housing needs will be addressed by:

- conserving and improving existing housing and neighborhoods,
- assisting in development and provision of affordable housing,
- providing adequate residential sites to address fair share housing needs,
- removing governmental constraints to housing development, and
- promoting equal housing opportunities.

Although the City does not build housing, the Housing Element does create a plan and regulatory framework that provides opportunities for housing to be built by the private sector, where market conditions ultimately determine when and where housing is built.

*Progress Under the Existing 5th Cycle Housing Element*

On July 30, 2013, HCD certified the City's 5th Cycle Housing Element for 2013-2021 and it is available at cityofirvine.org/community-development/current-general-plan.

Some highlights under the current housing element include:

| Income Category [% of County *Area Median Income (AMI)] | Allocated Units (2013-2021) | Actual Units Built (2013-2019) |
|---|---|---|
| Category 1 (0% - 50% AMI) | 2,817 | 1,127 |
| Category 2 (51% - 80% AMI) | 2,034 | 37 |
| Category 3 (81% - 120% AMI) | 2,239 | 12,998 |

| Income Category [% of County *Area Median Income (AMI)] | Allocated Units (2013-2021) | Actual Units Built (2013-2019) |
|---|---|---|
| Category 4 (120% AMI or above, which is considered market rate) | 5,059 | 14,863 |
| **TOTAL** | **12,149** | **29,025** |

In addition to the 29,025 actual units built represented in the above table, two affordable housing projects (Montaira and Salerno) were built in 2020 with a combined total of 244 Extremely Low/Very Low units. Leasing is underway for these 244 units.

*2021-2029 Regional Housing Needs Assessment*

For the upcoming eight years, HCD has determined the housing need for the Southern California region to be 1,341,827 units. SCAG has taken this number and, using their developed methodology, allocated to each city and county in the region, its respective share.

On September 4, 2020, SCAG officially released the draft RHNA allocation to each jurisdiction. The RHNA represents the minimum number of housing units Irvine is required to plan for in its Housing Element by providing "adequate sites" through its General Plan and Zoning Ordinance. Under state law, "adequate sites" are available and suitable sites, either vacant land or land that may be redeveloped during the eight-year planning period, with appropriate zoning, development standards, infrastructure capacity, and physical characteristics. The City of Irvine's portion of the RHNA for the 2021-2029 Housing Element is 23,554 units, of which 10,604 are allocated to low- and very low- income categories. Although more affordable housing has been built in Irvine than in any other City in Orange County, the total number of RHNA units in the 6$^{th}$ cycle represents a 94 percent increase from the 5$^{th}$ cycle and a 126 percent increase in extremely low and very low-income units. The following table summarizes the draft allocation by income category:

| Income Category [% of County Area Median Income (AMI)] | Units |
|---|---|
| Category 1 (0% - 50% AMI) | 6,379 |
| Category 2 (51% - 80% AMI) | 4,225 |
| Category 3 (81% - 120% AMI) | 4,299 |

| Income Category [% of County Area Median Income (AMI)] | Units |
|---|---|
| Category 4 (120% AMI or above, which is considered market rate) | 8,651 |
| **TOTAL** | **23,554** |

The challenge for Irvine will be meeting the Extremely Low/Very Low to Low-income unit allocations. It is anticipated that substantially more units than the total RHNA allocation of 23,554 units will need to be planned for to adequately incentivize the private sector to deliver the required affordable units.

On October 26, 2020, the City filed an appeal of its RHNA allocation to reduce the allocation by 8,259 total units. The appeal is posted at cityofirvine.org/news-media/news-article/city-irvine-regional-housing-needs-assessment-update. SCAG staff recommended denial of the City's appeal and the RHNA Appeals Board upheld SCAG staff's recommendation 4-2 (Orange County and Los Angeles County voting in opposition). Following the completion of the RHNA appeal process, SCAG plans to adopt the final allocation in March 2021. Staff expects the final RHNA allocation to increase slightly due to two successful RHNA appeals.

*Potential Housing Element Update Strategies*

The HEU must demonstrate that the City has the land capacity to address RHNA through a site inventory analysis in order to meet Housing Element law. This will be the most difficult component of the HEU due to the limited amount of developable vacant land and the size of the RHNA obligation. Staff and our HEU Consultant team will need to be creative while working with stakeholders and the community to explore and develop strategies that will address the RHNA. Although staff is in the early stages of formulating strategies, and will work with stakeholders and the community to develop strategies, some potential concepts are listed below:

- Rezoning for additional and higher density housing in the Irvine Business Complex, the area adjacent to the Irvine Transportation Center (train station), and Spectrum areas.
- Redevelopment of older/underperforming properties, which can be converted to mixed-use or residential use.
- Conversion of market rate apartment units to help the City meet the lower income categories of RHNA.
- Evaluation of existing affordable housing policies and the City's Inclusionary Housing Ordinance to ensure that adequate housing at the lowest income levels

is being provided. Currently the Inclusionary Ordinance requires that 15 percent of residential units that are built are at an affordable price point. This could be expanded to require a higher percentage of units to be affordable.

- Encourage efficient and innovative residential building design and ease restrictive development standards.

These concepts may develop into more detailed strategies to help meet the RHNA number but would be subject to Planning Commission review and City Council approval.

*Public Participation*

Cities are required to make a diligent effort to achieve public participation involving all economic segments of the community in the Housing Element update process. To fulfill this requirement, the City will solicit input from community stakeholders and the general public. Meetings will be publicized in various media platforms including print, social media, email notification, and on the City's project web page. The Community Outreach Plan will consist of these major components:

1. **City Council Scoping Session** – In compliance with General Plan amendment procedures as required by City Council Resolution No. 87-108, introduce the HEU process, provide RHNA overview, anticipated next steps, and solicit City Council input on draft Community Outreach Plan and HEU issues.

2. **Planning Commission Study Session** – The intent is to introduce the HEU process and requirements, provide RHNA overview, anticipated next steps, solicit input on draft Community Outreach Plan and HEU issues.

3. **Community Workshops** – The purpose is to have several open discussion forums with the community regarding HEU information and issues, questions and answers, and to solicit input. These meetings will most likely be conducted in a virtual format or a combination of virtual and in-person to comply with regulations pertaining to the COVID-19 pandemic in effect at that time.

4. **Public Review of Draft HEU and Associated CEQA Documentation** – The purpose is to solicit written comments on the draft HEU document, concurrently with HCD pre-submittal review process for the HEU.

5. **Project Briefings with Planning Commission and City Council** – The purpose is to provide project status updates and solicit input, if necessary.

6. **On-Demand Engagement via City's Project Webpage** – The purpose is to educate and encourage participation in HEU process with on-going updates to

webpage content and videos, as well as links to the draft and final HEU documents.

7. **Social Media** – The intent is to promote awareness and encourage participation by coordinating announcements through the Public Information Office.

8. **Language Considerations** – Staff will utilize translation services and bilingual services staff as necessary to ensure effective and multi-lingual communication with the community.

*Anticipated Next Steps*

As part of the update process, staff and Consultant will complete a review of demographics, population, and housing to understand current conditions and constraints, and develop an adequate site inventory for the 2021-2029 RHNA allocation.

The update process is outlined below and includes a variety of opportunities for public involvement (noted with an asterisk)

| | |
|---|---|
| Winter 2020-21 | • Introduction to the Irvine HEU –<br>City Council General Plan Amendment Scoping Session* (February 9, 2021)<br>Planning Commission Study Session* (February 18, 2021)<br>• Stakeholder outreach (development community)<br>• Develop site inventory<br>• Assess and develop draft HEU goals, policies, and objectives<br>• Develop draft implementation program |
| Spring 2021 | • Community workshops and public outreach*<br>• Stakeholder outreach<br>• Finalize site inventory<br>• Prepare draft HEU and environmental review for CEQA |
| Summer 2021 | • HCD pre-submittal review of draft HEU<br>• Public review of draft HEU and CEQA documentation*<br>• Project briefings with Planning Commission and City Council*<br>• Finalize HEU and CEQA documentation |
| Fall 2021 | Adoption hearings:<br>• Planning Commission*<br>• City Council* |
| State Due Date | October 15, 2021 (for certification) |

**ENVIRONMENTAL REVIEW**

This Study Session is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15262, Feasibility and Planning Studies. The direction is not a final action or approval regarding the Housing Element Update and does not have a legally binding effect on any possible future discretionary action.

**ALTERNATIVES CONSIDERED**

No alternatives were considered as the 6th Cycle HEU is due to HCD for certification by October 15, 2021. Jurisdictions that do not maintain a compliant Housing Element are at risk of significant repercussions including, but not limited to, ineligibility for critical state and federal funding, potential loss of land use control in which the state disallows the issuance of building permits, substantial fines and penalties including a four-year RHNA/HEU cycle (instead of the customary eight-year cycle), and exposure to litigation based on a legally inadequate General Plan.

**FINANCIAL IMPACT**

The funding for the HEU is within the approved Fiscal Year 2019-2021 biennial general fund budget and will be supplemented by State Senate Bill 2 reimbursement funding up to $200,000.

**REPORT PREPARED BY** Charles G. Kovac, Housing Administrator
Amy Mullay, Senior Planner

ec: Hitta Mosesman, Harris & Associates
Dima Galkin, Harris & Associates
Tim Gehrich, Deputy Director of Community Development
Kerwin Lau, Manager of Planning Services
Marika Poynter, Principal Planner
Melissa Chao, Senior Planner
Justin Equina, Associate Planner
Stephanie Takigawa, Housing Specialist

File 00832121-PGA

## 3.Presentation




### Overview

- What is the Regional Housing Needs Assessment (RHNA)
- Housing Element Purpose and Basics
- Potential Housing Element Update Strategies
- Next Steps
- Q & A

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE




Housing Element Update

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## Regional Housing Needs Assessment

- RHNA: A minimum number of units by income category each community is required to provide through "adequate sites" and zoning – Mandated by the State
- RHNA for Southern California: 1,341,827
- SCAG responsible for developing methodology and assigning RHNA to Southern CA cities and counties







## Draft RHNA Allocation

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,379 |
| Category 2 (51 – 80% AMI) | 4,225 |
| Category 3 (81 – 120% AMI) | 4,299 |
| Category 4 (120% AMI or above; considered "market rate") | 8,651 |
| **TOTAL** | **23,554** |

- RHNA Appeal hearings – City appeals denied
- Final RHNA allocation – anticipated March 2021 (slight increase anticipated)
- Actual number needed is anticipated to exceed allocation



## Housing Element Purpose

**State-mandated policy document that:**

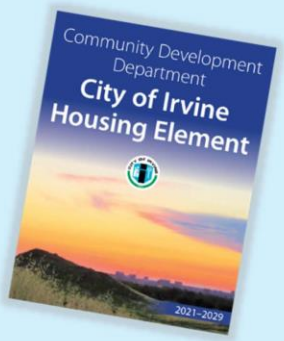
- Provides direction for implementation of various programs to meet existing and future housing needs for all income levels in the City
- Provides goals, policies, programs, and objectives that accommodate opportunities for the preservation of existing housing and development of new housing
- Demonstrates how the City will accommodate its RHNA allocation





## Housing Element Basics

- 5 Major Components:
  - Review of accomplishments
  - Housing needs assessment
  - Evaluation of constraints to housing
  - Identification of housing sites
  - Program strategy to address needs for 2021-2029
- Required to be updated every eight years
- Reviewed by State for compliance with State law






## The Housing Element DOES NOT

- Require the City to build the units
- Provide funding
- Authorize construction
  - Projects still need to go through the development review process







## Housing Element Update Goals

- Accommodate RHNA allocation by income category
- Develop effective housing policies and programs, including strategic implementation
- Incorporate changes required by state laws/regulations and guidance
- Ensure that a high quality of life is maintained as the community matures and evolves



## Benefits of State Compliance

- Continue local authority to issue building permits
- Protect against lawsuits
- Maintain eligibility for State funding opportunities
- Keep customary eight-year cycle
- Avoid substantial fines and penalties







## Potential Housing Element Strategies

- Rezone for more homes
- Redevelop older/underutilized properties
- Develop residential in open space subject to voter approval
- Convert market rate to affordable units
- Change affordable housing policies
- Expand inclusionary housing ordinance
- Ease restrictive development standards
- Encourage innovative design





## Next Steps

Winter 2020-21:

- ***City Council GPA Scoping Session for Housing Element Update (February 9, 2021)***
- ***Planning Commission Study Session***
- Stakeholder outreach (development community)
- Develop site inventory
- Assess goals, policies, and objectives

Spring 2021:

- ***Community workshops***
  - ***Advertised on social media; information provided in multiple languages***
- Finalize site inventory
- Prepare draft Housing Element and supporting documentation






## Next Steps (continued)

Summer 2021:

- ***Public review of draft Housing Element***
- State preliminary review of the draft
- ***Project briefings with Planning Commission and City Council***
- Finalize Housing Element and supporting documentation

Fall 2021 – Adoption Hearings:

- ***Planning Commission***
- ***City Council***

**State Due Date – October 15, 2021 for certification**



## Questions?

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

www.cityofirvine.org/housingelementupdate



Housing Element Update

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# 4.Public Notice

# PLANNING COMMISSION
## 6th CYCLE HOUSING ELEMENT UDPATE
## STUDY SESSION
## FEBRUARY 18, 2021 at 5:30 P.M.

| | |
|---|---|
| **PROJECT DESCRIPTION:** | The Planning Commission is hosting a study session for the 6th cycle Housing Element Update (HEU) for the 2021-2029 planning period. The Update must comply with the state's requirements and accommodate Irvine's new Regional Housing Needs Assessment (RHNA) allocation. The purpose of the study session is to introduce the HEU and solicit input on the upcoming work effort. |
| **LOCATION:** | Citywide |
| **INFORMATION AVAILABLE:** | Copies of the staff report, and other project information will be available for review by **5 p.m. on Thursday, February 4, 2021,** online at *cityofirvine.org/planningcommission*. |
| **INVOLVEMENT:** | Do you have any comments? Questions? Concerns? You are invited to participate in a public meeting to be held by the City of Irvine Planning Commission on **Thursday, February 18, 2021,** at **5:30 p.m.** Specific details about how to participate, which may include either tele-conferencing, video-conferencing, or another equivalent option, will be posted online at least 24 hours in advance of the hearing at *cityofirvine.org/planningcommission*. |
| **CONTACT:** | For more information or to submit comments in advance of the meeting, please contact Charles Kovac, Housing Administrator, via email at ckovac@cityofirvine.org or by phone at 949-724-7452 and/or Amy Mullay, Senior Planner, via email at amullay@cityofirvine.org or by phone at 949-724-7454. |
| **AMERICANS WITH DISABILITIES ACT:** | It is the intention of the City of Irvine to comply with the Americans with Disabilities Act in all respects. If you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact David Steinkraus by email at dsteinkraus@cityofirvine.org. Notification 48 hours prior to the hearing will enable the City to make reasonable arrangements ensuring accessibility to the hearing. (28 CFR 35. 102-35. 104 ADA Title II) |
| **CASE NUMBER(s):** | 00832121-PGA |
| **NOTICE DATE:** | January 21, 2021 **POST UNTIL:** February 19, 2021 |
| **PUBLISH DATE:** | *Irvine World News* – January 21, 2021 |

# 5.Affidavit of Publication

**Irvine World News**
2190 S. Towne Centre Place Suite 100
Anaheim, CA 92806
714-796-2209

5191001

IRVINE, CITY OF- LEGALS
1 CIVIC CENTER PLZ
ATTN: ACCOUNTS PAYABLE
IRVINE, CA 92606-5208

**E NO. 6th CYCLE HOUSING ELEMENT UDPA**

## AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA, } **SS.**
County of Orange

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the Irvine World News, a newspaper that has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, on August 23, 1990, Case No. A-154653 in and for the City of Irvine, County of Orange, State of California; that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

**01/21/2021**

I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct:

Executed at Anaheim, Orange County, California, on Date: January 21, 2021.

Signature

## PROOF OF PUBLICATION

Legal No. **0011435629**

**PLANNING COMMISSION**
**6th CYCLE HOUSING ELEMENT UDPATE**
**STUDY SESSION**
**FEBRUARY 18, 2021 at 5:30 P.M.**

**PROJECT DESCRIPTION:** The Planning Commission is hosting a study session for the 6th cycle Housing Element Update (HEU) for the 2021-2029 planning period. The Update must comply with the state's requirements and accommodate Irvine's new Regional Housing Needs Assessment (RHNA) allocation. The purpose of the study session is to introduce the HEU and solicit input on the upcoming work effort.

**LOCATION:** Citywide

**INFORMATION AVAILABLE:** Copies of the staff report, and other project information will be available for review by 5 p.m. on **Thursday, February 4, 2021**, online at cityofirvine.org/planningcommission .

**INVOLVEMENT:** Do you have any comments? Questions? Concerns? You are invited to participate in a public meeting to be held by the City of Irvine Planning Commission on **Thursday, February 18, 2021, at 5:30 p.m.** Specific details about how to participate, which may include either tele-conferencing, video-conferencing, or another equivalent option, will be posted online at least 24 hours in advance of the hearing at cityofirvine.org/planningcommission .

**CONTACT:** For more information or to submit comments in advance of the meeting, please contact Charles Kovac, Housing Administrator, via email at ckovac@cityofirvine.org or by phone at 949-724-7452 and/or Amy Mullay, Senior Planner, via email at amullay@cityofirvine.org or by phone at 949-724-7454.

**AMERICANS WITH DISABILITIES ACT:** It is the intention of the City of Irvine to comply with the Americans with Disabilities Act in all respects. If you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact David Steinkraus by email at dsteinkraus@cityofirvine.org. Notification 48 hours prior to the hearing will enable the City to make reasonable arrangements ensuring accessibility to the hearing. (28 CFR 35. 102-35. 104 ADA Title II)

**CASE NUMBER(s):** 00832121-PGA

**NOTICE DATE:** January 21, 2021 **POST UNTIL:** February 19, 2021

**PUBLISH DATE:** Irvine World News – January 21, 2021 11435629

# 6. Planning Commission Study Session Comment Summary and Analysis

| Comments and Questions Received at Feb. 18, 2021 Planning Commission Study Session | Who | How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Dedicated open space was in exchange for increased density in residential core. Believe it's a bad idea to consider residential in locally protected open space areas regardless of the origin of the protection | Commissioner Gaido; Chair Pierson | Addressed in the Site Inventory section of the HE.<br><br>No parcels in the HE site inventory are within locally protected open space areas or dedicated park lands. |
| Best to place units next to jobs and transit in IBC, Spectrum, Great Park, and TOD | Commissioner Gaido; Chair Pro Tem Knowland | Property owner outreach efforts for identifying potential opportunity sites for the HE site inventory focused on major job centers (i.e., Spectrum areas and Irvine Business Complex or IBC) and areas near transit specifically the Irvine Station.<br><br>The Site Inventory section reflects input from the Irvine's extensive property owner outreach efforts.<br><br>As indicated under Goals 1 and 2 of the Housing Plan section, it is anticipated that the subsequent General Plan Update and Zoning Ordinance Amendment work effort will maximize density near the Irvine Station with a residential overlay for transit-oriented development and expand the residential overlay and unit cap in the IBC. These overlays are intended to facilitate the creation of higher density urban villages that are master-planned. |
| Evaluate the City's inclusionary policy; consider a sliding scale for Category 1 and 2 (low-income) rents because rents currently set at high end of the scale or AMI percentage | Commissioner Gaido | Goal 4 of the Housing Plan section of the HE proposes to update the City's existing inclusionary ordinance as part of the subsequent General Plan Update and Zoning Ordinance Amendment work effort. The work effort will include a potential increase, likely at the lowest affordability categories, to mandate 20 percent of new |

| Comments and Questions Received at Feb. 18, 2021 Planning Commission Study Session | Who | How Comment was Addressed in HE (if applicable) |
|---|---|---|
| | | housing projects at affordable price points, rather than the current 15 percent.<br><br>In terms of a "sliding scale" approach for any affordable housing project that has federal, state, or county funding, the applicable regulations regarding income limits and allowable rents/purchase costs govern—and none have a "sliding scale." The formulas for determining affordable rent are set by funding source(s) such as TCAC (LIHTC), HUD (CDBG/HOME), HCD (for projects using density bonus) used to finance construction of a project (e.g. Irvine Community Land Trust and/or developed by an affordable housing developer). The affordable rent formula is stipulated in legal implementing agreements (such as density bonus agreements and regulatory agreements) recorded against properties to ensure affordability and compliance with the funding source requirements.<br><br>As for city-only funded or inclusionary ordinance-based units, the caution against having a sliding scale is to avoid allegations of discriminatory effects for a person(s) within a protected class(es) under federal or state housing laws. If rents are determined based on income level—meaning any household/person falling within a particular income category is charged the same amount in rent—with no discretion left on a sliding scale, that is a better way of limiting potential exposure to discrimination allegations.<br><br>From a practical perspective, charging lower rents would result in more of a subsidy being needed. Even if the City could enforce a sliding scale of rents, doing so may incentivize developers to select |

| Comments and Questions Received at Feb. 18, 2021 Planning Commission Study Session | Who | How Comment was Addressed in HE (if applicable) |
|---|---|---|
| | | other options such as the in-lieu fee or land dedication options to satisfy obligations, likely resulting in fewer affordable units actually being built. Lastly, deploying a sliding scale approach may be administratively difficult, particularly with annual recertification requirements. |
| Does the City have a say in timing for various income categories; focus on greatest need to make City livable | Commissioner Gaido; Commissioner Limb | The City's obligation is to plan for the RHNA allocation and to minimize any constraints under the City's control to facilitate construction.<br><br>However, market demand and the ability to piece together the complex financing stacks structure required to fund affordable housing developments will largely dictate whether and when units are constructed.<br><br>Based on past communications (i.e., phone calls), families and seniors are the two biggest categories with the greatest need within the very low and low income categories.<br>Objective HE-G.3 and its related programs in the Housing Plan section focuses on affordable housing for seniors, large families, and other special needs groups. |
| How many units are needed to accommodate the RHNA? | Chair Pro Tem Knowland | Addressed in the Site Inventory section of the HE.<br><br>The HE site inventory accommodates the RHNA allocation by income levels. |
| In terms of easing development standards, we don't want to compromise and create a different standard of living especially parking standards | Chair Pro Tem Knowland | The City will explore revisions to development standards in conjunction with creating residential and mixed-use overlays during the subsequent General Plan Update/Zoning Ordinance Amendment work effort.<br><br>Several affordable housing developers active in the region indicated that providing parking spaces on-site is expensive; |

| Comments and Questions Received at Feb. 18, 2021 Planning Commission Study Session | Who | How Comment was Addressed in HE (if applicable) |
|---|---|---|
| | | however, demand for spaces is high regardless of income level. |
| Want to understand "layered" financing options available for affordable housing. As an affordable housing developer, it won't get done without "subsidies". Need adequate financing | Commissioner Limb; Chair Pierson | Neither the federal nor the State government allocates sufficient funding to subsidize the needed affordable units pursuant to the RHNA numbers allocated to each city and county in California. Additionally, no one source of public subsidy is sufficient to fund an affordable housing project.<br><br>One multifamily affordable development can require 5 to 10 funding sources to finance its construction. Developers generally layer or "stack" financing from State and federal tax credits, State housing programs and grants (e.g., SB2), local land donation and other local grants, federal housing programs, and private loans from financial institutions.<br><br>Irvine's inclusionary housing ordinance has been very successful and has facilitated the development of the largest affordable housing portfolio in Orange County with over 4,800 units.<br><br>Addressed in the housing plan section of the HE to increase the affordable in-lieu fee (Policy HE-E.3 under Goal 4). Goal 4 of the Housing Plan section includes policies, programs, and actions for securing and assisting with affordable housing funding. Additionally, PP-I.3 aims to leverage all funding options such as joining the Orange County Finance Trust (OCHFT), a joint power authority comprised of many Orange County cities. OCHFT can provide additional funding options for affordable housing developers. |

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| What kind of affordable housing incentive programs are needed to encourage affordable housing developments? | Commissioner Limb; Vice Chair Huang; Chair Pierson | Addressed in the Housing Plan section of the HE, which includes policies and programs that support the following overarching goals:<br><br>(1) encourages development of difference housing types to meet the City's needs;<br>(2) maximizes land utilization for residential development;<br>(3) preserves existing affordable housing;<br>(4) encourage more affordable housing units;<br>(5) maximizing solutions for those experiencing or at risk of homelessness;<br>(6) encourage homeownership;<br>(7) improves quality of life and promotes placemaking; and<br>(8) affirmatively furthering fair housing. |
| Continue partnership with Irvine Community Land Trust (ICLT) with a coordinated approach to meet very low and low income levels | Commissioner Limb | Programs under Objective F of Goal 4 include strengthening the City's relationship with the ICLT, leveraging City owned land for development of 100 percent affordable housing projects, and pursuing land acquisition opportunities with the ICLT. |
| Consider long-term housing bond structured at cost to City because of historically low interest rates; probably requires super majority vote of voters (e.g., Los Angeles $1.2 billion bond for supportive housing for homeless Angelinos per Proposition HHH) | Commissioner Limb | Commissioner Limb is presenting a White Paper at the July 1, 2021 Planning Commission meeting, which will include finance staff participation, to facilitate this discussion. As information becomes available, this section will be amended. |
| Will Circulation Element be updated? | Transportation Commissioner Montgomery via Commissioner Limb | Yes, the circulation element will be updated during the subsequent General Plan Update work effort. |
| Aware of penalties if jurisdiction does not meet mandated requirements. | Commissioner Limb | Housing Element needs to demonstrate adequate sites to address the RHNA. Irvine's Annual Progress Report (submitted |

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|---|---|---|
| Provide an example of who has been penalized and to what extent. | | to HCD) tracks the status of meeting RHNA in terms of actual construction.<br><br>Staff is not aware of any Southern California jurisdiction that has been subject to Senate Bill 35 by-right streamlining of housing development in cities that are not meeting their housing needs (with prevailing wage requirements). Only several development projects in the San Francisco Bay Area have invoked SB 35 to bypass local opposition or cumbersome permitting timelines. |
| Ensure this is a transparent process | Chair Pro Tem Knowland; Vice Chair Huang | As outlined in this Public Engagement appendix, Irvine developed and executed a robust public engagement plan to ensure all ages and economic segments of the community are engaged using a variety of outreach methods with strong emphasis on language considerations to ensure effective and culturally diverse communication with the community.<br>A wide range of stakeholders including developers, property owners, Greater Irvine Chamber of Commerce, Building Industry Association of Southern California, Orange County chapter (BIA-OC) residents, people with special needs, and all interested parties were targeted.<br><br>The overarching goal of the public engagement plan is to inform and involve the community in the Housing Element Update process to help solve issues and/or make informed, sustainable decision (i.e., technically feasible, economically viable, publicly acceptable, and environmentally compatible.<br><br>Adopted in 2018 to enhance transparency, Irvine's Sunshine Ordinance makes meeting agendas/materials available 12 days in advance, rather than three days per the |

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| | | Brown Act. Additionally, all project workshop, public meeting materials, and draft HE and CEQA documentation are or will be posted on-line at the project website, www.cityofirvine.org/HEUpdate. |
| Address traffic issues | Vice Chair Huang | As part of the General Plan Update work effort, an Environmental Impact Report (EIR) with traffic study will be prepared. |
| Address impacts to schools, police/fire services, water/sewer, and facilities such as senior centers and libraries | Vice Chair Huang; Ken Montgomery | Notification of all school districts and utilities serving Irvine as well as Orange County Fire Authority (OCFA) and City public safety staff occurred throughout the HEU process.<br><br>As part of the General Plan Update work effort, an Environmental Impact Report (EIR) will be prepared to assess any impacts to schools, police/fire services, water/sewer, and more due to implementing the adopted 6th cycle HE and accommodating the RHNA. |
| Address location and adjacency issues to ensure the intended end user (e.g., seniors, people with disabilities or special needs) of housing is able to adapt successfully into the neighborhood | Chair Pierson | Goal 7 and its related policies and programs in the Housing Plan section address quality of life and placemaking to ensure future residents have access to neighborhood amenities and services consistent with Irvine's master planned communities. Additionally, policy HE-G.3 encourages the development of affordable housing within mixed-use projects that have community-serving uses.<br><br>This thoughtful planning approach will be further implemented through the subsequent General Plan Update and Zoning Ordinance Amendment work effort, which will also incorporate a robust community engagement plan. |
| Need to collaborate and use Commissioner Limb's affordable housing developer knowledge | Chair Pierson; Commissioner Limb | Given the accelerated project schedule, City staff held multiple briefings with City Council officials and Planning Commissioners at each important juncture |

| Comments and Questions Received at Feb. 18, 2021 Planning Commission Study Session | Who | How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Need overall perspective to work. Requesting working session between various commissions to collaborate and discuss | | throughout the HEU development process. Additionally, multiple public meetings were held by the Planning Commission and City Council. Any inputs received were considered in the development of the HE.<br><br>Additionally, all members of Irvine's Planning, Community Services, Finance, and Transportation Commissions were notified by email of the General Community Workshops and will continue to be notified of the upcoming public meetings and adoption hearings. |
| Our region desperately needs more housing, both affordable and market-rate units.<br><br>As a small business administrator, the cost of housing has become a huge problem to the sustainability of the economic engine of the State. It is hard to run a business against out of state competition when living standards for CA workers are so strained by the high price of housing.<br><br>It is not a secret that cost of single-family homes may always be high, but absurd rents for apartments is a choice we make. Please allow for higher density zoning.<br><br>As an IBC resident for ten years, it was a pleasure to live there and watching the neighborhood grow.<br><br>There is no going back to 1990s Irvine by in-action. We must | Alex Portney, Irvine Resident | As indicated under Goals 1 and 2 of the Housing Plan section, it is anticipated that the subsequent General Plan Update and Zoning Ordinance Amendment work effort will maximize density near the Irvine Station with a residential overlay for transit-oriented development and expand the residential overlay and unit cap in the IBC. |

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| affirmatively choose a bright future or a less bright one will choose us. | | |
| We purchased a home here nearly four years ago on the premise and promise that we would have a retail and restaurant center within walking distance in the next couple of years.<br><br>We paid extra taxes for this luxury. We are still waiting with no real time line. We want to know where the money is going and when the center we were promised will be built.<br><br>Chair Pierson asked: Did she indicate what area of the City that she was in? PC Secretary Steinkraus indicated "no." | Deanne Garcia, Irvine Resident | Generally, two basic factors drive the demand for real estate development – net growth and relocation where net growth is the primary driver.<br><br>Additionally, whether retail uses are developed is based on demand and the geographic area from which a retail business draws most of its customers (i.e., trade area). For most retail spending, this is where people live. In the IBC, employee spending drives a substantial amount of retail sales due to the area being jobs rich.<br><br>As we transition out of the COVID-19 pandemic, the implementation of Goal 7 and its related policies and programs in the Housing Plan section address quality of life and placemaking to ensure future residents have access to neighborhood amenities and services consistent with Irvine's master planned communities. Ultimately, similar to housing, development of retail uses is market driven. |

## Public Engagement

## Appendix A-K: Future Housing Sites

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6. Religious Institution Outreach responses
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8. Hotel Outreach Letter, dated May 3, 2021
9. Hotel Outreach Letter Mailing List
10. Opportunity Sites Correspondence with Property Owners & Representatives for Site Inventory Development

# 1. General Outreach Letter example, dated March 1, 2021

Community Development cityofirvine.org
City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 1, 2021

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under state mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest. If you would like to discuss this potential opportunity in further detail, please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to:
Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 25, 2021. If you are interested, please do not let this opportunity pass you by. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael (Feb 24, 2021 15:26 PST)

Pete Carmichael
Director of Community Development

**主旨： 爾灣市住宅要素更新 - 未來住宅用地**

尊敬的爾灣市業主：

爾灣市正著手更新 2021-2029 年規劃期的住宅要素，也即是第 6 次住宅要素更新。根據州要求，我們必須規劃大量未來住宅單元，其中包括平價住宅。在第 6 次更新中，我們致力於物色可因應未來住宅開發的潛在用地。如需關於住宅要素更新的更多資訊，請造訪 www.cityofirvine.org/housingelementupdate。

本市目前不考慮購買您的物業以轉為住宅。我們只是在嘗試物色適合或可以用於未來住宅開發的用地，暫不考慮目前分區。雖然尚未做出任何承諾或決策，我們仍希望徵詢您的意向。如果您想要深入討論此潛在機會，請透過電子郵件或電話方式與我們聯繫：


**CHARLES KOVAC**
住宅管理師
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
高級規劃師
mchao@cityofirvine.org
949-724-6395

或郵寄至：Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


我們期盼在 2021 年 3 月 25 日收到您的答覆。如果對此有興趣，切勿錯過此機會。請在方便時儘早與我們聯繫。

感謝撥冗關注此事。

謹上
Pete Carmichael
社區發展主任

主题： 尔湾住房要素更新 - 未来住房用地

尊敬的尔湾业主：

尔湾市正着手更新 2021-2029 年规划期的“住房要素”，也即是第 6 次住房要素更新。根据本州规定，我们必须规划大量未来住房单位，其中包括经济适用房。在第 6 次更新中，我们致力于物色可供未来住房开发的潜在用地。如需有关住房要素更新的更多信息，请访问 www.cityofirvine.org/housingelementupdate。

本市目前不考虑收购您的物业以转为住房。我们只是在尝试物色适合或可以用于未来住房开发的用地，暂不考虑现有分区。虽然尚未做出任何承诺或决策，我们仍希望征询您的意向。如果您希望借此潜在机会进行深入讨论，请通过电子邮件或电话方式与我们联系：


**CHARLES KOVAC**
住房管理员
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
高级规划师
mchao@cityofirvine.org
949-724-6395

或寄信至：Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


我们期盼在 2021 年 3 月 25 日前收到您的回信。如果对此感兴趣，切勿错过此机会。请在方便时尽快与我们联系。

感谢拨冗关注此事。

恭祝康泰
Pete Carmichael
社区发展主任

사안: **Irvine 주택 요건 업데이트 – 향후 주거용 용지**

Irvine 부동산 소유주님께

Irvine 시는 2021~2029 계획 기간의 주택 요건을 업데이트하고 있습니다. 6 차 주택 요건 업데이트에서도 관련 내용을 참조하실 수 있습니다. 주에서 지시하는 바에 따라, 저소득층용 주택을 포함해 일정한 수의 향후 주택 세대를 계획해야 합니다. 6 차 업데이트의 일환으로 추후 주거용 개발에 적합한 잠재적 용지를 파악하는 작업을 시행하고 있습니다. 주택 요건 업데이트에 대한 자세한 사항은 웹사이트 www.cityofirvine.org/housingelementupdate 를 참고하십시오.

시에서는 귀하의 부동산을 주거용 전환을 위해 매입하려는 의사가 없습니다. 당국의 의도는 현 구역 구분과 관계없이 향후 택지 개발이 가능하거나 적합한 잠재적 택지를 파악하고자 하는 것입니다. 어떠한 책무가 발생하거나 판단이 결정되는 것은 아니나, 귀하의 생각에 대해 알아보고자 합니다. 잠재적 기회인 해당 건에 대해 자세한 사항을 논의하고 싶으시다면 다음 연락처로 이메일 또는 전화를 통해 연락해 주십시오.


**CHARLES KOVAC**
주택 담당 책임자

**MELISSA CHAO**
선임 기획자

CKovac@cityofirvine.org
949-724-7452

mchao@cityofirvine.org
949-724-6395

우편 연락처: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

2021 년 3 월 25 일까지 연락해 주시면 감사하겠습니다. 해당 건에 관심이 있으신 경우, 기회를 놓치지 마십시오. 가능한 한 빠른 시일 내에 연락해 주십시오.

해당 사안에 소중한 시간과 관심을 가져 주셔서 감사합니다.

감사합니다.
Pete Carmichael
커뮤니티 개발국장

**件名： アーバイン住宅エレメントの更新 – 将来の宅地計画**

**アーバインに土地を所有する皆様：**

**アーバイン市は 2021 年～2029 年を計画期間として、「第 6 期住宅エレメントの更新」という名称で住宅エレメントの更新を行っています。州の要請に基づき、将来的に、低価格住宅を含め大規模な住宅建築を計画する必要があります。第 6 期の更新の一環として、市では将来の住宅開発に対応できる潜在的な宅地の特定を行っています。住宅エレメントの更新作業については、www.cityofirvine.org/housingelementupdate をご覧ください。**

**市は宅地への転用を目的とした土地の買収は予定していません。現在の区画に関係なく、将来的に宅地開発に適している、または可能な土地を特定している段階です。現段階では確約や決定事項は一切ありませんが、この計画に関心があるかどうかをお聞かせいただきたくご連絡させていただきました。今回の計画について詳しく内容を知りたいという場合は、メールまたは電話にてご連絡ください。**

**CHARLES KOVAC**
**住宅管理者**
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
**シニア・プランナー**
mchao@cityofirvine.org
949-724-6395

**お手紙の場合：** Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

2021 年 3 月 25 日までにご返信いただけましたら幸いです。ご興味がおありの場合は、この機会を逃さないよう、できるだけお早めにご連絡ください。

お手数をおかけしますが、よろしくお願いいたします。

敬具
Pete Carmichael
コミュニティ開発責任者

**Chủ đề:** **Cập Nhật Yếu Tố Nhà Lưu Trú ở** Irvine – **Những Khu Vực Nhà Lưu Trú Tương Lai**

Kính gửi Chủ Hộ tại Irvine:

Thành Phố Irvine đang trong quá trình cập nhật Yếu Tố Nhà Ở của mình cho giai đoạn quy hoạch năm 2021-2029, hay còn gọi là Cập Nhật Yếu Tố Nhà Ở chu kỳ 6. Theo yêu cầu của Tiểu Bang, chúng tôi phải quy hoạch một số lượng đáng kể đơn vị nhà ở trong tương lai, bao gồm nhà ở giá rẻ. Là một phần trong quá trình cập nhật chu kỳ 6, chúng tôi đang xác định các địa điểm tiềm năng có thể điều chỉnh thích hợp với sự phát triển khu dân cư sau này. Để biết thêm thông tin về những nỗ lực cập nhật Yếu Tố Nhà Ở, vui lòng vào trang www.cityofirvine.org/housingelementupdate.

Thành Phố không xem xét tiếp quản tài sản của quý vị để chuyển sang nhà ở. Chúng tôi chỉ đơn giản cố gắng xác định những địa điểm có khả năng thích hợp hoặc khả năng để phát triển khu dân cư trong tương lai cho dù việc phân vùng hiện tại là gì. Mặc dù chưa có sự cam kết hay quyết định nào, chúng tôi muốn đánh giá sự quan tâm của quý vị. Nếu quý vị muốn thảo luận thêm chi tiết về cơ hội tiềm năng này, vui lòng liên hệ với chúng tôi qua email hoặc điện thoại theo số:


**CHARLES KOVAC**
Quản Lý Nhà Ở
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Nhân Viên Quy Hoạch Cấp Cao
mchao@cityofirvine.org
949-724-6395

Hoặc qua thư từ gửi đến: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


Chúng tôi hy vọng nhận được thông tin từ quý vị trước 25 tháng Ba, 2021. Nếu quý vị quan tâm, xin đừng để cơ hội này trôi qua. Vui lòng liên hệ với chúng tôi khi thuận tiện với quý vị nhất.

Cám ơn quý vị đã dành thời gian và quan tâm đến vấn đề này.

Trân trọng kính chào,
Pete Carmichael
Giám Đốc Phát Triển Cộng Đồng

**Asunto:** **Actualización del informe de vivienda de Irvine: sitios de vivienda futuros**

Estimado propietario de Irvine:

La Ciudad de Irvine está en proceso de actualizar su informe de vivienda para el periodo de planificación de 2021 a 2029, conocido también como el 6.º ciclo de actualización del informe de vivienda. Por orden del estado, debemos planificar un número considerable de unidades de vivienda futuras, incluyendo viviendas asequibles. Como parte del 6.º ciclo de actualización, estamos trabajando para identificar sitios que podrían ser adecuados para el desarrollo residencial en el futuro. Para obtener más información sobre los esfuerzos de actualización del informe de vivienda, visite www.cityofirvine.org/housingelementupdate.

La Ciudad no está considerando comprar su propiedad para convertirla en vivienda. Solo estamos intentando identificar sitios en los que el desarrollo residencial podría ser adecuado o viable en el futuro, independientemente de la zonificación actual. Aunque no se tomó ninguna decisión ni se hizo ningún compromiso, queremos saber su interés. Si quiere hablar sobre esta posible oportunidad detalladamente, comuníquese por correo electrónico o por teléfono a:


**CHARLES KOVAC**
Administrador de viviendas
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Coordinadora sénior
mchao@cityofirvine.org
949-724-6395

O envíe una carta a: Charles Kovac, Housing Administrador
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


Esperamos tener una respuesta suya antes del 25 de marzo de 2021. Si está interesado, no deje pasar esta oportunidad. Comuníquese con nosotros en cuanto pueda.

Gracias por su tiempo y su atención a este asunto.

Atentamente,
Pete Carmichael
Director de Desarrollo de la Comunidad

**موضوع: به‌روزرسانی بخش مسکن Irvine – مکان‌های مسکن آینده**

مالک گرامی ملک Irvine:

**شهر ایروین در مرحله به‌روزرسانی بخش مسکن خود برای دوره برنامه‌ریزی 2021-2029 است که از آن به‌عنوان به‌روزرسانی بخش مسکن چرخه 6 ام نیز یاد می‌شود. مطابق با حکم دولت، ما موظف هستیم برای ساخت تعداد قابل توجهی از واحدهای مسکونی آینده، از جمله مسکن ارزان‌قیمت، برنامه‌ریزی کنیم. به عنوان بخشی از به‌روزرسانی چرخه 6 ام، ما در تلاشیم مکان‌های بالقوه‌ای را شناسایی کنیم که ممکن است در آینده از نظر رشد مسکونی مناسب باشند. برای کسب اطلاعات بیشتر در خصوص اقدامات به‌روزرسانی بخش مسکن، لطفاً به سایت www.cityofirvine.org/housingelementupdate مراجعه کنید.**

این شهر در نظر ندارد ملک شما را برای تبدیل به مسکن خریداری کند. ما به واقع در حال تلاش برای شناسایی مکان های احتمالی هستیم که امکان رشد مسکونی در آینده صرف‌نظر از منطقه‌بندی فعلی مناسب یا امکان‌پذیر باشد. با وجود اینکه هیچ تعهد و تصمیمی اتخاذ نشده است، ما می‌خواهیم علاقه شما را بسنجیم. در صورت تمایل به توضیح بیشتر در مورد این فرصت بالقوه، لطفاً از طریق ایمیل یا تلفن با ما تماس بگیرید:

**CHARLES KOVAC**
مدیر امور اسکان
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
برنامه‌ریز ارشد
mchao@cityofirvine.org
949-724-6395

یا از طریق ارسال نامه به:
Charles Kovac, Housing Administrator
City of Irvine
Civic Center Plaza 1
Irvine, CA 92606

امیدواریم تا 25 مارس 2021 به ما اطلاع دهید. در صورت تمایل، لطفاً این فرصت را از دست ندهید. لطفاً در اولین فرصت با ما تماس بگیرید.

با تشکر از وقت و توجه‌تان به این موضوع.

با احترام،
Pete Carmichael
مدیر توسعه جامعه

**الموضوع: تحديث حول بند الإسكان في مدينة إرفاين - مواقع الإسكان المستقبلية**

عزيزي السيد/السيدة مالك(ة) العقار في إرفاين:

تعمل Irvine إرفاين على تحديث بند الإسكان لفترة التخطيط الممتدة بين 2021 و2029، التي يشار إليها أيضًا باسم تحديث بند الإسكان للدورة السادسة. بموجب تكليف الولاية، يجب علينا التخطيط لعدد كبير من الوحدات السكنية المستقبلية، بما في ذلك الإسكان الميسور التكلفة. وكجزء من تحديث الدورة السادسة، نعمل على تحديد المواقع المحتملة التي يمكنها استيعاب التطوير السكني في المستقبل. للحصول على معلومات إضافية حول جهود تحديث بند الإسكان، يرجى زيارة www.cityofirvine.org/housingelementupdate.

لا تفكر المدينة في الاستحواذ على عقارك لتحويله إلى أحد مواقع الإسكان. بل نحاول ببساطة تحديد المواقع المحتملة التي قد تشكل فرصة محتملة أو قد تكون مناسبة للتطوير السكني في المستقبل بغض النظر عن تقسيم المناطق الحالي. وبالرغم من عدم اتخاذ أي التزامات أو قرارات، نود معرفة مدى اهتمامك. إذا كنت ترغب في مناقشة هذه الفرصة المحتملة بمزيد من التفصيل، فيرجى الاتصال بنا عبر البريد الإلكتروني أو الهاتف على:

**تشارلز كوفاك**
مسؤول الإسكان
CKovac@cityofirvine.org
949-724-7452

**ميليسا تشاو**
مسؤول تخطيط أول
mchao@cityofirvine.org
949-724-6395

أو عبر خطاب إلى:
Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

نتطلع إلى أن نسمع منك بحلول 25 مارس 2021. إذا كنت مهتمًا، فيرجى ألا تدع هذه الفرصة تفوتك. يرجى التواصل معنا في أقرب وقت ممكن.

نشكرك على وقتك واهتمامك بهذه المسألة.

مع خالص الاحترام،
بيت كارمايكل
مدير التنمية المجتمعية

# 2. General Outreach Letter Mailing List (2,278 property owners)

| Full Name | Address Line 1 | City | State | ZIP Code |
|---|---|---|---|---|
| 12 MAUCHLY LLC | 3002 DOW AVE STE 218 | TUSTIN | CA | 92780-7235 |
| ABF SPECTRUM OFFICE LLC | P O BOX 2450 | NEWPORT BEACH | CA | 92658 |
| ADA TECHNOLOGY PARK | 1420 N BRISTOL ST | NEWPORT BEACH | CA | 92660-2914 |
| ALTON CORPORATE PLAZA LLC | PO BOX 2450 | NEWPORT BEACH | CA | 92658-8972 |
| ALTON TECH ADA LLC | 550 NEWPORT CENTER DR | NEWPORT BEACH | CA | 92660-7010 |
| AUTO CENTER COMMUNITY | 25108 MARGUERITE PKWY UNIT A-262 | MISSION VIEJO | CA | 92692-2497 |
| BIXBY LAND COMPANY | 1501 QUAIL ST STE 230 | NEWPORT BEACH | CA | 92660-2740 |
| BRE / HV PROPERTIES LLC | PO BOX 49550 | CHARLOTTE | NC | 28277-9550 |
| CHILD DEVELOPMENT CENTER | 350 WOODVIEW AVE STE 100 | MORGAN HILL | CA | 95037-8105 |
| CITY OF IRVINE | PO BOX 19575 | IRVINE | CA | 92623-9575 |
| CLK INVESTMENT LLC | 30 MAUCHLY STE A | IRVINE | CA | 92618-2337 |
| COSMETIC CAR CARE INC | 12 MAUCHLY STE F | IRVINE | CA | 92618-2399 |
| COUNTY OF ORANGE | PO BOX 1379 | SANTA ANA | CA | 92702-1379 |
| EKIMAE LLC | 12 MAUCHLY UNIT 102 | IRVINE | CA | 92618-2317 |
| DENISE J TR TEDDY FENTON | 22481 OVERLAKE DR | LAKE FOREST | CA | 92630-3007 |
| GENERAL CORPORATION | 12 MAUCHLY STE M | IRVINE | CA | 92618-6306 |
| GROUP DELTA CONSULTANTS | 32 MAUCHLY STE B | IRVINE | CA | 92618-2336 |
| ALFREDO ELIAS GUTIERREZ | 12 MAUCHLY STE G | IRVINE | CA | 92618-6300 |
| HERITAGE FIELDS EL TORO | 15131 ALTON PKWY STE 400 | IRVINE | CA | 92618-2386 |
| INGOLD FAMILY | 5256 S MISSION RD STE 1210 | BONSALL | CA | 92003-3624 |
| IRVINE REDEVELOPMENT | 1 CIVIC CENTER PLZ | IRVINE | CA | 92606-5207 |
| RAMESH U TR KALWANI | 12 MAUCHLY STE J | IRVINE | CA | 92618-6303 |
| LAGUNA CANYON INVESTMENT | 10 SYCAMORE CANYON DR | DOVE CANYON | CA | 92679-4213 |
| LASERGRAPHICS, INC | 20 ADA | IRVINE | CA | 92618-2303 |
| LBL PROPERTIES & INVESTMENTS LLC | 17 LYRA WAY | COTO DE CAZA | CA | 92679-5104 |
| LIVE NATION WORLDWIDE INC | 251 RHODE ISLAND ST STE 200 | SAN FRANCISCO | CA | 94103-5168 |
| JAMES ARTHUR TR MARCUS | 300 VIA LOS TILOS | SAN CLEMENTE | CA | 92673-6607 |
| MATSING INVESTMENTS LLC | 5 FRANKLIN | IRVINE | CA | 92620-2891 |
| MAUCHLY ASSOCIATES LLC | 18800 VON KARMAN AVE | IRVINE | CA | 92612-1724 |
| MAUCHLY CR LLC | 12 MAUCHLY STE B | IRVINE | CA | 92618-2395 |
| MAUCHLY IRVINE PROPERTY | 12 MAUCHLY STE I | IRVINE | CA | 92618-6302 |
| MAUCHLY PROPERTIES LLC | 31906 VIA COYOTE | COTO DE CAZA | CA | 92679-4109 |
| MILLER JOAN ELLEN TR / MILLER FAMILY TR | 999 CORPORATE DR STE 100 | LADERA RANCH | CA | 92694-2149 |
| JOHN BRADLEY MOORE | 1025 WYKOFF WAY | LAGUNA BEACH | CA | 92651-3036 |
| WILLIAM R TR MORE | 1930 PORT CHELSEA PL | NEWPORT BEACH | CA | 92660-5348 |
| NEXTATE LLC | 34 MAUCHLY STE B | IRVINE | CA | 92618-2357 |
| NORTHWESTERN MUTL LIFE INS CO | PO BOX 11404 | NEWPORT BEACH | CA | 92658-5028 |
| NRG HOLDING LIMITED | 3270 BEAUDRY TER | GLENDALE | CA | 91208-1747 |
| OLEN PROP CORP | 7 CORPORATE PLAZA DR | NEWPORT BEACH | CA | 92660-7904 |
| WILLIAM TR OONG | PO BOX 54272 | IRVINE | CA | 92619-4272 |
| PARKWAY FINANCIAL GROUP | 15375 BARRANCA PKWY STE K102 | IRVINE | CA | 92618-2211 |
| PRICE CO, THE | 999 LAKE DR | ISSAQUAH | WA | 98027-8990 |
| SECOND HARVEST FOOD BANK OF ORANGE COUNTY INC | 8014 MARINE WAY | IRVINE | CA | 92618-2235 |
| ST ALBERT GROUP LLC | 5 BERNINI | IRVINE | CA | 92614-5325 |
| TP-LINK USA CORPORATION | 145 S STATE COLLEGE BLVD STE 400 | BREA | CA | 92821-5833 |
| UNITED STATES OF AMERICA | 300 N LOS ANGELES ST STE 7516 | LOS ANGELES | CA | 90012-3341 |
| VANAZ LAND COMPANY LLC | 32 MAUCHLY UNIT 3 | IRVINE | CA | 92618-2336 |
| YES INVESTMENT GROUP LLC | 29 NEW DAWN | IRVINE | CA | 92620-1976 |
| LOU ZELEZNIK | 29862 HIDDENWOOD | LAGUNA NIGUEL | CA | 92677-1906 |
| HUNTINGTON NORTH L E CORPORATION | 297 GODDARD | IRVINE | CA | 92618-4604 |
| ORANGE COUNTY FIRE AUTHORITY | 1 FIRE AUTHORITY RD | IRVINE | CA | 92602-0125 |
| WESTCO REAL ESTATE | 8750 RESEARCH DR | IRVINE | CA | 92618-4222 |
| SANDERSON J RAY-SPECTRUM V PARTNERS | 4667 MACARTHUR BLVD STE 420 | NEWPORT BEACH | CA | 92660-1867 |
| SANDERSON J RAY-SPECTRUM V PARTNERS | PO BOX 1392 | BAKERSFIELD | CA | 93302-1392 |

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|---|---|---|---|---|
| MASIH & MARYAM PROPERTIES | 1311 CIRCLE WAY | LAGUNA BEACH | CA | 92651-1304 |
| 9930 RESEARCH LLC | 7 JAMESTOWN | IRVINE | CA | 92620-2665 |
| YUN PO CHEN | 9940 RESEARCH DR | IRVINE | CA | 92618-4331 |
| IRVINE OASIS LLC | 566 NYES PL | LAGUNA BEACH | CA | 92651-4145 |
| GENERAL MORTGAGE CAPITAL | 1350 BAYSHORE HWY STE 740 | BURLINGAME | CA | 94010-1816 |
| HOUSER INVESTMENTS LLC | 9970 RESEARCH DR | IRVINE | CA | 92618-4309 |
| HYCINA LLC | 40 PACIFICA STE 1500 | IRVINE | CA | 92618-7496 |
| X-1 HOLDINGS LLC | 9900 RESEARCH DR | IRVINE | CA | 92618-4309 |
| SPECTRUM REALTY PARTNERS | 9911 IRVINE CENTER DR STE 100 | IRVINE | CA | 92618-4329 |
| SCOTT STONEY | 11 CAPE ANDOVER | NEWPORT BEACH | CA | 92660-8401 |
| YANSUN LLC | PO BOX 53785 | IRVINE | CA | 92619-3785 |
| GEELS LLC | 28541 OAKMONT | MISSION VIEJO | CA | 92692-4538 |
| A & K SPECTRUM CENTER LLC | 9950 IRVINE CENTER DR | IRVINE | CA | 92618-4357 |
| WESTCO REAL ESTATE | 9960 IRVINE CENTER DR | IRVINE | CA | 92618-4357 |
| AC IRVINE LLC | 18631 GALE AVE | CITY OF INDUSTRY | CA | 91748-1343 |
| 9901 IRVINE CENTER DR LLC | 9901 IRVINE CENTER DR | IRVINE | CA | 92618-4308 |
| NINETY-NINE EIGHTY LLC | 25731 PASEO DE LA PAZ | SAN JUAN CAPISTRANO | CA | 92675-4013 |
| DOUBLE DRAGON ENTERPRISESLLC | 9890 RESEARCH DR | IRVINE | CA | 92618-4346 |
| JAMES R HAWKINS | 9880 RESEARCH DR | IRVINE | CA | 92618-4340 |
| PARVIN LLC | 16541 SCIENTIFIC | IRVINE | CA | 92618-4356 |
| 16531 SCIENTIFIC WAY LLC | 9850 IRVINE CENTER DR | IRVINE | CA | 92618-4353 |
| RAJAB INVESTMENT GROUP | 9910 IRVINE CENTER DR | IRVINE | CA | 92618-4357 |
| GROUP TOWFIQ LLC | 16511 SCIENTIFIC | IRVINE | CA | 92618-4377 |
| DIF-16501 SCIENTIFIC | 22 CALLE TAMARA | SAN CLEMENTE | CA | 92673-7041 |
| RAM TULSI LLC | 16491 SCIENTIFIC | IRVINE | CA | 92618-4355 |
| TAHITI HOLDINGS LLC | 32709 CASPIAN SEA DR | DANA POINT | CA | 92629-3545 |
| 16481 SCIENTIFIC WAY LLC | 16481 SCIENTIFIC | IRVINE | CA | 92618-4394 |
| JAHANYAR LLC | 8807 W PICO BLVD STE 203 | LOS ANGELES | CA | 90035-3398 |
| RESEARCH DRIVE PARTNER | 9870 RESEARCH DR | IRVINE | CA | 92618-4310 |
| MOHAMIE GROUP LLC | 9871 IRVINE CENTER DR | IRVINE | CA | 92618-4361 |
| OSTER USA HOLDING INC | 19 CORAL CAY | NEWPORT BEACH | CA | 92657-1908 |
| VALUEROCK BB IRVINE LLC | 18301 VON KARMAN AVE STE 850 | IRVINE | CA | 92612-0105 |
| NATALIA TR ULYANCHENKO | 1 ELDERWOOD | ALISO VIEJO | CA | 92656-2113 |
| PMFF LLC | 9841 IRVINE CENTER DR STE 110 | IRVINE | CA | 92618-4314 |
| JOHN D TR LAUBACH | 4045 SYME DR | CARLSBAD | CA | 92008-3561 |
| KARL H TR DIMIER | 9841 IRVINE CENTER DR STE 130 | IRVINE | CA | 92618-4314 |
| YK CAPITAL HOLDINGS LLC | 76 ASHFORD | IRVINE | CA | 92618-3917 |
| KEITH D HERMANCE | 26155 BUSCADOR | MISSION VIEJO | CA | 92692-3238 |
| YU, EN QUAN ANDREW TR E Q | 9336 LINDANTE DR | WHITTIER | CA | 90603-1029 |
| KATHLEEN ALBERTSON | 51 SAN RAPHAEL | DANA POINT | CA | 92629-4043 |
| SARAKKI, VENU | 9 S SUR | NEWPORT COAST | CA | 92657-1910 |
| REAL ESTATE SOLUTIONS LLC | 9841 IRVINE CENTER DR STE 210 | IRVINE | CA | 92618-4316 |
| EL TORO LAND LLC | 9841 IRVINE CENTER DR STE 220 | IRVINE | CA | 92618-4316 |
| RONMAC LLC | 38 BALBOA CVS | NEWPORT BEACH | CA | 92663-3226 |
| PATEL, SHEETAL S TR S S & J S PATEL FAMILY TR | 5465 BLUE RIDGE DR | YORBA LINDA | CA | 92887-4234 |
| TS FAMILY HOLDINGS L L C | 9770 RESEARCH DR | IRVINE | CA | 92618-4327 |
| TM INVESTMENT LLC | 2301 PINEHURST DR | TUSTIN | CA | 92782-1142 |
| TIGER LOANS INC | 780 ROOSEVELT UNIT 120 | IRVINE | CA | 92620-3660 |
| JAMES M TR THAYER | 25041 MUSTANG DR | LAGUNA HILLS | CA | 92653-5700 |
| 9891 IRVINE CENTER LLC | 9891 IRVINE CENTER DR STE 150 | IRVINE | CA | 92618-4319 |
| BOGHRATY, FARROKH TR | 9891 IRVINE CENTER DR STE 160 | IRVINE | CA | 92618-4319 |
| TIM CHIUNG TR T C CHEN | 1306 OUTRIGGER DR | CORONA DEL MAR | CA | 92625-1214 |
| PALA PARTNERS LLC | 54 WALDEN | IRVINE | CA | 92620-4200 |
| MOGHADDAM, BABAK TR | 72 CALAVERA | IRVINE | CA | 92606-8922 |
| SHAWNICK ICD LLC | 1310 GALAXY DR | NEWPORT BEACH | CA | 92660-4919 |

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|---|---|---|---|---|
| FRONTIERS IN BIOSCIENCE | 20 SUNSET CV | NEWPORT COAST | CA | 92657-1901 |
| ICD EQUITIES LLC | 9890 IRVINE CENTER DR | IRVINE | CA | 92618-4353 |
| AV VENUE LLC | 16500 SCIENTIFIC | IRVINE | CA | 92618-4382 |
| KJSD INVESTMENTS LLC | 49 ANACAPA LN | ALISO VIEJO | CA | 92656-1630 |
| ZIRKONZAHN USA INC | 154 TECHNOLOGY PKWY STE 250 | PEACHTREE CORNERS | GA | 30092-2956 |
| 9860 RESEARCH DRIVE LLC | 9860 RESEARCH DR | IRVINE | CA | 92618-4310 |
| ALI TR PAKZAD | 961 SUMMIT DR | LAGUNA BEACH | CA | 92651-3428 |
| TZ COMMERCIAL INVESTMENT | 86 CUNNINGHAM | IRVINE | CA | 92618-8864 |
| GREWAL FOODS INVESTMENTS | 9870 IRVINE CENTER DR | IRVINE | CA | 92618-4353 |
| RANIER HOLDINGS LLC | 62 MAXWELL | IRVINE | CA | 92618-4641 |
| COATE CHRIS | 31431 TRIGO TRL | COTO DE CAZA | CA | 92679-3913 |
| WARREN YUE-REN TR KANG | 58 MAXWELL | IRVINE | CA | 92618-4641 |
| PVT INVESTMENTS LLC | PO BOX 10548 | NEWPORT BEACH | CA | 92658-5000 |
| DALPAC ELECTRONICS INC | 54 MAXWELL | IRVINE | CA | 92618-4641 |
| DAVID J TR MORALES | 33686 CHULA VISTA AVE | DANA POINT | CA | 92629-1623 |
| GEORGE MAKAR | 38 VISTA MONTEMAR | LAGUNA NIGUEL | CA | 92677-7955 |
| THOMPSON INDUSTRIES LLC | 31 MOMENTO | IRVINE | CA | 92603-4239 |
| RANIER HOLDINGS LLC | 64 MAXWELL | IRVINE | CA | 92618-4641 |
| LUCY TR ZHU REVOC ZHU | 23 MARSEILLE | LAGUNA NIGUEL | CA | 92677-5400 |
| CHARLES TRIELOFF | 30171 SADDLERIDGE DR | SAN JUAN CAPISTRANO | CA | 92675-1550 |
| AKRADI, PARVIZ TR | 70 MAXWELL | IRVINE | CA | 92618-4641 |
| TAM TR DUONG DUONG | 72 MAXWELL | IRVINE | CA | 92618-4641 |
| MAXWELL PACIFIC | 24271 CASCADES DR | LAGUNA NIGUEL | CA | 92677-2420 |
| KUAN, SUECHYI JUSTIN TR | 4 THORN OAK | DOVE CANYON | CA | 92679-4200 |
| VICTOR TR TANON TR TANON | 9851 IRVINE CENTER DR | IRVINE | CA | 92618-4393 |
| SFO VENTURES LLC | 9846 RESEARCH DR | IRVINE | CA | 92618-4310 |
| S W MANAGEMENT LLC | 1 PETERS CANYON RD STE 160 | IRVINE | CA | 92606-1748 |
| 9831 IRVINE CENTER DR LLC | 9831 IRVINE CENTER DR | IRVINE | CA | 92618-4334 |
| M & G PROPERTIES ON SCIENTIFIC LLC | 8775 RESEARCH DR | IRVINE | CA | 92618-4217 |
| CHARLES LIU | 3 FAIRVIEW | IRVINE | CA | 92602-0839 |
| HAPPY MEDIUM VENTURES LLC | 24 FLORES | FOOTHILL RANCH | CA | 92610-1816 |
| C & C PARTNERSHIP | 56 TESLA | IRVINE | CA | 92618-4603 |
| BETMAR LLC | 16431 SCIENTIFIC | IRVINE | CA | 92618-4355 |
| JAM INVESTMENT LLC | 88 MAXWELL | IRVINE | CA | 92618-4641 |
| BRENDA SU TR EUGENE WANG | 893 CORPORATE WAY | FREMONT | CA | 94539-6115 |
| IRVINE SCIENTIFIC LLC | 9891 IRVINE CENTER DR STE 200 | IRVINE | CA | 92618-4320 |
| ICD PARTNERS LLC | 9811 IRVINE CENTER DR STE 100 | IRVINE | CA | 92618-4375 |
| SBSV PROPERTIES LLC | 9810 IRVINE CENTER DR | IRVINE | CA | 92618-4353 |
| IRVINE PROPERTIES | 9881 RESEARCH DR | IRVINE | CA | 92618-4304 |
| TANG VICTOR TR TANG / FAMILY TR | 330 GODDARD | IRVINE | CA | 92618-4601 |
| PATRICK J TR O'BRIEN | 3531 E MIRALOMA AVE STE B | ANAHEIM | CA | 92806-2128 |
| GREGORY A TR KOSLOSKY | 7 CHRISTOPHER ST | LADERA RANCH | CA | 92694-1527 |
| BIG SUNNY DAY LLC | 1990 N CALIFORNIA BLVD STE 710 | WALNUT CREEK | CA | 94596-7250 |
| 2100 LIMITED PARTNERSHIP | 2100 S FIGUEROA ST | LOS ANGELES | CA | 90007-2047 |
| FEI MARKETING INC | 380 GODDARD | IRVINE | CA | 92618-4601 |
| EMERGING DISPLAY TECHNOLOGIES CORPORATION | 16811 HALE AVE STE D | IRVINE | CA | 92606-5066 |
| BELUM PROP LLC | 400 GODDARD | IRVINE | CA | 92618-4610 |
| IMAN TOHIDIAN | 410 GODDARD UNIT 9 | IRVINE | CA | 92618-4610 |
| PARSI LLC | 420 GODDARD BLDG 10 | IRVINE | CA | 92618-4610 |
| BERNARD K TR FUNG | 67 GROVESIDE DR | ALISO VIEJO | CA | 92656-7070 |
| 440 GODDARD LLC | 440 GODDARD # 12 | IRVINE | CA | 92618-4610 |
| BING FENG | 450 GODDARD | IRVINE | CA | 92618-4610 |
| SEPTEMBER 5 INVESTMENTS | 111 LUMINOUS | IRVINE | CA | 92603-4260 |
| THE E-LAND COMPANY | PO BOX 50564 | IRVINE | CA | 92619-0564 |
| RESEARCH ASSOCIATES LLC | 111 PACIFICA STE 300 | IRVINE | CA | 92618-7428 |

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|---|---|---|---|---|
| A6 HOLDINGS LLC | 16401 SCIENTIFIC | IRVINE | CA | 92618-4355 |
| ASSIST PROPERTIES LLC | 7 MONTIA | IRVINE | CA | 92620-2208 |
| ROBBY HOON KANG | 544 WALD | IRVINE | CA | 92618-4637 |
| ION ASSETS INC | PO BOX 130 | LAGUNA BEACH | CA | 92652-0130 |
| LOPEZ ROBERT & JANET | 117 STRAW | IRVINE | CA | 92618-1049 |
| 550 CICI LLC | 2900 BRISTOL ST STE G203 | COSTA MESA | CA | 92626-7914 |
| BOUTINE LOS ANGELES INC | 272 RADIAL | IRVINE | CA | 92618-1034 |
| MILLENIUM SYSTEMS INC | 580 WALD | IRVINE | CA | 92618-4637 |
| SALT PROPERTY MANAGEMENT | 576 WALD | IRVINE | CA | 92618-4637 |
| RMB HOLDINGS LLC | 19762 MACARTHUR BLVD FL 2 | IRVINE | CA | 92612-2424 |
| WWW FORMOSA LLC | 568 WALD | IRVINE | CA | 92618-4637 |
| MICHELLE TR MA | 8 BENAVENTE | IRVINE | CA | 92606-8939 |
| HAN H TR NEE | 3 SPINNAKER | NEWPORT COAST | CA | 92657-1911 |
| 3 AMIGOS HOLDINGS LLC | 6 ORCHARD STE 200 | LAKE FOREST | CA | 92630-8353 |
| JOSEPH M TR MARTELLI | 16391 SCIENTIFIC | IRVINE | CA | 92618-4354 |
| SONENSHINE, YGAL TR | 2437 MONACO DR | LAGUNA BEACH | CA | 92651-1006 |
| NASCENT PROPERTIES LLC | 9834 RESEARCH DR STE 100 | IRVINE | CA | 92618-4373 |
| TEE ENTERPRISE LLC | 16381 SCIENTIFIC | IRVINE | CA | 92618-4354 |
| MINGAR GROUP LLC | 2705 S DIAMOND BAR BLVD STE 258 | DIAMOND BAR | CA | 91765-3555 |
| BOFUS 222 LLC | PO BOX 3400 | NEW YORK | NY | 10163-3400 |
| ASB PROPERTIES LLC | 230 GODDARD | IRVINE | CA | 92618-4625 |
| IRVINE JOONGANG BAPTIST CHURCH | 4 VAN BUREN # D | IRVINE | CA | 92620-3795 |
| HUSHMAND BEHNAM | 250 GODDARD | IRVINE | CA | 92618-4625 |
| SIMON VENTURES LLC | 29230 PASEO CARMONA | SAN JUAN CAPISTRANO | CA | 92675-3654 |
| 30 MAXWELL LLC | 30 MAXWELL # A | IRVINE | CA | 92618-4641 |
| BYC HOLDINGS LLC | 490 WALD | IRVINE | CA | 92618-4638 |
| VEGA LAND COMPANY LLC | 209 S STEPHANIE ST STE B105 | HENDERSON | NV | 89012-5501 |
| JAMES A TR MORONI | 28841 CURLEW LN | LAGUNA NIGUEL | CA | 92677-1385 |
| BAYPORT WALD ASSOCIATES | 20201 SW BIRCH ST STE 155 | NEWPORT BEACH | CA | 92660-1772 |
| GLOBAL LIFE ENRICHMENT | 16371 SCIENTIFIC | IRVINE | CA | 92618-4354 |
| DONALD INVESTMENT CO | 1300 N BRISTOL ST STE 290 | NEWPORT BEACH | CA | 92660-8926 |
| DANIEL TR ADAMS | 27181 WOODBLUFF RD | LAGUNA HILLS | CA | 92653-7535 |
| TESLA PARTNERSHIP | 50 TESLA | IRVINE | CA | 92618-4603 |
| MJ HOLDINGS LLC | 25262 HUGO RD | LAGUNA NIGUEL | CA | 92677-1521 |
| RICHARD HENRICKSEN | 54 TESLA | IRVINE | CA | 92618-4603 |
| SUSAN STREET PARTNERS GP | 3740 S SUSAN ST UNIT 250 | SANTA ANA | CA | 92704-6988 |
| LET INVESTMENTS LLC | 751 LAUREL ST UNIT 427 | SAN CARLOS | CA | 94070-3113 |
| HOU, YUQING | 60 TESLA UNIT G | IRVINE | CA | 92618-4603 |
| ROY M TR LEE | 62 HARRISON | IRVINE | CA | 92618-0107 |
| AI & LU LLC | 6 ROYAL SAINT GEORGE RD | NEWPORT BEACH | CA | 92660-5217 |
| NOREAS SCIENTIFIC | 16361 SCIENTIFIC | IRVINE | CA | 92618-4354 |
| SCIENTIFIC WAY HOLDINGS | 21 CAMELOT DR | WARWICK | NY | 10990-3486 |
| KELITAL LLC | 16191 SCIENTIFIC | IRVINE | CA | 92618-4325 |
| SID M GOMNAM | 22 SHADYBEND | IRVINE | CA | 92602-0844 |
| IVEY, MICHAEL S TR THE | 16171 SCIENTIFIC | IRVINE | CA | 92618-4325 |
| ADM PROPERTIES L P | 28 HAMMOND STE F | IRVINE | CA | 92618-1660 |
| ROGER D TR GROVES | 7 MARBELLA | MONARCH BEACH | CA | 92629-4118 |
| WCC ENERGY INC | 9700 RESEARCH DR | IRVINE | CA | 92618-4327 |
| VEENA ASSET MANAGEMENT | 9710 RESEARCH DR | IRVINE | CA | 92618-4327 |
| ANIME KING LLC | 9720 RESEARCH DR | IRVINE | CA | 92618-4327 |
| FAJIYA HOLDINGS LLC | 9730 RESEARCH DR | IRVINE | CA | 92618-4327 |
| 9741 IRVINE CENTER LLC | 5 LONG VIEW RD | COTO DE CAZA | CA | 92679-5219 |
| 9731 ICD LLC | 23 NEW HVN | LAGUNA NIGUEL | CA | 92677-2934 |
| SHIGGY, LLC | 9721 IRVINE CENTER DR | IRVINE | CA | 92618-4324 |
| TANGUT CORPORATION LTD | 9711 IRVINE CENTER DR | IRVINE | CA | 92618-4324 |

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| RSAK INC | 9740 RESEARCH DR | IRVINE | CA | 92618-4327 |
| KY RESEARCH LLC | 3 TRAPANI | IRVINE | CA | 92614-5346 |
| KRISTINE WEATHERLY | 33 GLITTERING SKY | ALISO VIEJO | CA | 92656-8098 |
| FU, PI YUN TR P Y FU | 2306 PORT CARLISLE PL | NEWPORT BEACH | CA | 92660-5421 |
| SOUL SHIPS LLC | 9790 RESEARCH DR | IRVINE | CA | 92618-4327 |
| ARTHURTECT LLC | 179 TRILLIUM | IRVINE | CA | 92618-1180 |
| 9801 LLC | 9801 IRVINE CENTER DR | IRVINE | CA | 92618-4307 |
| OHANESIAN INVESTMENTS LLC | 9771 IRVINE CENTER DR | IRVINE | CA | 92618-4343 |
| 9751-9761 IRVINE CENTER | 9761 IRVINE CENTER DR | IRVINE | CA | 92618-4324 |
| WHITE OHANA LLC, THE | 3197 AIRPORT LOOP DR | COSTA MESA | CA | 92626-3412 |
| JARRAHIAN, GHOLAM H | 24525 ALTA LOMA CT | LAGUNA HILLS | CA | 92653-6217 |
| BRISTOL CAPITAL GROUP LLC | 215 W ALAMEDA AVE | BURBANK | CA | 91502-3060 |
| GODDARD, HOLDINGS LLC | 18001 SKY PARK CIR STE E | IRVINE | CA | 92614-0506 |
| 40 TESLA LLC | 28051 TEFIR | MISSION VIEJO | CA | 92692-1300 |
| WALD STREET L P | 671 WALD | IRVINE | CA | 92618-4628 |
| GREGORY SHLAEN | 26483 LA SCALA | LAGUNA HILLS | CA | 92653-6500 |
| TOLLMAN, STEVEN TR THE | 61 CAMBRIA DR | CORONA DEL MAR | CA | 92625-1004 |
| 631 WALD LLC | 631 WALD | IRVINE | CA | 92618-4628 |
| 621 WALD LLC | 4 SEASTAR CT | NEWPORT COAST | CA | 92657-1549 |
| BUIILDING ENTERPRISE LLC | 210 GODDARD | IRVINE | CA | 92618-4625 |
| J & J REALTY LLC | 200 GODDARD | IRVINE | CA | 92618-4625 |
| GODDARD AVENUE INVESTMENTS | 31131 HOLLY DR | LAGUNA BEACH | CA | 92651-6938 |
| 38 TESLA LLC | 38 TESLA | IRVINE | CA | 92618-4603 |
| HEINTOW PROPERTIES DEV LLC | 2 GODDARD | IRVINE | CA | 92618-4600 |
| KAISER PHARMACEUTICAL CO | 16 GODDARD | IRVINE | CA | 92618-4600 |
| CHURCH, OF JESUS CHRIST | 18 GODDARD | IRVINE | CA | 92618-4600 |
| WALD STREET | 324 BOCA DEL CANON | SAN CLEMENTE | CA | 92672-5402 |
| NINYO, AVRAM TR | 5710 RUFFIN RD | SAN DIEGO | CA | 92123-1013 |
| TESLA ASSOCOCATES LLC | 47 PETERS CANYON RD | IRVINE | CA | 92606-1402 |
| GOODLAND INVESTMENTS INC | 355 GODDARD STE 250 | IRVINE | CA | 92618-4644 |
| HEITMAN HOLDINGS INC | 2830 E CORONADO ST | ANAHEIM | CA | 92806-2503 |
| GODDARD-IRVINE LLC | 3100 DONALD DOUGLAS LOOP N | SANTA MONICA | CA | 90405-3084 |
| ZC1 | 551 WALD | IRVINE | CA | 92618-4627 |
| AVANT GARDE PROPERTIES | 19511 PAULING | FOOTHILL RANCH | CA | 92610-2619 |
| CARON, GILBERT M TR THE | 721 SANDPIPER DR | LAGUNA BEACH | CA | 92651-4101 |
| FIVE GODDARD LLC | 5 GODDARD | IRVINE | CA | 92618-4600 |
| VUONA JOHN F TR VUONA / FAMILY TR | 11 VIA ROSADO | RANCHO STA MARG | CA | 92688-3145 |
| KEZY | 553 WALD | IRVINE | CA | 92618-4627 |
| SPECTRUM GODDARD LLC | 19 GODDARD | IRVINE | CA | 92618-4600 |
| DAVID C P TR VOO | 439 WALD | IRVINE | CA | 92618-4639 |
| CHRIST OUR REDEEMER | 45 TESLA | IRVINE | CA | 92618-4603 |
| 17401 ARMSTRONG LLC | 2306 CRESTVIEW DR | LAGUNA BEACH | CA | 92651-3473 |
| AMTRAN LOGISTICS INC | 9 GODDARD | IRVINE | CA | 92618-4600 |
| TIWARI, V N TR THE KASHI | PO BOX 9623 | NEWPORT BEACH | CA | 92658-9623 |
| NEW LIFE KOREAN CHURCH | 15 GODDARD | IRVINE | CA | 92618-4600 |
| 9451-61 IRV CTR DR LLC | 32 VIA CORSICA | DANA POINT | CA | 92629-3357 |
| AIRHART I LLC | 415 SIGNAL RD | NEWPORT BEACH | CA | 92663-5838 |
| CONCORD LLC | PO BOX 10866 | COSTA MESA | CA | 92627-0263 |
| JEFF CHARLES POKRAJAC | 8 RODEO | FOOTHILL RANCH | CA | 92610-1740 |
| ERIC P TR TRABERT | 9521 IRVINE CENTER DR | IRVINE | CA | 92618-4654 |
| KC-95 LLC | 9571 IRVINE CENTER DR | IRVINE | CA | 92618-4654 |
| TRI ARCH INVESTMENTS LLC | 9511 IRVINE CENTER DR | IRVINE | CA | 92618-4654 |
| PRIDEMARK INVESTMENTS LLC | 3 KNOWLES | IRVINE | CA | 92603-3446 |
| PARSADAYAN, WALODIA M TR | 5 MOONSHELL | NEWPORT COAST | CA | 92657-2161 |
| BOLIN EDMUND | 9591 IRVINE CENTER DR | IRVINE | CA | 92618-4654 |

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| R JACKSON INVESTMENTS LLC | 9601 IRVINE CENTER DR | IRVINE | CA | 92618-4652 |
| TRISHINE INVESTMENT LLC | 9611 IRVINE CENTER DR | IRVINE | CA | 92618-4652 |
| FLAIRSOU LLC | 27121 BURBANK | FOOTHILL RANCH | CA | 92610-2501 |
| PCI LLC | 2170 CRESTVIEW DR | LAGUNA BEACH | CA | 92651-3449 |
| 1310 WEST STEWART LLC | 11582 VISTA MAR | SANTA ANA | CA | 92705-3174 |
| MA LANDS LLC | 18701 VIA PALATINO | IRVINE | CA | 92603-3432 |
| KICKS & GIGGLES LLC | 23052 ALICIA PKWY STE H | MISSION VIEJO | CA | 92692-1661 |
| CAPELLI LLC | 730 S GRAND AVE | SANTA ANA | CA | 92705-4116 |
| ARJA PROPERTIES | 9590 RESEARCH DR | IRVINE | CA | 92618-4664 |
| ROBERT KRANTZ | 9570 RESEARCH DR | IRVINE | CA | 92618-4664 |
| ARMAN AMINLOO | 9580 RESEARCH DR | IRVINE | CA | 92618-4664 |
| KOLL 2 LLC | 9600 RESEARCH DR | IRVINE | CA | 92618-4666 |
| GOLD MTN LLC | 6 REEF | LAGUNA NIGUEL | CA | 92677-5639 |
| SAEED YAZDIANPOUR | 705 S STARVIEW CT | ANAHEIM | CA | 92808-1646 |
| LAGUNA CELLAR LLC | 2885 CHATEAU WAY | LAGUNA BEACH | CA | 92651-2010 |
| 9630 RESEARCH LLC | 12 POINT LOMA DR | CORONA DEL MAR | CA | 92625-1026 |
| IHCH PROPERTIES LLC | 9620 RESEARCH DR | IRVINE | CA | 92618-4666 |
| C K GROUP LLC | 9660 RESEARCH DR | IRVINE | CA | 92618-4666 |
| K & S PROP LLC | 9670 RESEARCH DR | IRVINE | CA | 92618-4666 |
| MARC SALEM | 118 PANORAMA | IRVINE | CA | 92618-4814 |
| CHEN, NAI-HSIN | 121 THATCH | IRVINE | CA | 92618-1046 |
| WINCHESTER EQUITY GROUP | 3460 WINCHESTER WAY | ROWLAND HEIGHTS | CA | 91748-6107 |
| ZEENAT LLC | 16220 SCIENTIFIC | IRVINE | CA | 92618-4349 |
| MHKH LLC | 20 SAN SIMEON | LAGUNA NIGUEL | CA | 92677-7950 |
| PETER Y S CHO | 29 EDGEVIEW | IRVINE | CA | 92603-0113 |
| 16180 SCIENTIFIC LLC | 16180 SCIENTIFIC | IRVINE | CA | 92618-4348 |
| SAMUEL TR LEE | 3 KENT | IRVINE | CA | 92603-3454 |
| ALBERT & SONS REAL ESTATE | PO BOX 12738 | NEWPORT BEACH | CA | 92658-5073 |
| STEIN HOLDINGS LLC | 2860 MICHELLE STE 150 | IRVINE | CA | 92606-1010 |
| WHITELEATHER BRUCE & REBECCA S | 514 22ND ST | HUNTINGTON BEACH | CA | 92648-3301 |
| HORIBA INSTRUMENTS | 9755 RESEARCH DR | IRVINE | CA | 92618-4626 |
| GHIZZONE LLC | 12955 NW SKYLINE BLVD | PORTLAND | OR | 97231-2432 |
| ARMS ASSET MANAGEMENT LLC | 11 MORRO BAY | IRVINE | CA | 92602-1083 |
| SPYGLASS TESLA LLC | PO BOX 13307 | NEWPORT BEACH | CA | 92658-5092 |
| ALS BOYS L P | 9701 RESEARCH DR | IRVINE | CA | 92618-4632 |
| VIZIO COMMERCIAL LLC | 39 TESLA | IRVINE | CA | 92618-4603 |
| RKGJ HOLDINGS LLC | 16300 BAKE PKWY | IRVINE | CA | 92618-4667 |
| LEEC REALTY INVESTORS LLC | 16320 BAKE PKWY | IRVINE | CA | 92618-4667 |
| ZSO IRVINE PROPERTIES LLC | 9685 RESEARCH DR | IRVINE | CA | 92618-4657 |
| VINTAGE WORLD PROPERTIES | 10161 BOLSA AVE STE 204C | WESTMINSTER | CA | 92683-6775 |
| 9210 IRVINE CENTER DR LLC | 9210 IRVINE CENTER DR | IRVINE | CA | 92618-4661 |
| IRVINE BUSINESS OFFICE 16360 LLC | 16360 BAKE PKWY | IRVINE | CA | 92618-4667 |
| AUTO COMPANY XIX INC | 200 SW 1ST AVE FL 14 | FORT LAUDERDALE | FL | 33301-2074 |
| CENTRAL IRVINE INVESTMENT | 13215 PENN ST STE 680 | WHITTIER | CA | 90602-1773 |
| POLYTEC INC | 16400 BAKE PKWY STE 200 | IRVINE | CA | 92618-5603 |
| 9190 ICD LLC | 9190 IRVINE CENTER DR | IRVINE | CA | 92618-4659 |
| 9180 ICD LLC | 9180 IRVINE CENTER DR | IRVINE | CA | 92618-4659 |
| THINKTECH LABS | 9170 IRVINE CENTER DR | IRVINE | CA | 92618-4614 |
| VINSANTO VENTURES LLC | 9160 IRVINE CENTER DR STE 200 | IRVINE | CA | 92618-4683 |
| GERAYLI LLC | 31921 MONARCH CRST | LAGUNA NIGUEL | CA | 92677-5451 |
| JAB PROPERTY HOLDINGS LLC | 9140 IRVINE CENTER DR STE 100 | IRVINE | CA | 92618-4650 |
| SOUTHERN CA EDISON CO | 2 INNOVATION WAY # 2ND | POMONA | CA | 91768-2560 |
| SOUTH COUNTY INVESTORS | 16420 BAKE PKWY | IRVINE | CA | 92618-4665 |
| WILLOW TREE PROPERTIES INC | 16430 BAKE PKWY | IRVINE | CA | 92618-4665 |
| TELAIR GROUP LLC | 8 WHATNEY STE 115 | IRVINE | CA | 92618-2878 |

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| GLOBAL DIMENSION | 34 CERVANTES | NEWPORT BEACH | CA | 92660-9013 |
| TGWHW LLC | 16440 BAKE PKWY STE 150 | IRVINE | CA | 92618-4674 |
| TRI WORLD TERRAIN LLC | 16460 BAKE PKWY | IRVINE | CA | 92618-4665 |
| BORDEAUX VENTURES LLC | 9110 IRVINE CENTER DR | IRVINE | CA | 92618-4659 |
| RICHFIELD PROPERTY | PO BOX 51311 | IRVINE | CA | 92619-1311 |
| SDK HOLDINGS LLC | 28 MARBLE CREEK LN | COTO DE CAZA | CA | 92679-5146 |
| OC PARKWAY PROPERTY LLC | 3009 POST OAK BLVD STE 2000 | HOUSTON | TX | 77056-6599 |
| JN HOLDINGS LLC | 2808 WILLIS ST | SANTA ANA | CA | 92705-5714 |
| RODNEY TR CHAMBERLIN | 2 DEERFIELD PL | TRABUCO CANYON | CA | 92679-1400 |
| OB ELSANADI LLC | 9070 IRVINE CENTER DR | IRVINE | CA | 92618-4678 |
| GREGORY TR STEPANIAN | 9070 IRVINE CENTER DR STE 110 | IRVINE | CA | 92618-4678 |
| CEDAR LAKE PROPERTIES LLC | 3060 EDGEWAY | COSTA MESA | CA | 92626-3291 |
| JESSE A TR BERBER | 35 EMERALD GLN | LAGUNA NIGUEL | CA | 92677-9371 |
| YU AND YUEN LLC | 28715 LOS ALISOS BLVD STE 8 | MISSION VIEJO | CA | 92692-4986 |
| 2M2K LLC | 2190 PALMER PL | TUSTIN | CA | 92782-1180 |
| CHONG, NUNG | 9070 IRVINE CENTER DR STE 140 | IRVINE | CA | 92618-4690 |
| DLC FAMILY HOLDINGS LLC | 9070 IRVINE CENTER DR STE 145 | IRVINE | CA | 92618-4690 |
| JENNIFER EVE SLATER | 265 PRINCETON DR | COSTA MESA | CA | 92626-6161 |
| SHIGA, TATSUYA | 33 HIGHFIELD GLN | IRVINE | CA | 92618-4042 |
| BAHIA, OMRAN | 9070 IRVINE CENTER DR STE 200 | IRVINE | CA | 92618-4687 |
| MANSOUR TR AMID | 28711 SEA PT | LAGUNA NIGUEL | CA | 92677-4659 |
| MINA K TR POURANG | 37 REDWOOD TREE LN | IRVINE | CA | 92612-2226 |
| LOREEN TR GILBERT | 9070 IRVINE CENTER DR STE 230 | IRVINE | CA | 92618-4687 |
| 9070 LEASING LLC | 9070 IRVINE CENTER DR STE 240 | IRVINE | CA | 92618-4687 |
| MOLKARA, MAHYAR TR NIKKI | 94 DOVECREST | IRVINE | CA | 92620-0206 |
| 9070 HOLDINGS LLC | 9070 IRVINE CENTER DR STE 260 | IRVINE | CA | 92618-4692 |
| SO PAC GROUP LLC | 774 MAYS BLVD STE 10297 | INCLINE VILLAGE | NV | 89451-9759 |
| NKDW INVESTMENTS LLC | 95 VIA ONDA | SAN CLEMENTE | CA | 92673-5689 |
| KASHANI, BABAK | 16520 BAKE PKWY STE 105 | IRVINE | CA | 92618-4688 |
| LAWRENCE WILLIAM QUEEN | 16520 BAKE PKWY STE 110 | IRVINE | CA | 92618-4688 |
| SEASHORE RESOURCES L P | 16520 BAKE PKWY STE 115 | IRVINE | CA | 92618-4688 |
| JAY M KIM | 32 FIELD | IRVINE | CA | 92620-3343 |
| MASSIMO CANNAS | 9 WYETH ST | LADERA RANCH | CA | 92694-0300 |
| SLDL BAKE PKWY LLC | 26513 DINERAL | MISSION VIEJO | CA | 92691-1510 |
| CHU PAUL TR & J YANG 2016 FAMILY | 45 EMERALD | IRVINE | CA | 92614-7521 |
| DANIEL N TR SUNRISE LEE | 7 COBALT DR | DANA POINT | CA | 92629-5906 |
| IRVINE REAL ESTATE | 16520 BAKE PKWY STE 150 | IRVINE | CA | 92618-4694 |
| ROYA TOOMARIAN | 19191 BECKWITH TER | IRVINE | CA | 92603-3502 |
| FOUR DOORS LLC | 16520 BAKE PKWY STE 200 | IRVINE | CA | 92618-4689 |
| MELODY H CHEN | 15 POWAY | IRVINE | CA | 92602-0912 |
| HUAQI CAPITAL INC | 16520 BAKE PKWY | IRVINE | CA | 92618-4668 |
| KASTAMONU INVESTMENTS LLC | 16520 BAKE PKWY STE 230 | IRVINE | CA | 92618-4689 |
| HIRBODI, SAEID TR | 16520 BAKE PKWY STE 240 | IRVINE | CA | 92618-4689 |
| TAKEDA HEALTH GROUP INC | 54 CARRINGTON | IRVINE | CA | 92620-2199 |
| MADDEZ LLC | 16520 BAKE PKWY STE 260 | IRVINE | CA | 92618-4695 |
| CCI BUSINESS PROPERTIES | 16520 BAKE PKWY STE 270 | IRVINE | CA | 92618-4695 |
| 16520 BAKE LLC | 16520 BAKE PKWY STE 280 | IRVINE | CA | 92618-4695 |
| ZAMANI, JASON TR THE | 28921 VIA PASATIEMPO | LAGUNA NIGUEL | CA | 92677-7614 |
| 16490 BAKE PARKWAY LLC | 8693 HILLCREST RD | BUENA PARK | CA | 90621-1011 |
| 9080 IRVINE CENTER DR LLC | 27471 HOMESTEAD RD | LAGUNA NIGUEL | CA | 92677-6601 |
| ARBURG CALIFORNIA LLC | 644 WEST ST | ROCKY HILL | CT | 06067-3414 |
| CARMAX AUTO SUPERSTORES | 12800 TUCKAHOE CREEK PKWY | RICHMOND | VA | 23238-1115 |
| SHAYAN PROPERTIES LLC | 27360 CLOVERLY DR | MISSION VIEJO | CA | 92692-3100 |
| CORBIZ LLC | 17531 VON KARMAN AVE | IRVINE | CA | 92614-6207 |
| KPM SPECTRUM III LP | 4343 VON KARMAN AVE STE 150 | NEWPORT BEACH | CA | 92660-1200 |

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| NATURETEX DECORATIVE | 9205 RESEARCH DR | IRVINE | CA | 92618-4286 |
| CALBION ACQUISITIONS LLC | 8 CORPORATE PARK STE 110 | IRVINE | CA | 92606-3167 |
| DIF HOLDINGS LLC | 9211 RESEARCH DR | IRVINE | CA | 92618-4286 |
| JOE & BRIAN INC | 103 AMBER SKY | IRVINE | CA | 92618-4800 |
| INTERNATIONAL GRACE | 9221 RESEARCH DR | IRVINE | CA | 92618-4286 |
| TOONERS PROPERTIES LLC | 34145 PACIFIC COAST HWY UNIT 516 | DANA POINT | CA | 92629-2808 |
| 9283 RESEARCH LLC | 104 LATTICE | IRVINE | CA | 92603-4261 |
| AIDA LLC | 21 SOMMET | NEWPORT COAST | CA | 92657-0104 |
| GREENS CAPITAL VENTURES | 9289 RESEARCH DR | IRVINE | CA | 92618-4286 |
| MICHAEL TR ZALKE | 140 AVENIDA PRINCESA | SAN CLEMENTE | CA | 92672-4234 |
| VICTORIA FAMILY | 4617 RUFFNER ST | SAN DIEGO | CA | 92111-2285 |
| RMV INVESTMENT LLC | 9297 RESEARCH DR | IRVINE | CA | 92618-4286 |
| JOHN E FAIMAN | 20857 PARKSIDE | LAKE FOREST | CA | 92630-5826 |
| CHOI JUNGHWAN & ELAINE D | 3 WALNUT CRK | IRVINE | CA | 92602-1047 |
| MAKTAB TARIGHAT OVEYSSI | PO BOX 19306 | ENCINO | CA | 91416-9306 |
| BOOM BOOM MANAGEMENT LLC | 30846 CALLE MALAGA | LAGUNA NIGUEL | CA | 92677-5502 |
| KHILNANI, KISHIN TR K | 9307 RESEARCH DR | IRVINE | CA | 92618-4288 |
| RESEARCH HOLDINGS | PO BOX 2683 | LAGUNA HILLS | CA | 92654-2683 |
| BETA HOLDINGS LLC | 9279 RESEARCH DR | IRVINE | CA | 92618-4286 |
| EVAN H JAFA | 55 LAKEFRONT | IRVINE | CA | 92604-4683 |
| OCELOT SPECTRUM RESEARCH | 38 LEHIGH AISLE | IRVINE | CA | 92612-4109 |
| JOHN A TR PARKER PARKER | 9269 RESEARCH DR | IRVINE | CA | 92618-4286 |
| JWANG INVESTMENTS LLC | 160 CALDERON AVE | MOUNTAIN VIEW | CA | 94041-1403 |
| CAROTT COSTAL HOLDINGS | 28201 LAS BRISAS DEL MAR | SAN JUAN CAPISTRANO | CA | 92675-5212 |
| TYRG ENTRPRISE LLC | 9263 RESEARCH DR | IRVINE | CA | 92618-4286 |
| TYRG ENTRPRISE LLC | 9261 RESEARCH DR | IRVINE | CA | 92618-4286 |
| MITCHELL ANTHONY | 9811 IRVINE CENTER DR STE 200 | IRVINE | CA | 92618-4375 |
| KMA HOLDINGS LLC | 9257 RESEARCH DR | IRVINE | CA | 92618-4286 |
| TUNG, CHIA-HUNG | 2190 COLLIER CT | TUSTIN | CA | 92782-1528 |
| ALZ LEE LLC | 9253 RESEARCH DR | IRVINE | CA | 92618-4286 |
| COREY TR LEYTON LEYTON | 106 MCKNIGHT DR | LAGUNA BEACH | CA | 92651-1359 |
| BUCKLEY ENTERPRISES LLC | 9247 RESEARCH DR | IRVINE | CA | 92618-4286 |
| EARLY BIRD PROPERTIES LLC | 9223 RESEARCH DR STE 3A | IRVINE | CA | 92618-4286 |
| GARCHER INVESTMENT | 9227 RESEARCH DR | IRVINE | CA | 92618-4286 |
| SERENDIB SPECTRUM LLC | 15201 LAGUNA CANYON RD STE 200 | IRVINE | CA | 92618-7713 |
| TERRY S CHEN | 507 LUMINOUS | IRVINE | CA | 92603-4238 |
| HARVEST CMNTY CH OF IRVINE | 9235 RESEARCH DR | IRVINE | CA | 92618-4286 |
| YIMU INTERNATIONAL INC | 9239 RESEARCH DR | IRVINE | CA | 92618-4286 |
| LAM, YIM TR LAM 1980 | 33 GENOA | IRVINE | CA | 92618-0114 |
| PURSUIT OF HAPPYNESS | 9245 RESEARCH DR | IRVINE | CA | 92618-4286 |
| MISTRETTA FAMILY | 846 W FOOTHILL BLVD STE G | UPLAND | CA | 91786-3784 |
| RHI INVESTMENTS | 30 MULLER STE 213 | IRVINE | CA | 92618-4679 |
| BACCENTER LLC | 5319 UNIVERSITY DR STE 201 | IRVINE | CA | 92612-2965 |
| KOYORAD COOLING SYSTEMS | 15 DOPPLER | IRVINE | CA | 92618-4305 |
| 709 RANDOLPH | 20 DOPPLER | IRVINE | CA | 92618-4306 |
| GREENFIELD INVS GRP LLC | 20111 STEVENS CREEK BLVD STE 280 | CUPERTINO | CA | 95014-2394 |
| CALIFORNIA INVESTMENT | 32 EDELMAN | IRVINE | CA | 92618-4312 |
| GARY FRANK MASON | 410 MONARCH BAY DR | MONARCH BEACH | CA | 92629-3448 |
| CALIFORNIA INVESTMENT PROPERTIES | 2 PALMA VLY | TRABUCO CANYON | CA | 92679-4736 |
| RHEON U S A | 2 DOPPLER | IRVINE | CA | 92618-4306 |
| JL RESEARCH LLC | 10 EDELMAN | IRVINE | CA | 92618-4312 |
| HCH PARTNERS LLC | 15 EDELMAN | IRVINE | CA | 92618-4311 |
| HUYNDAI MOTOR AMERICA | 10550 TALBERT AVE | FOUNTAIN VALLEY | CA | 92708-6031 |
| CUSHING VENTURES LLC | 4490 VON KARMAN AVE | NEWPORT BEACH | CA | 92660-2008 |
| SINGER, EDELE LEE TR | 3347 BAHIA BLANCA E UNIT A | LAGUNA WOODS | CA | 92637-2558 |

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| SPECTRUM ICD 8949 LLC | 4790 IRVINE BLVD STE 105 | IRVINE | CA | 92620-1998 |
| AMARICIAY-RE HOLDINGS LLC | 73 BUNSEN | IRVINE | CA | 92618-4218 |
| 75 BUNSEN LLC | 136 COYOTE BRUSH | IRVINE | CA | 92618-8873 |
| GACT LLC | 77 BUNSEN | IRVINE | CA | 92618-4218 |
| PHIARO, INC | 9016 RESEARCH DR | IRVINE | CA | 92618-4215 |
| 4Y RESOURCES LLC | 80 BUNSEN | IRVINE | CA | 92618-4210 |
| ELEVEN CUSHING LLC | 11 CUSHING STE 100 | IRVINE | CA | 92618-4233 |
| RESEARCH DRIVE LLC | 6789 QUAIL PKWY, UNIT 432 | IRVINE | CA | 92603 |
| JONG C TR LIMB | 78 BUNSEN | IRVINE | CA | 92618-4210 |
| 4TH GENERATION PROPERTIES | PO BOX 52798 | IRVINE | CA | 92619-2798 |
| IRVINE IMPORTS INC | 9101 RESEARCH DR | IRVINE | CA | 92618-4206 |
| JONG C TR LIMB | 24081 PINEHURST LN | LAGUNA NIGUEL | CA | 92677-2475 |
| MERCHANT-60 BUNSEN LLC | 19 CHAPARRAL CT | RANCHO STA MARG | CA | 92688-5546 |
| EMPRESSA LLC | PO BOX 7733 | LAGUNA NIGUEL | CA | 92607-7733 |
| ALPHA TECHNICAL & SERVICES INC | 7 CUSHING | IRVINE | CA | 92618-4220 |
| HUBBLE LLC | 5 HUBBLE | IRVINE | CA | 92618-4209 |
| KHANNA ROHIT | 6 KANSAS | IRVINE | CA | 92606-1787 |
| KHANNA R & C LIVING TRUST | 63 LUNAR | IRVINE | CA | 92618-1315 |
| CW SPECTRUM LLC | 11 HUBBLE | IRVINE | CA | 92618-4209 |
| CYRUS TR C JALLALI | 15 HUBBLE | IRVINE | CA | 92618-4244 |
| JENG YWH REN / LIANG, MEI HUA | 33 ANTIQUE ROSE | IRVINE | CA | 92620-4802 |
| MORNING STAR INVESTMENTS | 19 HUBBLE | IRVINE | CA | 92618-4209 |
| TIDE INTERNATIONAL USA | 21 HUBBLE | IRVINE | CA | 92618-4209 |
| 6 CUSHING LLC | 6 CUSHING STE 200 | IRVINE | CA | 92618-4230 |
| IWILL USA CORP | PO BOX 2810 | LAGUNA HILLS | CA | 92654-2810 |
| DANA 4 ENTERPRISES | 5 ASILOMAR RD | LAGUNA NIGUEL | CA | 92677-1021 |
| IRVINE AUTO CARE LLC | 2600 MICHELSON DR STE 1200 | IRVINE | CA | 92612-6514 |
| MC KENNA HUNTINGTON | 10900 FIRESTONE BLVD | NORWALK | CA | 90650-2241 |
| BRIGHTSQUARE LLC | 5319 UNIVERSITY DR # 210 | IRVINE | CA | 92612-2965 |
| MAYER, ROBERT L JR TR | 26071 GLEN CANYON DR | LAGUNA HILLS | CA | 92653-6323 |
| RESEARCH 9000 LLC | 3400 OCEAN BLVD | CORONA DEL MAR | CA | 92625-3258 |
| NEW ERA CAP CO INC | 160 DELAWARE AVE | BUFFALO | NY | 14202-2404 |
| ARK INDUSTRIES LLC | 65 PARKER | IRVINE | CA | 92618-1605 |
| 8935 RESEARCH LLC | 8935 RESEARCH DR | IRVINE | CA | 92618-4278 |
| JEFFERSON SPRINGS LLC | 8931 RESEARCH DR | IRVINE | CA | 92618-4237 |
| HASSAN TR MAHDARA | 8925 RESEARCH DR | IRVINE | CA | 92618-4237 |
| BO ZHANG | 16485 LAGUNA CANYON RD STE 160 | IRVINE | CA | 92618-3821 |
| ELI PROPERTIES LLC | 8921 RESEARCH DR | IRVINE | CA | 92618-4237 |
| STEPHEN J TR ALDERSON | 24131 CASCADES DR | LAGUNA NIGUEL | CA | 92677-2418 |
| LEE CHIN LAND TR | 32 PELICAN CREST DR | NEWPORT COAST | CA | 92657-1805 |
| CAMFIELD PARTNERS LLC | 8895 RESEARCH DR STE 200 | IRVINE | CA | 92618-4283 |
| 8915 RESEARCH LLC | 8915 RESEARCH DR STE 200 | IRVINE | CA | 92618-4260 |
| J & C DEVELOPMENT LLC | 8901 RESEARCH DR | IRVINE | CA | 92618-4237 |
| APTE INVESTMENTS LLC | 26772 DEVONSHIRE RD | LAGUNA HILLS | CA | 92653-7562 |
| PROGRESSIVE CAPITAL | 8911 RESEARCH DR | IRVINE | CA | 92618-4237 |
| PEACOCK GROUP LLC | PO BOX 6477 | LAGUNA NIGUEL | CA | 92607-6477 |
| 8881 RESEARCH LLC | 24022 HILLHURST DR | LAGUNA NIGUEL | CA | 92677-2241 |
| 8875 RESEARCH DRIVE LLC | 8875 RESEARCH DR | IRVINE | CA | 92618-4236 |
| 8871 RESEARCH DRIVE LLC | 8871 RESEARCH DR | IRVINE | CA | 92618-4236 |
| GDSM PROPERTIES | 8845 RESEARCH DR STE 100 | IRVINE | CA | 92618-4239 |
| INTEGRITAS DESIGN & DEVELOPMENT LLC | 360 E 1ST ST # 898 | TUSTIN | CA | 92780-3211 |
| OCMI PROPERTIES LLC | 8851 RESEARCH DR | IRVINE | CA | 92618-4236 |
| BIEN-AIR REAL ESTATE CORP | 5 CORPORATE PARK | IRVINE | CA | 92606-5113 |
| ERLING A TR EIDE | 2250 S MCDOWELL EXT | PETALUMA | CA | 94954-5659 |
| IRVINE C & R PROPERTIES | 8841 RESEARCH DR | IRVINE | CA | 92618-4241 |

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| FNIS HOLDINGS LLC | PO BOX 7820 | NEWPORT BEACH | CA | 92658-7820 |
| NEXT CHAMPION LIMITED | 8831 RESEARCH DR STE 200 | IRVINE | CA | 92618-4262 |
| CANTONI PROPERTIES INC | 4800 ALPHA RD | DALLAS | TX | 75244-4607 |
| 8825 RESEARCH DR LLC | 8825 RESEARCH DR | IRVINE | CA | 92618-4236 |
| JEFFREY JOHN TR BITETTI | 2418 HOLIDAY RD | NEWPORT BEACH | CA | 92660-3701 |
| CASTELLINI LLC | 8811 RESEARCH DR | IRVINE | CA | 92618-4270 |
| ZINA DEVELOPMENT LLC | 8707 RESEARCH DR | IRVINE | CA | 92618-4217 |
| ROBERT'S PROP ENTERPRSES | 7 CORTE PASILLO | SAN CLEMENTE | CA | 92673-6814 |
| MAGELLAN COMMERCIAL REAL ESTATE | 8717 RESEARCH DR | IRVINE | CA | 92618-4200 |
| 8687 RESEARCH LLC | 8687 RESEARCH DR STE 150 | IRVINE | CA | 92618-4290 |
| R & B SPECTRUM PTNRS LLC | 8677 RESEARCH DR | IRVINE | CA | 92618-4204 |
| MARKIM PROPERTIES LLC | 27701 GOLDEN RIDGE LN | SAN JUAN CAPISTRANO | CA | 92675-5417 |
| CONANT PROPERTIES IV L P | 20322 SW ACACIA ST STE 100 | NEWPORT BEACH | CA | 92660-1503 |
| PROPERTY RESERVE INC | 2 N RIVERSIDE PLZ STE 2350 | CHICAGO | IL | 60606-2617 |
| N & D IRVINE LLC | 30 AUTO CENTER DR | IRVINE | CA | 92618-2802 |
| 51 AUTO CENTER IRVINE LLC | 4470 KATELLA AVE | LOS ALAMITOS | CA | 90720-3515 |
| JNSN MANAGEMENT LLC | 25262 ROCKRIDGE RD | LAGUNA HILLS | CA | 92653-7839 |
| VALCOLE PROPERTIES LLC | 1321 S AUTO CENTER DR | ANAHEIM | CA | 92806-5612 |
| CT PROPERTIES LLC | 41 AUTO CENTER DR | IRVINE | CA | 92618-2803 |
| JOHN G TR ALEVIZOS | 6820 E AVENIDA DE SANTIAGO | ANAHEIM | CA | 92807-5102 |
| MCLAREN PROPERTIES LLC | 12 MCLAREN | IRVINE | CA | 92618-2810 |
| SONATINA INC | 16 FERN CYN | LAGUNA NIGUEL | CA | 92677-1002 |
| MCLAREN AUTO CENTER LLC | 1716 CLARK AVE | LONG BEACH | CA | 90815-3801 |
| SEVEN OLDFIELD ASSOC | 2 RUE DU PARC | NEWPORT BEACH | CA | 92660-5203 |
| SHOKOOH, FARROKH TR | 17 GOODYEAR STE 100 | IRVINE | CA | 92618-1822 |
| PETER JUTEAU | 3 OLDFIELD | IRVINE | CA | 92618-2800 |
| STANDER WHATNEY LLC | 1 WHATNEY | IRVINE | CA | 92618-2806 |
| 3 WHATNEY LLC | 3 WHATNEY | IRVINE | CA | 92618-2837 |
| BERNICIA CAPITAL LLC | 15 WHATNEY | IRVINE | CA | 92618-2808 |
| AMNET HOLDINGS LLC | 10 WHATNEY | IRVINE | CA | 92618-2807 |
| 9 WHATNEY LLC | 18 LITTLE POND | LAGUNA NIGUEL | CA | 92677-1004 |
| NEWPORT COAST CLASSIC | 10 CANYON RIM | NEWPORT COAST | CA | 92657-1713 |
| ADVANTECH CORPORATION | 13 WHATNEY | IRVINE | CA | 92618-2808 |
| BERGSTROM, KENT K BERGSTROM, BEVERLY | 407 AVENIDA TERESA | SAN CLEMENTE | CA | 92672-2234 |
| PUBLIC STORAGE | 701 WESTERN AVE | GLENDALE | CA | 91201-2349 |
| PRINCE TAFT PLAZA | 260 NEWPORT CENTER DR 3RD FL | NEWPORT BEACH | CA | 92660-7520 |
| BESPOKE IRVINE LLC | PO BOX 8265 | WICHITA FALLS | TX | 76307-8265 |
| MILLIKEN CO LLC | PO BOX 17724 | ANAHEIM | CA | 92817-7724 |
| JI YEON KIM | 13 AUTRY | IRVINE | CA | 92618-2709 |
| JH LLC | 10 FARADAY | IRVINE | CA | 92618-2714 |
| HCG1224 FAMILY LIMITED | 13 OAKBROOK | COTO DE CAZA | CA | 92679-4741 |
| LOREN W POCHIROWSKI | 24912 TIMBERWOOD WAY | LAKE FOREST | CA | 92630-3333 |
| SWI PROPERTIES LLC | 18 TIMBERGATE | IRVINE | CA | 92614-7068 |
| IRVINE FOUR LLC | 15560 ROCKFIELD BLVD STE A | IRVINE | CA | 92618-6708 |
| IRVINE FOUR LLC | 15550 ROCKFIELD BLVD STE C | IRVINE | CA | 92618-2791 |
| IRVINE FOUR LLC | 15560 ROCKFIELD BLVD STE C | IRVINE | CA | 92618-2794 |
| IRVINE FOUR LLC | 2 DESERT FLS | FRISCO | TX | 75034-6875 |
| IRVINE FOUR LLC | 456 S ARROWHEAD AVE | SAN BERNARDINO | CA | 92408-1309 |
| IRVINE FOUR LLC | 25862 PECOS RD | LAGUNA HILLS | CA | 92653-6103 |
| IRVINE FOUR LLC | 15550 ROCKFIELD BLVD STE D | IRVINE | CA | 92618-2791 |
| IRVINE FOUR LLC | 11766 WILSHIRE BLVD STE 820 | LOS ANGELES | CA | 90025-6590 |
| IRVINE FOUR LLC | 23 EDGEVIEW | IRVINE | CA | 92603-0113 |
| IRVINE FOUR LLC | 2 VENTURE STE 120 | IRVINE | CA | 92618-7390 |
| IRVINE FOUR LLC | 15530 ROCKFIELD BLVD STE B4 | IRVINE | CA | 92618-2723 |
| IRVINE FOUR LLC | 15530 ROCKFIELD BLVD STE C | IRVINE | CA | 92618-2723 |

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| IRVINE FOUR LLC | 153 COUNTRY CLUB DR | SAN LUIS OBISPO | CA | 93401-8918 |
| IRVINE FOUR LLC | 29 LAKESIDE | IRVINE | CA | 92604-4515 |
| IRVINE FOUR LLC | 15520 ROCKFIELD BLVD STE C | IRVINE | CA | 92618-2792 |
| IRVINE FOUR LLC | 24796 WEYBURN DR | LAGUNA HILLS | CA | 92653-4309 |
| IRVINE FOUR LLC | 13610 BURNING TREE LN APT 3G | SEAL BEACH | CA | 90740-5530 |
| IRVINE FOUR LLC | 15520 ROCKFIELD BLVD STE G | IRVINE | CA | 92618-2792 |
| IRVINE FOUR LLC | 17 N SANTA TERESITA | IRVINE | CA | 92606-0824 |
| IRVINE FOUR LLC | 5 CORTE TALLISTA | SAN CLEMENTE | CA | 92673-6863 |
| IRVINE FOUR LLC | 15540 ROCKFIELD BLVD STE A100 | IRVINE | CA | 92618-2738 |
| IRVINE FOUR LLC | 15510 ROCKFIELD BLVD STE C110 | IRVINE | CA | 92618-2728 |
| IRVINE FOUR LLC | 410 31ST ST | NEWPORT BEACH | CA | 92663-3824 |
| IRVINE FOUR LLC | 15500 ROCKFIELD BLVD STE B | IRVINE | CA | 92618-2722 |
| TRICO-HST ASSOCIATES | 3100 PULLMAN ST STE A | COSTA MESA | CA | 92626-4500 |
| JPSMS PARTNERS | 6467 MAIN ST | WILLIAMSVILLE | NY | 14221-5856 |
| 3 AUTRY LLC | 745 BUENA VISTA WAY | LAGUNA BEACH | CA | 92651-2604 |
| BEN TR KHALAJ KHALAJ | 21902 ERIE LN | LAKE FOREST | CA | 92630-2307 |
| 10 AUTRY LLC | 25622 RAPID FALLS RD | LAGUNA HILLS | CA | 92653-7816 |
| T STREET VOLLEYBALL LLC | 1 AUTRY | IRVINE | CA | 92618-2709 |
| LANG REAL ESTATE LLC | 22512 ASPAN ST | LAKE FOREST | CA | 92630-1767 |
| JOHN E TR POPE | 29 STOWE | IRVINE | CA | 92620-2819 |
| HUANG, KUAN CHUN | 34841 DOHENY PL | DANA POINT | CA | 92624-1715 |
| SAINT MARINA COPTIC ORTHODOX CHURCH | PO BOX 51914 | IRVINE | CA | 92619-1914 |
| ENCINO VALLEY SHOPPING | PO BOX 7525 | LAGUNA NIGUEL | CA | 92607-7525 |
| BAUSHES LLC | 9979 MUIRLANDS BLVD | IRVINE | CA | 92618-2508 |
| JAY KENNETH TR MURRAY | 4614 CORTLAND DR | CORONA DEL MAR | CA | 92625-2707 |
| JOHN H TR BORDEN | 31922 PASEO DE ELENA | SAN JUAN CAPISTRANO | CA | 92675-3915 |
| KENNETH B MURPHY | 9 SAINT PAUL LN | LAGUNA NIGUEL | CA | 92677-9374 |
| CHUANG JACKSON H & MARGRET L | 9947 MUIRLANDS BLVD | IRVINE | CA | 92618-2508 |
| EPICREW USA INC | 9943 MUIRLANDS BLVD UNIT B-5 | IRVINE | CA | 92618-2508 |
| WOLVERINE WAY LLC | 9939 MUIRLANDS BLVD | IRVINE | CA | 92618-2508 |
| MILL ENT LLC | 9935 MUIRLANDS BLVD # 87 | IRVINE | CA | 92618-2508 |
| KAPSON PROPERTIES LLC | 9931 MUIRLANDS BLVD | IRVINE | CA | 92618-2508 |
| YAO HOLDINGS LLC | 9991 MUIRLANDS BLVD | IRVINE | CA | 92618-2508 |
| ZEBRA VENTURES LLC | 19332 BRUSHWOOD LN | TRABUCO CANYON | CA | 92679-1188 |
| YAO HOLDINGS LLC | 9999 MUIRLANDS BLVD | IRVINE | CA | 92618-2508 |
| GLASS BOX LLC | 4 FARADAY | IRVINE | CA | 92618-2714 |
| IDAHO / CAL PARTNERS LLC | 23742 PASEO DEL CAMPO | LAGUNA NIGUEL | CA | 92677-2412 |
| ALTIC PROPERTIES LLC | 4639 TREMONT LN | CORONA DEL MAR | CA | 92625-3130 |
| LAND DUDES I LLC | 668 N COAST HWY # 1370 | LAGUNA BEACH | CA | 92651-1513 |
| ONE WRIGLEY BUILDING LLC | 1 WRIGLEY | IRVINE | CA | 92618-2711 |
| M G ENTERPRISES | 15230 BURBANK BLVD | SHERMAN OAKS | CA | 91411-3534 |
| BREAD OF LIFE GREAT PARK | 2 FARADAY | IRVINE | CA | 92618-2737 |
| JOSE GUERRERO SANCHEZ | 709 S ORANGE AVE | SANTA ANA | CA | 92701-5845 |
| SPECTRUM PACIFIC PARTNERS | 10022 DEERHAVEN DR | SANTA ANA | CA | 92705-1530 |
| BROADLEY JAMES CORP | 19 THOMAS | IRVINE | CA | 92618-2704 |
| MASON ST PARTNERS LLC | 2100 STUNT RD | CALABASAS | CA | 91302-2357 |
| IS EQUITIES | 700 E OCEAN BLVD UNIT 3204 | LONG BEACH | CA | 90802-5073 |
| T MILLER CORPORATION | 18 CRESPI CIR | LADERA RANCH | CA | 92694-1561 |
| PAUL A TR MARSHALL | 422 31ST ST | NEWPORT BEACH | CA | 92663-3837 |
| TYSON & HEAP INVESTMENT | 18681 PORTOFINO DR | IRVINE | CA | 92603-3403 |
| CATHERINE TR C HUMPHREY | 3172 CORTE HERMOSA | NEWPORT BEACH | CA | 92660-3250 |
| CYNSTAN ENTS LLC | 8317 CREEKSIDE DR | DUBLIN | CA | 94568-3516 |
| CHAPMAN UNIV CHARITABLE | 1 UNIVERSITY DR | ORANGE | CA | 92866-1005 |
| NHIF HOLDINGS LLC | 1 TRUMAN ST | IRVINE | CA | 92620-5742 |
| BUCKHEAD PHOENIX L P | 1301 DOVE ST STE 860 | NEWPORT BEACH | CA | 92660-2440 |

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| FIVE MARCONI PROPERTY CO | 433 N CAMDEN DR STE 888 | BEVERLY HILLS | CA | 90210-4412 |
| GREEN TURTLE LLC | 9471 IRVINE CENTER DR STE 100 | IRVINE | CA | 92618-4680 |
| T & C DEVELOPMENT | 25911 CEDARBLUFF TER | LAGUNA HILLS | CA | 92653-7546 |
| 12 MASON LANE LLC | 8915 E KAISER BLVD | ANAHEIM HILLS | CA | 92808 |
| LARO MARQUOIA LLC | 16633 VENTURA BLVD STE 1040 | ENCINO | CA | 91436-1862 |
| 10 THOMAS LLC | 10 THOMAS | IRVINE | CA | 92618-2702 |
| 12 MASON LANE LLC | 96 CORPORATE PARK | IRVINE | CA | 92606-5136 |
| J MORITA USA | 9 MASON | IRVINE | CA | 92618-2707 |
| FAMILIES FORWARD | 8 THOMAS | IRVINE | CA | 92618-2763 |
| CHEN, TAI-WEI TR J-C & L S CHEN GRANDCHILD'S IRREVOC TR | 1783 LN | SAN MARINO | CA | 91108 |
| LANG ROGER D & VIRGINIA F TRUST | 2 VIAGGIO LN | FOOTHILL RANCH | CA | 92610-1933 |
| ARE-MD NO 1 LLC | PO BOX 847 | CARLSBAD | CA | 92018-0847 |
| RESEARCH DX INVESTMENTS | 5 MASON | IRVINE | CA | 92618-2552 |
| TIM TR O'NEIL | 1827 BAYADERE TER | CORONA DEL MAR | CA | 92625-1808 |
| KARMA AUTOMOTIVE LLC | 9950 JERONIMO RD | IRVINE | CA | 92618-2014 |
| MISSION PLAZA PROPERTIES | 3857 BIRCH ST UNIT 482 | NEWPORT BEACH | CA | 92660-2616 |
| 2 THOMAS LLC | 25500 RANCHO NIGUEL RD STE 280 | LAGUNA NIGUEL | CA | 92677-7306 |
| MASON BEVERLYWOOD LLC | 9990 SANTA MONICA BLVD | BEVERLY HILLS | CA | 90212-1607 |
| GOODYEAR PROPERTIES LLC | 735 SHASTA ST | REDWOOD CITY | CA | 94063-2124 |
| WESTERN TELEMATIC INC | 5 STERLING | IRVINE | CA | 92618-2517 |
| VALENCIA ST APTS LLC | 29071 BOUQUET CANYON RD | SILVERADO | CA | 92676-9604 |
| MONARCH RRC PROPERTIES L | PO BOX 1017 | CORONA DEL MAR | CA | 92625-6017 |
| K H PARTNERS LLC | 6765 WESTMINSTER BLVD UNIT C155 | WESTMINSTER | CA | 92683-3769 |
| K H PARTNERS LLC A CAL | 5 HOLLAND STE 201 | IRVINE | CA | 92618-2574 |
| CARDINAL INVESTMENT | 375 BRISTOL ST STE 50 | COSTA MESA | CA | 92626-7970 |
| JEFFREY TR RUBIE | 35261 CAMINO CAPISTRANO | DANA POINT | CA | 92624-1801 |
| SIGMAN FAMILY PARTNERSHIP | 5 HOLLAND STE 101 | IRVINE | CA | 92618-2568 |
| JELIC, MARINKO TR | 2 MASON | IRVINE | CA | 92618-2513 |
| SUNTREK LLC | 26011 VIA ARBOLEDA | SAN JUAN CAPISTRANO | CA | 92675-3038 |
| ALLEN SHALBAF LLC | 70 W 36TH ST RM 4B | NEW YORK | NY | 10018-8040 |
| DB INTERNATIONAL LLC | PO BOX 5707 | DIAMOND BAR | CA | 91765-7707 |
| SHIMANO AMERICAN | 1 HOLLAND | IRVINE | CA | 92618-2506 |
| ANDRELLA STACIE | 2 SHIRE | COTO DE CAZA | CA | 92679-4907 |
| RII CA QRS 15-2 INC | 4 GOODYEAR | IRVINE | CA | 92618-2002 |
| ENZO ENTERPRISE GROUP LLC | 33 BOULDER VW | IRVINE | CA | 92603-0409 |
| MARC SALEM | 9680 RESEARCH DR | IRVINE | CA | 92618-4666 |
| 1685 TORONTO WAY LLC | 24165 SNIPE LN | LAGUNA NIGUEL | CA | 92677-1313 |
| LOS ANGELES CHURCH | 2716 OCEAN PARK BLVD STE 2006 | SANTA MONICA | CA | 90405-5598 |
| JOSEPH JAY TR MANOOGIAN | 5 HOLLAND STE 123 | IRVINE | CA | 92618-2573 |
| SPARKLETTS DRINKING | 2300 WINDY RIDGE PKWY SE STE 500N | ATLANTA | GA | 30339-8577 |
| PROLOGIS-EXCHANGE 3 HOLLAND LL | 1800 WAZEE ST STE 500 | DENVER | CO | 80202-2526 |
| BCM TECHNOLOGY INC | 11 CHRYSLER | IRVINE | CA | 92618-2009 |
| DATCARD PROPERTIES LLC | 7 GOODYEAR | IRVINE | CA | 92618-2001 |
| XNM LLC | 9600 TOLEDO WAY | IRVINE | CA | 92618-1808 |
| GREGORY S BISCONTE | 26141 COUNTRY RIDGE CIR | LAKE FOREST | CA | 92630-6599 |
| DDMMW LLC | 11 VANDERBILT | IRVINE | CA | 92618-2011 |
| CHROMA ATE INC | 7 CHRYSLER | IRVINE | CA | 92618-2009 |
| SMART SYSTEMS TECHNOLOGY | 9 GOODYEAR | IRVINE | CA | 92618-2001 |
| 239 INVESTMENTS LLC | 3191 AIRPORT LOOP DR STE D | COSTA MESA | CA | 92626-3404 |
| DFM INVESTMENTS | 10 CHRYSLER STE A | IRVINE | CA | 92618-2016 |
| JACK L TR TRYON | 12 LUSITANO | COTO DE CAZA | CA | 92679-4930 |
| RUDOLPH TR DWORZAK | 34 LANGFORD LN | MISSION VIEJO | CA | 92694-0817 |
| NEONEX INVESTMENTS LLC | 3334 E COAST HWY UNIT 401 | CORONA DEL MAR | CA | 92625-2328 |
| GRANDJACK TECHNOLOGY LLC | 7 ANZIO | IRVINE | CA | 92614-7309 |
| BRIDGE INTERESTS LLC | 23 MOUNT VERNON | IRVINE | CA | 92620-1997 |

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| LEECONCEPT PARTNERS LLC | 11 SEVENOAKS | IRVINE | CA | 92603-3450 |
| THE MALLOY FAMILY | 556 MALLOY CT | CORONA | CA | 92878-4045 |
| 15 STUDEBAKER LLC | 2150 E TAHQUITZ CANYON WAY STE 9 | PALM SPRINGS | CA | 92262-6818 |
| BRIGHT LAND OF IRVINE LLC | 7 VANDERBILT | IRVINE | CA | 92618-2011 |
| TPS GLOBAL INDUSTRIES INC | 6 CHRYSLER | IRVINE | CA | 92618-2008 |
| NAVIEN INC | 20 GOODYEAR | IRVINE | CA | 92618-1813 |
| E MANSON INVESTS LTD | 620 WILSON AVE #401 | TORONTO ONTARIO | | M3K1Z |
| LELIAN PROPERTY | PO BOX 15324 | IRVINE | CA | 92623-5324 |
| NITTO AVECIA PHARMA SERVICES INC | 10 VANDERBILT | IRVINE | CA | 92618-2010 |
| HAMILTON FAMILY LP | 341 W MEATS AVE | ORANGE | CA | 92865-2623 |
| BYRON LAWRENCE RUSSELL | 1 CHRISTOPHER ST | LADERA RANCH | CA | 92694-1527 |
| PET QWERKS INC | 9 STUDEBAKER | IRVINE | CA | 92618-2013 |
| C & C | 8 VANDERBILT | IRVINE | CA | 92618-2081 |
| 18 MORGAN LLC | 18 MORGAN STE 200 | IRVINE | CA | 92618-2074 |
| GB REAL ESTATE LLC | 6740 COBRA WAY STE 100 | SAN DIEGO | CA | 92121-4102 |
| JOHN A TR J A KORBONSKI | 19 SUN TER | LAGUNA NIGUEL | CA | 92677-9230 |
| SHOKOOH, FARROKH TR | 31191 CEANOTHUS DR | LAGUNA BEACH | CA | 92651-6929 |
| 5 STUDEBAKER LLC | 2235 CAMPUS DR | EL SEGUNDO | CA | 90245-0001 |
| VANDERBILT KSJB LLC | 30622 HUNT CLUB DR | SAN JUAN CAPISTRANO | CA | 92675-1911 |
| HILLTOP CENTER I LLC / HILLTOP CENTER II LLC | 1142 S WINCHESTER BLVD | SAN JOSE | CA | 95128-3922 |
| DCC STUDEBAKER LLC | 268 CALLE DE ANDALUCIA | REDONDO BEACH | CA | 90277-6703 |
| MOSON PROP INC | 50 LONSDALE AVE, STE 2201 | NORTH VANCOUVER, | | BRITISH COLUMBIA, , CANADA |
| MC CALL COMMERCIAL | 6 HUGHES STE 100 | IRVINE | CA | 92618-2060 |
| MCCALL COMMERCIAL | 6 HUGHES STE 120 | IRVINE | CA | 92618-2060 |
| CHINESE COMMUNITY | 6 HUGHES STE 160 | IRVINE | CA | 92618-2062 |
| ARCS SIX LLC | 6 HUGHES STE 210 | IRVINE | CA | 92618-2063 |
| 6 HUGHES LLC | 6 HUGHES STE 220 | IRVINE | CA | 92618-2063 |
| PCM INC | 1940 E MARIPOSA AVE | EL SEGUNDO | CA | 90245-3457 |
| STIVERS INVESTMENT CO | 505 E COLORADO BLVD STE 201 | PASADENA | CA | 91101-5213 |
| BIP MORGAN LLC | 6 SIENA | LAGUNA NIGUEL | CA | 92677-8627 |
| SMART 1031 LLC | 4100 NEWPORT PLACE DR STE 820 | NEWPORT BEACH | CA | 92660-1403 |
| BERDAN TOLEDO LLC | 1714 16TH ST | SANTA MONICA | CA | 90404-4402 |
| BRE NEWTON HOTELS | PO BOX A3956 | CHICAGO | IL | 60690-3956 |
| MORGAN BAY PARTNERS LLC | 115 N DOHENY DR APT 1 | WEST HOLLYWOOD | CA | 90048-2827 |
| STUDEBAKER REAL ESTATE | 4 STUDEBAKER | IRVINE | CA | 92618-2012 |
| LINGKOGIN INC | 2005 PALO VERDE AVE # 316 | LONG BEACH | CA | 90815-3322 |
| PUBLIC STORAGE | PO BOX 25025 | GLENDALE | CA | 91221-5025 |
| STASON INDUSTRIAL | 11 MORGAN | IRVINE | CA | 92618-2005 |
| PROGRESSIVE LP | 17992 COWAN | IRVINE | CA | 92614-6026 |
| J6 INVESTMENTS LLC | 2261 TRACY RD | NORTHWOOD | OH | 43619-1344 |
| SICOR PHARMACEUTICALS INC | 3801 GERMANTOWN PIKE STE 203 | COLLEGEVILLE | PA | 19426-4019 |
| PACIFIC MORGAN LLLP | PO BOX 25991 | LOS ANGELES | CA | 90025-0991 |
| GIRL SCOUTS OF ORANGE | 9500 TOLEDO WAY STE 100 | IRVINE | CA | 92618-1823 |
| PARKER PROPERTIES INC | 6035 PARKLAND BLVD | CLEVELAND | OH | 44124-4186 |
| MITCHELL J & C FAMILY TRUST | 20 BLUE GRASS | IRVINE | CA | 92603-0412 |
| CHOU ANNIE CHING MEI TR / CHOU FAMILY TRUST | 10668 BRECKENRIDGE DR | SAN DIEGO | CA | 92131-6114 |
| ORANGE BAKERY INC | 17751 COWAN | IRVINE | CA | 92614-6009 |
| KOBOT INTERNATIONAL INC | 1 MORGAN | IRVINE | CA | 92618-1917 |
| MEEHAN HOLDINGS LLC | 9400 TOLEDO WAY | IRVINE | CA | 92618-1804 |
| APPLIED MEDICAL | 22872 AVENIDA EMPRESA | RANCHO SANTA MARGARITA | CA | 92688-2650 |
| HUBBLE PARKER LLC | 39 PARKER | IRVINE | CA | 92618-1605 |
| CHICONY AMERICA INC | 53 PARKER | IRVINE | CA | 92618-1605 |
| PATEL, DAHYABHAI R TR | 57 PARKER | IRVINE | CA | 92618-1605 |
| RUBY / TURNER ONE | 1500 QUAIL ST STE 150 | NEWPORT BEACH | CA | 92660-2750 |
| JUPITOR CORP USA | 55 FAIRBANKS | IRVINE | CA | 92618-1603 |

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| SCHULZ INVESTMENTS LLC | 16 HAMMOND | IRVINE | CA | 92618-1606 |
| MARTIN TR KUBICKI | 25096 PERCH DR | DANA POINT | CA | 92629-2036 |
| LANDAU FAMILY TRUST / LANDAU SERGIO & MARA L | 28 HAMMOND STE B | IRVINE | CA | 92618-1664 |
| A & B INVESTMENT GROUP LLC | 24721 LAS ALTURAS CT | LAGUNA HILLS | CA | 92653-6231 |
| PORETSKY, ZINOVY TR Z | 2318 CRESTVIEW DR | LAGUNA BEACH | CA | 92651-3473 |
| ROBERT A TR COVENEY | 1 RUE FONTAINBLEAU | NEWPORT BEACH | CA | 92660-5928 |
| PETER A TR VAN DIJK | 28 HAMMOND STE G | IRVINE | CA | 92618-1659 |
| MORNINGWOOD PROPERTIES | 24 HAMMOND STE C | IRVINE | CA | 92618-1680 |
| MATRANGA REAL EST LP | 8195 E KAISER BLVD | ANAHEIM | CA | 92808-2214 |
| RON TAYBI | 24 HAMMOND STE E | IRVINE | CA | 92618-1680 |
| XENPROP LLC | 24 HAMMOND STE F | IRVINE | CA | 92618-1680 |
| ROSEEN EQUITIES LLC | 24 HAMMOND STE G | IRVINE | CA | 92618-1680 |
| RANDALL E TR MILLER | 24 HAMMOND STE A | IRVINE | CA | 92618-1680 |
| LIAO, XIUGAO TR LIAO WANG | 16 TRINITY | IRVINE | CA | 92612-3271 |
| OIIS PROPERTIES LLC | 11 PEPPERTREE | ALISO VIEJO | CA | 92656-2160 |
| 31 MUSICK LLC | 31 MUSICK | IRVINE | CA | 92618-1638 |
| LI, FEIYU | 22832 SKYVIEW WAY | LAGUNA NIGUEL | CA | 92677-5419 |
| HONEY BAKED HAM, INC | 29 MUSICK | IRVINE | CA | 92618-1638 |
| VIKING FREIGHT SYSTEMS | 3336 E 32ND ST STE 217 | TULSA | OK | 74135-4442 |
| TARA S KUPUMBATI | 31 STOWE | IRVINE | CA | 92620-2819 |
| CHRISTOPHER TR TRISNAN | 28851 VIA LEONA | SAN JUAN CAPISTRANO | CA | 92675-5536 |
| IDLK FINGERPRINT | 6681 MAGNOLIA AVE STE C | RIVERSIDE | CA | 92506-2900 |
| REXROSE R & E HLDGS LLC | 13865 ALTON PKWY # A | IRVINE | CA | 92618-1686 |
| JAMES P TR DONNELLY | 2303 CALLE LAS PALMAS | SAN CLEMENTE | CA | 92672-4403 |
| BOZENA MCCARTHY | 31281 SUMMERHILL CT | COTO DE CAZA | CA | 92679-4162 |
| JOHN M MULHALL | 24262 ONTARIO LN | LAKE FOREST | CA | 92630-1919 |
| GREG C MC KHANN | 248 W MARQUITA APT 3 | SAN CLEMENTE | CA | 92672-1522 |
| 13885-B ALTON LLC | 28536 OAKMONT | MISSION VIEJO | CA | 92692-4538 |
| ROBERT TR LEVEY | 20 LA PERLA | FOOTHILL RANCH | CA | 92610-1714 |
| BOB AND JULIE YDENS-ALTON PROPERTY LLC | 19191 JASPER HILL RD | TRABUCO CANYON | CA | 92679-1121 |
| DREW R TR SMITH | 31121 VIA LIMON | SAN JUAN CAPISTRANO | CA | 92675-5550 |
| ASSAF BROTHERS LLC | 1960 E GRAND AVE STE 380 | EL SEGUNDO | CA | 90245-5157 |
| TUSKO PROPERTIES LLC | 16787 BEACH BLVD # 727 | HUNTINGTON BEACH | CA | 92647-4848 |
| K & C SUITE A LLC | 13765 ALTON PKWY STE B | IRVINE | CA | 92618-1627 |
| QASTLE LLC | 13765 ALTON PKWY STE E | IRVINE | CA | 92618-1627 |
| QUEJEBLE HOLDINGS LLC | 13765 ALTON PKWY | IRVINE | CA | 92618-1627 |
| PAMELA S TR LIPPINCOTT | 24441 MOCKINGBIRD PL | LAKE FOREST | CA | 92630 |
| SENNETT INVESTMENTS LLC | 13700 ALTON PKWY | IRVINE | CA | 92618-1617 |
| OGAEDA LLC | 24761 PASEO VENDAVAL | LAKE FOREST | CA | 92630-2136 |
| CHOI, YIM YEUNG TR CHOI | 29 MOMENTO | IRVINE | CA | 92603-4239 |
| FSP NORTH AMERICA INC | 33 MUSICK | IRVINE | CA | 92618-1638 |
| YASMEEN AHUSSAIN | 35 MUSICK | IRVINE | CA | 92618-1638 |
| E & L INVEST PROP LLC | 28 HAMMOND STE D | IRVINE | CA | 92618-1662 |
| ROBERT B TR NICKEL | 24282 SPARROW ST | LAKE FOREST | CA | 92630-1857 |
| MUSICK LABS LLC | 33 BROOKLINE | ALISO VIEJO | CA | 92656-1461 |
| PENSCO TRUST COMPANY | PO BOX 173859 | DENVER | CO | 80217-3859 |
| SOKHI, LAKHWINDER S | 2 DOUGLASS DR | COTO DE CAZA | CA | 92679-5231 |
| PROTEC ASSOCIATION SERVICES | 10180 WILLOW CREEK RD | SAN DIEGO | CA | 92131-1636 |
| MADAN FOODS INC | 23 MUSICK | IRVINE | CA | 92618-1638 |
| FAUNA 43 LLC | 14431 GALY ST | TUSTIN | CA | 92780-2308 |
| MEXS-A INC | 18 ICEBERG ROSE | IRVINE | CA | 92620-2889 |
| 19 MUSICK LLC | 31522 FLYING CLOUD DR | LAGUNA NIGUEL | CA | 92677-2711 |
| ALEC TR CHEN | 37 VACAVILLE | IRVINE | CA | 92602-0915 |
| BEAGAL STAKE LLC | 15 MUSICK | IRVINE | CA | 92618-1638 |
| MANSOUR OFFICE BUILDING | 15942 LOS SERRANOSCOUNTR, STE D-342 | CHINO HILLS | CA | 91709 |

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| MANSOUR, MEDHAT M TR | 10565 GROVE OAK DR | SANTA ANA | CA | 92705-2587 |
| 9361 REALTY GROUP LLC | 34523 CALLE NARANJA | CAPISTRANO BEACH | CA | 92624-1056 |
| JOHN M TR REID | 75 S PEAK | LAGUNA NIGUEL | CA | 92677-2903 |
| MEDICAL TECHNICAL | 9251 IRVINE BLVD | IRVINE | CA | 92618-1645 |
| PATRICIA R TR SIMONIAN | 1 HUNTINGTON CT | NEWPORT BEACH | CA | 92660-4217 |
| GSI IRVINE PROPERTY LLC | 9241 IRVINE BLVD STE 100 | IRVINE | CA | 92618-1695 |
| SCOTT TR DINEEN | 615 CATALINA | LAGUNA BEACH | CA | 92651-2544 |
| NAJJAR SAID F & RANDA R | 29312 WOOD CANYON RD | SILVERADO | CA | 92676-9613 |
| FREDERICK TR KAIFESH | 10 FLAT IRON RD | COTO DE CAZA | CA | 92679-5213 |
| SERRA RIDGE PROPERTIES | 25412 NEPTUNE DR | DANA POINT | CA | 92629-1213 |
| PARKCOURT LLC | 18092 STRATFORD CIR | VILLA PARK | CA | 92861-4514 |
| VENT-A-HOOD | 4405 W COAST HWY | NEWPORT BEACH | CA | 92663-2614 |
| M J MOORE LLC | 9221 IRVINE BLVD | IRVINE | CA | 92618-1645 |
| PERRICOMM3 LLC | 2750 SIGNAL PKWY | SIGNAL HILL | CA | 90755-2207 |
| BARRY IRVINE LLC | 9201 IRVINE BLVD | IRVINE | CA | 92618-1645 |
| 15707 ROCKFIELD LLC | 19782 MACARTHUR BLVD STE 100 | IRVINE | CA | 92612-2414 |
| CENTERPOINT PROPERTIES TRUST | 9156 TOLEDO WAY | IRVINE | CA | 92618 |
| IMAI PROPERTIES, INC | 11 AUTO CENTER DR | IRVINE | CA | 92618-2803 |
| ROCKRIDGE REAL ESTATE LP | 4005 W CHESTER PIKE | NEWTOWN SQUARE | PA | 19073-2206 |
| LOMITA BOULEVARD #1 LLC | 23705 CRENSHAW BLVD STE 200 | TORRANCE | CA | 90505-5298 |
| CT HOLLAND INDUSTRIAL LLC | 11620 WILSHIRE BLVD STE 1000 | LOS ANGELES | CA | 90025-6821 |
| SSWI REAL ESTATE | 1142 S DIAMOND BAR BLVD | DIAMOND BAR | CA | 91765-2203 |
| AMERICAN FERTILITY CENTER LLC | 22800 SAVI RANCH PKWY STE 200 | YORBA LINDA | CA | 92887-4623 |
| AMERICAN HUGHES MEDICAL | 2 HUGHES STE 175 | IRVINE | CA | 92618-2037 |
| IRVINE PROF ASSOCS LLC | 3 IRIS | IRVINE | CA | 92620-2212 |
| ZERO POINT MED ENTRPRS | 4 HUGHES STE 150 | IRVINE | CA | 92618-2044 |
| ROCK ROSE LLC TR THE / MUSTANG MINT TITLE HOLDING TR | 11 HALLEY | IRVINE | CA | 92603 |
| EDWARDS LIFESCIENCES LLC | 1 EDWARDS WAY | IRVINE | CA | 92614-5688 |
| LENNAR HOMES OF CALIFORNIA INC | 15241 LAGUNA CANYON RD | IRVINE | CA | 92618-3146 |
| SUN KAIYING | 58 MCDONALD PL UNIT 307 | GOLETA | CA | 93117-2422 |
| LZ REAL ESTATE INVESTMENT INC | 9 SOMMET | NEWPORT BEACH | CA | 92657-0104 |
| TIAN LI / WENG JIALAN | 1206 NOLITA | IRVINE | CA | 92612-6576 |
| TERESA P BOGDANOVICH | 1208 NOLITA | IRVINE | CA | 92612-6576 |
| QUERUBIN JOSEPH J BOGDANOVICH, LYLYANA J | 1210 NOLITA | IRVINE | CA | 92612-6576 |
| KUANG HONG | 1212 NOLITA | IRVINE | CA | 92612-6576 |
| SHI, YUZHI | 8120 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| HWANG SHIH-I TR HWANG / WU / FAMILY TR | 6927 DELIGHT WAY | SAN JOSE | CA | 95120-3106 |
| JOHN SOLIMAN | 1218 NOLITA | IRVINE | CA | 92612-6576 |
| CHHABRA ISHAAN & PREETI | 1220 NOLITA | IRVINE | CA | 92612-6576 |
| SONG JEAN | 1222 NOLITA | IRVINE | CA | 92612-6576 |
| SHEN XIAOLI | 1301 CALLE CABALLERO | SAN DIMAS | CA | 91773-4041 |
| TALENT GO INVESTMENT LLC | 26 BOULDER VW | IRVINE | CA | 92603-0410 |
| LIANG JIE MA, HONGYAN | 1228 NOLITA | IRVINE | CA | 92612-6576 |
| YUAN YONG LAN, LAN | 76 FENWAY | IRVINE | CA | 92620-2186 |
| DINO DALAL | 1234 NOLITA | IRVINE | CA | 92612-6576 |
| ZHU AMANDA PING & NICOLAS TAO | 1005 S MONTEZUMA WAY | WEST COVINA | CA | 91791-3733 |
| CHEN JIE & KAI | 150 BISHOP LNDG | IRVINE | CA | 92620-7329 |
| HUI WANG | 57 WINDWALKER WAY | TUSTIN | CA | 92782-3739 |
| PING HU | 32 VIA BURRONE | NEWPORT COAST | CA | 92657-1403 |
| WANG FUHUA | 17 VACAVILLE | IRVINE | CA | 92602-0915 |
| YE, YANPING | 17721 ANGLIN LN | TUSTIN | CA | 92780-1903 |
| SHENG, JIAYI | 1306 NOLITA | IRVINE | CA | 92612-6579 |
| LIM, YIING SHYR | 1310 NOLITA | IRVINE | CA | 92612-6579 |
| MENG QIAN / ZHENG DAOHE | 56 WINDWALKER WAY | TUSTIN | CA | 92782-3739 |
| TINA TSAO | 1314 NOLITA | IRVINE | CA | 92612-6579 |

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|---|---|---|---|---|
| LI, ZHEHENG | 108 FOUNTAIN FRK | IRVINE | CA | 92602-1883 |
| FU, JIE | 112 HEATHER MIST | IRVINE | CA | 92618-4812 |
| KELVIN YIHANG ZHANG | 14351 SETTLERS RIDGE CT | EASTVALE | CA | 92880-3726 |
| CAMELLIA SHEIKHAVANDI | 1322 NOLITA | IRVINE | CA | 92612-6579 |
| SENAATI, ASHKON | 401 S PASEO REAL | ANAHEIM | CA | 92807-4213 |
| XI, MINGJIA | 8 N 1ST AVE | ARCADIA | CA | 91006-3205 |
| WU, JIAMAN | 144 NEWALL | IRVINE | CA | 92618-1031 |
| ARIANA MAH | 1334 NOLITA | IRVINE | CA | 92612-6579 |
| JIANG BEI | 1336 NOLITA | ALISO VIEJO | CA | 92656 |
| ZHANG, WENJIE | 65 TWIN FLOWER | IRVINE | CA | 92620-3695 |
| EMILY YANG MILLER | 18 TERRAZA DEL MAR | DANA POINT | CA | 92629-1100 |
| LIU, LINXUAN | 1402 NOLITA | IRVINE | CA | 92612-6582 |
| EMILY SAKURA ABE | 1404 NOLITA | IRVINE | CA | 92612-6582 |
| YE, HUIZHEN | 1406 NOLITA | IRVINE | CA | 92612-6582 |
| YANG ROBERT HONGJIE GAN, LINLING | 18711 VIA TORINO | IRVINE | CA | 92603-3438 |
| JOSEPH A ZIMNY | 205 MIDVALE LN | IRVINE | CA | 92620-2161 |
| GAVIN ALEXANDER PYOTT | 1414 NOLITA | IRVINE | CA | 92612-6582 |
| JUN TAO | 36 DEER CRK | IRVINE | CA | 92604-7100 |
| FAN, KAMAN CHUANMING | 39 MANZANILLO | LAKE FOREST | CA | 92630-1442 |
| YOUNGER JARED R | 18426 BROOKHURST ST STE 103 | FOUNTAIN VALLEY | CA | 92708-6777 |
| LAM FONG-SHEK TR / ONG SOO LEE TR | 1804 SWINTON DR | FOLSOM | CA | 95630-6125 |
| ZHANG LIPING | 1424 NOLITA | IRVINE | CA | 92612-6582 |
| XIONG XIAOGUO | 1426 NOLITA | IRVINE | CA | 92612-6582 |
| YING XIAO | 35 HIDDEN TRL | IRVINE | CA | 92603-0212 |
| BISHOP JOHN | 1430 NOLITA | IRVINE | CA | 92612-6582 |
| CHIH PING KUO | 1434 NOLITA | IRVINE | CA | 92612-6582 |
| DALE J MARQUIS | 10 TELESCOPE | NEWPORT COAST | CA | 92657-1504 |
| THE SOLIMAN-RIZKALLA CLINIC INC | 1514 CRESTVIEW RD | REDLANDS | CA | 92374-6377 |
| YE, HUIZHEN | 1506 NOLITA | IRVINE | CA | 92612-6595 |
| PETER HODGES | 1508 NOLITA | IRVINE | CA | 92612-6595 |
| ABDELMOLA SHERIF ALI, ABEER | 1510 NOLITA | IRVINE | CA | 92612-6595 |
| LEE GRACE A | 1512 NOLITA | IRVINE | CA | 92612-6595 |
| YAO, JIANWEN | 63 TURNSTONE | IRVINE | CA | 92618-1707 |
| SODHA, AMAR K | 1516 NOLITA | IRVINE | CA | 92612-6595 |
| ZHENG, JIANMIN | 35 TRIPLE LEAF | IRVINE | CA | 92620-2868 |
| SAMAT VIPUL TR THE SAMAT FAMILY TR | 540 N CASTELLINA TER | MOUNTAIN HOUSE | CA | 95391-1337 |
| DISSANAYAKE, SUMUDU | 1522 NOLITA | IRVINE | CA | 92612-6595 |
| SHI YUJIE HAN, YUING | 1524 NOLITA | IRVINE | CA | 92612-6595 |
| SPEETER ANDREA | 1526 NOLITA | IRVINE | CA | 92612-6595 |
| FAKHARI, HAMID | 1063 S TAYLOR CT | ANAHEIM | CA | 92808-2424 |
| XU, YANPING | 1530 NOLITA | IRVINE | CA | 92612-6595 |
| KONG, XIANJUNLIANG | 1532 NOLITA | IRVINE | CA | 92612-6595 |
| MAXWELL ROSS BYER | 1534 NOLITA | IRVINE | CA | 92612-6595 |
| CARLOS CORNEJO I | 1536 NOLITA | IRVINE | CA | 92612-6595 |
| XIAO YANG | 1538 NOLITA | IRVINE | CA | 92612-6595 |
| YANG, NARI | 28 JUNIPER | LAKE FOREST | CA | 92630-1449 |
| MINH PHUONG TRAN | 1542 NOLITA | IRVINE | CA | 92612-6595 |
| JODHKA JASPREET KAUR | 53 SUMMER HOUSE | IRVINE | CA | 92603-0211 |
| DISSANAYAKE SUMUDU / PATHIRANE MINOLI | 2202 NOLITA | IRVINE | CA | 92612-6596 |
| HONG MIKE S TR THE HONG FAMILY TR | 29 PEPPER TREE LN | RLLNG HLS EST | CA | 90274-5406 |
| GONG TIAN | 2206 NOLITA | IRVINE | CA | 92612-6596 |
| MONIUSZKO MONIKA TR M MONIUSZKO LIVING TR | 430 POPPY AVE | CORONA DEL MAR | CA | 92625-2508 |
| YUAN ZHIYI | 2210 NOLITA | IRVINE | CA | 92612-6596 |
| KAN IVAN G | 2212 NOLITA | IRVINE | CA | 92612-6596 |
| EFTEKHARI NEECOO NIKKI | 2214 NOLITA | IRVINE | CA | 92612-6596 |

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| VALAIE FARAZ / RAHBARAN PARDIS | 24 DELPHINUS | IRVINE | CA | 92603-5705 |
| LIU IRVINE 2017 LLC | 2218 NOLITA | IRVINE | CA | 92612-6596 |
| HADDAD JAMES ELIAS TR THE J E & L A HADDAD COMMUNITY PPTY TR | 2503 TIVERTON DR | BAKERSFIELD | CA | 93311-9384 |
| LIAN WENLI TR THE WENLI 2015 REVOC FAMILY TR | 133 QUIET GRV | IRVINE | CA | 92618-0847 |
| YU TAI J | 123 SPIRAL | IRVINE | CA | 92618-1367 |
| HSU BECK | 26922 FALLING LEAF DR | LAGUNA HILLS | CA | 92653-7539 |
| VICTOR WEISHAW WANG REVOC LIVING TR | 3653 LANDFAIR CT | SAN DIEGO | CA | 92130-1835 |
| LI YANQUAN | 77 BOUNTIFUL | IRVINE | CA | 92602-1802 |
| GAO CHAO | 149 LINDA VIS | IRVINE | CA | 92618-1358 |
| MA QIANG GAO, KUN | 101 TINKER | IRVINE | CA | 92618-0825 |
| KISON CARINNA CELINE DE LEON | 2236 NOLITA | IRVINE | CA | 92612-6596 |
| ZHAO JUNYING | 6448 ADOBE CIR | IRVINE | CA | 92617-5134 |
| YI MYONG S 2015 TRUST | 2240 NOLITA | IRVINE | CA | 92612-6596 |
| TAO WEIXIAN CHEN, QIUHUA | 2242 NOLITA | IRVINE | CA | 92612-6596 |
| QIAN FANGZE | 2244 NOLITA | IRVINE | CA | 92612-6596 |
| HOU QING | 2302 NOLITA | IRVINE | CA | 92612-6598 |
| SISANTE MANUEL | 2304 NOLITA | IRVINE | CA | 92612-6598 |
| CHEN YIHONG | 18 VERNAL SPG | IRVINE | CA | 92603-0405 |
| NICOLAS LINDA / TUPAS FLORENTINO L | 725 E ORANGE BLOSSOM WAY | AZUSA | CA | 91702-1581 |
| LIONS PROPERTY LLC | PO BOX 580103 | ELK GROVE | CA | 95758-0002 |
| TAM CHRISTOPHER CHI-CHEUNG | PO BOX 2901 | NEWPORT BEACH | CA | 92659-0375 |
| HU CHUNFANG | 11 LYNNFIELD | IRVINE | CA | 92620-1987 |
| LU YIJIA | 125 BRIDLE PATH | IRVINE | CA | 92602-1806 |
| LIANG WU | 8 IST AVE | ARCADIA | CA | 91006 |
| YANG NAIING | 2322 NOLITA | IRVINE | CA | 92612-6598 |
| JGW INVESTMENT PROPERTIES LLC | 1296 HILLSIDE ST | MONTEREY PARK | CA | 91754-5145 |
| MIAO DASEN ZHANG, CHUNYAN | 2326 NOLITA | IRVINE | CA | 92612-6598 |
| XU HAO | MINHANG DISTRICT | SHANGHAI CHINA | | |
| YANG JEREMY | 2334 NOLITA | IRVINE | CA | 92612-6598 |
| MAO LI | 15131 ALTON PKWY | IRVINE | CA | 92618-2385 |
| KYLES LELE Y | 2338 NOLITA | IRVINE | CA | 92612-6598 |
| JONES EMILY LAUREN TR | 2340 NOLITA | IRVINE | CA | 92612-6598 |
| ZHU CHUNHONG | 19811 COLIMA RD STE 230 | WALNUT | CA | 91789-3422 |
| LUONG MICHAEL H | 2344 NOLITA | IRVINE | CA | 92612-6598 |
| ZHANG LUYA | 2402 NOLITA | IRVINE | CA | 92612-8545 |
| LIU JILL YALAN | 128 CRUISER | IRVINE | CA | 92618-0832 |
| QIU KE | 2406 NOLITA | IRVINE | CA | 92612-8545 |
| YU FEI / REN XIAOHONG | 14262 FLORENCE ST | EASTVALE | CA | 92880-9122 |
| SATOR NHUNG T | 2412 NOLITA | IRVINE | CA | 92612-8545 |
| LIU IRVINE 2017 LLC | 2414 NOLITA | IRVINE | CA | 92612-8545 |
| WANG HONGWEI JIA, RU | 877 FRANCISCO ST APT 1507 | LOS ANGELES | CA | 90017-2876 |
| BERTAINA LISA ANN | 2418 NOLITA | IRVINE | CA | 92612-8545 |
| ENG JESSICA | 2422 NOLITA | IRVINE | CA | 92612-8545 |
| LI HONG / XU QIANXUN | 402 ROCKEFELLER | IRVINE | CA | 92612-7165 |
| HUA JIAN JIANG, JINGJING | 16 DAHLIA | LAKE FOREST | CA | 92630-8379 |
| ZESIGER ZACHARY | 2428 NOLITA | IRVINE | CA | 92612-8545 |
| JEON CHANHEE | 3223 W 6TH ST UNIT 205 | LOS ANGELES | CA | 90020-5006 |
| WONG YAT CHUN | 106 CASTER | IRVINE | CA | 92618-0829 |
| WIN ARTHUR H LWIN, MAE H | 2397 EDGEWATER DR | BEAVERCREEK | OH | 45431-5687 |
| BUCCINO DANIEL ANTHONY | 2436 NOLITA | IRVINE | CA | 92612-8545 |
| KUO CHUN-WEI FENG, LIMIN | 8770 CELEBRATION ST | CHINO | CA | 91708-8876 |
| GONG PEIXIAN | 8 BANDOL | NEWPORT BEACH | CA | 92657-0136 |
| NOVIKOFF RYAN | 2444 NOLITA | IRVINE | CA | 92612-8545 |
| ZHAO JIAN & RUIXIN | 2502 NOLITA | IRVINE | CA | 92612-8549 |
| WU XIAOHUI | 2504 NOLITA | IRVINE | CA | 92612-8549 |

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| CHEN ZHEN | 7397 COBBLE CREEK DR | EASTVALE | CA | 92880-9093 |
| HUANG YIXI | 59 PULSAR | IRVINE | CA | 92618-1330 |
| ZHOU LI | 2522 NOLITA | IRVINE | CA | 92612-8549 |
| SUN DAOXUE WANG, ZHUANG | 20 HAWKEYE | IRVINE | CA | 92602-0851 |
| MADANIPOUR MELODY | 2514 NOLITA | IRVINE | CA | 92612-8549 |
| WALKER TRAKIA WILLIS | 2518 NOLITA | IRVINE | CA | 92612-8549 |
| HASSAN SALAHEDDIN FAWZI / HARIS, GHADEER | 1 DEEP SEA | NEWPORT BEACH | CA | 92657-2154 |
| ZHENG JING | 57 STETSON | IRVINE | CA | 92602-1828 |
| CHENG HUIFEN & SHOUCHENG | 2524 NOLITA | IRVINE | CA | 92612-8549 |
| LIANG XUELING | 504 CULTIVATE | IRVINE | CA | 92618-1309 |
| DEPOY DOUGLAS & YOUNG-SOOK | 2528 NOLITA | IRVINE | CA | 92612-8549 |
| LIANG SHARON S | 2530 NOLITA | IRVINE | CA | 92612-8549 |
| LU XIN / WANG CUIFANG | 2532 NOLITA | IRVINE | CA | 92612-8549 |
| ZHONG YULI | 2534 NOLITA | IRVINE | CA | 92612-8549 |
| CAO WEN WANG, HONGTAO | 2536 NOLITA | IRVINE | CA | 92612-8549 |
| WANG XIAOJUAN | 17891 VIA CASITAS | CHINO HILLS | CA | 91709-3903 |
| LI MINGHUI | 45 SHADYBEND | IRVINE | CA | 92602-0844 |
| LIN AIJUAN | PO BOX 51942 | IRVINE | CA | 92619-1942 |
| GARDNER-ISAAC LLC | 1781 LANGLEY AVE | IRVINE | CA | 92614-5621 |
| EDWARDS LIFESCIENCES LLC | MS 6 | SANTA ANA | CA | 92711-1150 |
| JHW IRVINE II LLC | 9110 JUDICIAL DR OFC | SAN DIEGO | CA | 92122-6712 |
| 18831 VON KARMAN IRVINE DELAWARE LLC | 17620 FITCH STE 220 | IRVINE | CA | 92614-6081 |
| ALLERGAN SALES LLC | PO BOX 19534 | IRVINE | CA | 92623-9534 |
| JS SJK LP | 17522 ARMSTRONG AVE | IRVINE | CA | 92614-5726 |
| BAXTER HEALTHCARE CORP | 1 BAXTER PKWY | DEERFIELD | IL | 60015-4625 |
| RTED IRVINE LLC | 19642 COUNTY LN | SANTA ANA | CA | 92705-1406 |
| PRUDENTIAL OVERALL SUPPLY | PO BOX 11210 | SANTA ANA | CA | 92711-1210 |
| MILLER, DEERE LLC | 15441 ALBRIGHT ST | PACIFIC PALISADES | CA | 90272-2525 |
| TECHNOS PROPERTIES LLC | 1621 ALTON PKWY STE 250 | IRVINE | CA | 92606-4876 |
| PRITCHARD LLC | 17897 MACARTHUR BLVD 2ND FL | IRVINE | CA | 92614-0533 |
| JACARANDA HOLDINGS LLC | PO BOX 7538 | REDLANDS | CA | 92375-0538 |
| ALLERGAN SALES LLC | 2525 DUPONT DR UNIT MN-1A | IRVINE | CA | 92612-1531 |
| LAKESHORE PROPERTIES LLC | 18101 VON KARMAN AVE STE 1220 | IRVINE | CA | 92612-0179 |
| YING ENTERPRISES | 122 E FOOTHILL BLVD UNIT A-315 | ARCADIA | CA | 91006-2505 |
| PRISA 2020 MAIN LLC | 4 EMBARCADERO CTR STE 2700 | SAN FRANCISCO | CA | 94111-4180 |
| 2050 MAIN STREET LLC | 2050 MAIN ST STE 220 | IRVINE | CA | 92614-8264 |
| THIRD AVE INVESTMENT LLC | PO BOX 112130 | SALT LAKE CITY | UT | 84147-2130 |
| THIRD AVENUE INVESTMENTS | PO BOX 511196 | SALT LAKE CITY | UT | 84151-1196 |
| PRISA 2020 MAIN LLC | 101 CALIFORNIA ST FL 40 | SAN FRANCISCO | CA | 94111-6127 |
| ABAN LLC | 4343 VON KARMAN AVE 3RD FL | NEWPORT BEACH | CA | 92660-2099 |
| VON KARMAN INCOME | 490 CALIFORNIA AVE FL 4 | PALO ALTO | CA | 94306-1989 |
| GHC PROPERTIES LLC | 17832 GILLETTE AVE | IRVINE | CA | 92614-6502 |
| MDD PARTNERS II L P | 17111 RED HILL AVE | IRVINE | CA | 92614-5607 |
| SKYPARK MANAGEMENT LLC | 18012 SKY PARK CIR | IRVINE | CA | 92614-6671 |
| SKYPARK INVESTMENT GROUP | 18008 SKY PARK CIR STE 195 | IRVINE | CA | 92614-6902 |
| ROYAL GARDENS MHC LP | 18006 SKY PARK CIR STE 200 | IRVINE | CA | 92614-6406 |
| 17421 LLC | 17421 VON KARMAN AVE | IRVINE | CA | 92614-6205 |
| 18004 SKY PARK PARTNERS | 3191 RED HILL AVE STE 200 | COSTA MESA | CA | 92626-3451 |
| UAL BENEFIT COMMITTEE TR | 54 CORPORATE PARK | IRVINE | CA | 92606-5105 |
| PETRO DIAMOND INC | 1100 MAIN ST | IRVINE | CA | 92614-6737 |
| HCF LANDLORD (CA) LP | 600 5TH AVE FL 9 | NEW YORK | NY | 10020-2311 |
| FIDM PROPERTIES INC | 919 S GRAND AVE | LOS ANGELES | CA | 90015-1421 |
| BROADSTONE ALTON LLC | 450 NEWPORT CENTER DR STE 550 | NEWPORT BEACH | CA | 92660-7615 |
| KOLL / PER AIRPORT PROFESSIONAL CENTER LLC | 151 KALMUS DR STE F1 | COSTA MESA | CA | 92626-5965 |
| EVERWIN INVESTMENT INC | 2275 HUNTINGTON DR UNIT 309 | SAN MARINO | CA | 91108-2640 |

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| JMJ COWAN LLC | 4040 MACARTHUR BLVD 220 | PICO RIVERA | CA | 90660 |
| JC ORANGE COUNTY LLC | 829 MONTEREY PASS RD | MONTEREY PARK | CA | 91754-3608 |
| MITCHELL PROPERTY | 16420 JOHNSON RD | BAKERSFIELD | CA | 93314-9616 |
| JAE WOO KIM | 2025 ALTON PKWY UNIT 100 | IRVINE | CA | 92606-4904 |
| JIMMY L TR SMULL SMULL | 17631 FITCH | IRVINE | CA | 92614-6021 |
| CHARLIE AND LING ZHANG | 27611 LA PAZ RD STE A8 | LAGUNA NIGUEL | CA | 92677-3999 |
| ORANGE COUNTY MUSIC AND | 17620 FITCH STE 160 | IRVINE | CA | 92614-6081 |
| CONTANT CHRISTINA H TR | PO BOX 15005 | SANTA ANA | CA | 92735-0005 |
| VON KARMAN PLAZA LLC | 1121 SW SALMON ST FL 5 | PORTLAND | OR | 97205-2000 |
| VON KARMAN PLAZA LLC | 1211 SW SALMON ST, STE 500 | PORTLAND | OR | 97205 |
| BCSD PROP LP | 3330 HARBOR BLVD UNIT 500 | COSTA MESA | CA | 92626-1502 |
| AG FAIRCHILD OWNER L P | 2000 AVENUE OF THE STARS STE 1020 | LOS ANGELES | CA | 90067-4710 |
| SPUS8 2600 MICHELSON LP | 14800 QUORUM DR STE 510 | DALLAS | TX | 75254-6200 |
| UNIVERSITY OF SOUTHERN | 830 CHILDS WAY #5 | LOS ANGELES | CA | 90089-0277 |
| 2698 WHITE ROAD | 19762 MACARTHUR BLVD STE 300 | IRVINE | CA | 92612-2498 |
| LAACO LTD | 431 W 7TH ST | LOS ANGELES | CA | 90014-1601 |
| WESTWOOD HOLDINGS LP | 1680 MICHIGAN AVE PH 3 | MIAMI BEACH | FL | 33139-2514 |
| IMMANUEL MISSION | 17200 JAMBOREE RD | IRVINE | CA | 92614-5828 |
| 17100 MURPHY BUILDING LLC | 261 W BEACH AVE | INGLEWOOD | CA | 90302-2904 |
| MOSON PROPERTIES INC | 50 LONSDALE AVE, STE 201 | NORTH VANCOUVER, BRITISH | | COLUMBIA, , CANADA |
| MERITAGE HOMES OF CALIFORNIA INC | 1250 CORONA POINTE CT STE 210 | CORONA | CA | 92879-2099 |
| MYRE INVESTMENTS LLC | PO BOX 2130 | PALOS VERDES PENINSULA | CA | 90274-8130 |
| DERIAN APG LLC | 100 BAYVIEW CIR STE 310 | NEWPORT BEACH | CA | 92660-8910 |
| OLSEN PROPERTIES CORP | 7 CORPORATE | NEWPORT BEACH | CA | 92660 |
| AVALONBAY COMMUNITIES INC | 671 N GLEBE RD STE 800 | ARLINGTON | VA | 22203-2138 |
| DU BRIDGE PARTNERS | 2641 DU BRIDGE AVE | IRVINE | CA | 92606-5001 |
| CALVERT CONSULTING LLC | 1902 MCGAW AVE | IRVINE | CA | 92614-0910 |
| NOYES INVESTMENT CO | 1807 BUTTONSHELL LN | NEWPORT BEACH | CA | 92660-3822 |
| LYNN T TR OETTINGER | 685 3RD AVE FL 4 | NEW YORK | NY | 10017-8408 |
| MCKIBBIN, DONALD H TR THE | 1112 PEMBROKE LN | NEWPORT BEACH | CA | 92660-4735 |
| BENEVATE INVESTMENT LLC | 3600 WILSHIRE BLVD STE 1814 | LOS ANGELES | CA | 90010-2622 |
| CAPE CONSTANTINE | 4533 MACARTHUR BLVD STE 707 | NEWPORT BEACH | CA | 92660-2059 |
| BRANSFORD W JACKSON & KATHRYN L | 17682 MITCHELL N STE 200 | IRVINE | CA | 92614-6037 |
| JS LEASING LLC | PO BOX 5005 | RANCHO MIRAGE | CA | 92270-1065 |
| KERRY TR PEDLOW | 1225 GAVIOTA DR | LAGUNA BEACH | CA | 92651-3165 |
| 1811-21 KAISER AVENUE L P | 9777 WILSHIRE BLVD STE 711 | BEVERLY HILLS | CA | 90212-1907 |
| SCCD EXEMPT LLC | 214 MAIN ST # 132 | EL SEGUNDO | CA | 90245-3803 |
| RHMATTHEWS LLC | 17752 FITCH | IRVINE | CA | 92614-6033 |
| 1733 KAISER CO LLC | 1733 KAISER AVE | IRVINE | CA | 92614-5705 |
| Z PROPERTY LLC | 16862 RED HILL AVE | IRVINE | CA | 92606-4803 |
| OLTMANS INVESTMENT CO | 10005 MISSION MILL RD | WHITTIER | CA | 90601-1739 |
| WILLIAM C TR W C COOPER | 19005 LYNN LN | YORBA LINDA | CA | 92886-2700 |
| GRAZIANO LLC | 1923 ALTON PKWY | IRVINE | CA | 92606-4903 |
| GEMDALE 2400 BARRANCA HOLDINGS LLC | 680 E COLORADO BLVD STE 300 | PASADENA | CA | 91101-6147 |
| MARVIN ENGINEERING CO INC | 260 W BEACH AVE | INGLEWOOD | CA | 90302-2903 |
| JEFFREY D WONG | 1316 W BAY AVE | NEWPORT BEACH | CA | 92661-1021 |
| MAZDA MOTOR OF AMERICA | 7755 IRVINE CENTER DR | IRVINE | CA | 92618-2903 |
| SCAMPERS LLC | 1641 LANGLEY AVE | IRVINE | CA | 92614-5619 |
| GI DC IRVINE LLC | 188 THE EMBARCADERO STE 700 | SAN FRANCISCO | CA | 94105-1247 |
| RJV & ASSOCIATES LLC | 1167 WARNER AVE | TUSTIN | CA | 92780-6458 |
| ENCORE CENTERPOINTE LLC | 1006 SEGOVIA CIR | PLACENTIA | CA | 92870-7100 |
| 19752 MACARTHUR LLC | 9550 FIRESTONE BLVD STE 105 | DOWNEY | CA | 90241-5560 |
| BATES, JOHNSON BUILDING | 18311 VON KARMAN AVE STE 910 | IRVINE | CA | 92612 |
| JEREMY PINAWIN | 3128 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| MICHAEL MARGULIS | 10638 HUNTERS GLEN DR | SAN DIEGO | CA | 92130-4849 |

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| JOHN PANICKER | 3130 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| NIKITA J RAMESH | 1329 MERCADO WAY | SAN JOSE | CA | 95131-4023 |
| CHAU CHRISTOPHER | 111 YUBA | IRVINE | CA | 92620-7344 |
| DAVID MINH-TUAN NGUYEN | 4696 WELLFLEET DR | HUNTINGTON BEACH | CA | 92649-6422 |
| RAYMOND BRUCE DAITCH | 2317 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| BABAKNIA REALTY LLC | 15775 LAGUNA CANYON RD STE 240 | IRVINE | CA | 92618-3191 |
| CHEN, LIQIAO | 3136 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| HSIEH ANNA JAN, PINYAO | 1437 STERLING RD | REDLANDS | CA | 92373-6675 |
| MOSTAFA HANEY & FAYROZE | 2245 STUDIO DR | BREA | CA | 92821-6154 |
| HARTOUNIAN, SHAUNT A | 3139 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| ARNOLD ROBERT | 16 CAMINO ALENZA | SAN CLEMENTE | CA | 92673-6870 |
| JOHN GREGORY DAY | 3229 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| NI XIAOJUAN ZHANG, HAO WEI | 8555 LORAIN RD | SAN GABRIEL | CA | 91775-1117 |
| PAUL A MANESE | 3231 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| MICHAEL THOMAS HURST | 122 N HARBOR BLVD STE 100 | FULLERTON | CA | 92832-1842 |
| YEN HSIANG YUNG HSU, YUAN CHING | 7709 HANNUM AVE | CULVER CITY | CA | 90230-6164 |
| DE NOVO PACIFIC LLC | 55 MADISON AVE STE 400 | MORRISTOWN | NJ | 07960-7397 |
| NAMM DAVID / MIYASHIRO, ANNALISE | 3235 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| SCOTT, HARRISON I TR | 908 PATRONELLA AVE | TORRANCE | CA | 90503-5242 |
| HSIAO YUN CHEN LEE, PIN YIN | 2338 HELEN AVE | UPLAND | CA | 91786-8409 |
| YU, XU | 3238 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| LEE, SHIH-NING | 3239 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| KIAN MOKHBERY | 3240 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| PETER BAIRD | 7 RANDOLPH GATE FLAT 5/1 | GLASGOW, SCOTLAND, , | | UNITED KINGDOM |
| JOHN TR JESSY YOUNESI | 30 OLD COURSE DR | NEWPORT BEACH | CA | 92660-4276 |
| NEW DARREN HANS TR | 5390 CAMINITO EXQUISITO | SAN DIEGO | CA | 92130-2863 |
| JENNIFER OH | 26 LILAC | IRVINE | CA | 92618-6909 |
| CATHY VOLPE | 3332 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| ABRAHAM WENHAI CHUANG | PO BOX 60364 | IRVINE | CA | 92602-6012 |
| ZHAO, TIANPEI | 3334 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| TADJEDIN, ALI TR THE | 274 VILLA POINT DR | NEWPORT BEACH | CA | 92660-6236 |
| GRACE K TELL | 2258 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| BEVERLY FREIBERG | 3337 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| KRISTY MARIE THOMAS | 31 CORONEL PL | ALISO VIEJO | CA | 92656-1631 |
| SEYEDI MIR HAMID | 249 RADIAL | IRVINE | CA | 92618-1034 |
| MICHAEL E TR PARNELL | 20105 CHIANTI CT | YORBA LINDA | CA | 92886-8608 |
| GLORIA T TR G T NOBOA | 10315 SUMMERTIME LN | CULVER CITY | CA | 90230-4557 |
| SAADAT MIMI FAMILY TRUST | 31452 PASEO CALIZ | SAN JUAN CAPISTRANO | CA | 92675-1812 |
| PAYNE, LUIZ | 20 VIA ONAGRO | RANCHO SANTA MARGARITA | CA | 92688-4104 |
| LIM, HUNMO | 3431 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| ALI JENABZADEH | 3432 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| CANYON SPRINGS CORP | 8945 W RUSSELL RD STE 207 | LAS VEGAS | NV | 89148-1226 |
| STEPHANIE TR LU | 3434 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| SANDHU, HARPREET S | 2122 W CHERYLL CT | PORTERVILLE | CA | 93257-7501 |
| CHARLTON AMY EILEEN | 3 BELL PASTURE RD | LADERA RANCH | CA | 92694-1412 |
| KATIE C TR HOWE | 385 BROADWAY | COSTA MESA | CA | 92627-2342 |
| MOHAMMAD REZA KOUPAEI | 6874 CAMBRIA COVE CIR | HUNTINGTON BEACH | CA | 92648-2640 |
| ALEXANDRA JANAE PIERCE | 247 MIRA MAR AVE | LONG BEACH | CA | 90803-6153 |
| ALLEN L YEH | 3440 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| ELEANOR HSIEH | 4775 BLUE MOUNTAIN DR | YORBA LINDA | CA | 92887-2606 |
| ABOUELELA, MAHA | 3145 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| JENNY TANUDJAJA | 3146 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| NABY, SHIVA | 3147 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| MUNN JULIE A | 3148 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| RICHARD A PETERSON | 3149 WATERMARKE PL | IRVINE | CA | 92612-5615 |

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| MARY LIN | 2801 KELVIN AVE UNIT 181 | IRVINE | CA | 92614-0124 |
| FATOLAHZADEH PARDIS | 26081 HITCHING RAIL RD | LAGUNA HILLS | CA | 92653-6303 |
| EDWARD ANTHONY BROWNLEE | 4141 W 118TH PL | WESTMINSTER | CO | 80031-5039 |
| TU CHRISTINA HUIHSUN | 3153 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| JOSEPH JYEFU CHEN | 1414 VALENCIA AVE | TUSTIN | CA | 92782-1818 |
| JASON TR JAZAYERI | 5 INDIGO | IRVINE | CA | 92618-3958 |
| DANIEL YOUNGSUK CHAE | 12602 VENICE BLVD APT 209 | LOS ANGELES | CA | 90066-3757 |
| ALEXANDRA JELIC NOVAK | 15 MONTE CARLO | IRVINE | CA | 92614-0222 |
| AZAR S TR A S NEJAD | 19643 SACRAMENTO LN | HUNTINGTON BEACH | CA | 92646 |
| ALICE M TR SINGH | 3249 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| COLETTE J ZAGARELLA | 4363 MOUNT HUKEE AVE | SAN DIEGO | CA | 92117-4737 |
| FRIEDLING ZELMA TRUST | 103 DEER SPRING WAY | PALM DESERT | CA | 92211-3205 |
| FENG, LIYU | 16 TRIESTE | IRVINE | CA | 92606-8910 |
| DAVID T CHEN | 3253 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| HENRY CHOISUN TR HC CHAN | 18450 GIFFORD ST | FOUNTAIN VALLEY | CA | 92708-5746 |
| TAGHAVI, NIMA TR N | 6 VIA CORALLE | NEWPORT BEACH | CA | 92657-1625 |
| STARK MELANIE J TR | 3346 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| PARSA MONA L | 3347 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| LEE FEN TR L F LIU LIU | 3 MARINER CV | BUENA PARK | CA | 90621-1662 |
| DONALD J CARTER | 220 AVENIDA ARAGON UNIT B | SAN CLEMENTE | CA | 92672-5015 |
| BRIGGS MARK E & JANICE G | 3350 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| SAHALEH NEWSHA | 3351 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| DIANA S ZARDOUZ | 3352 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| TERRI CHO I | PO BOX 521 | RANCHO SANTA FE | CA | 92067-0521 |
| CHEN, I-LIN | 3444 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| AMIN JAIMINI MUKESH TR / AMIN MUKESH SHRIKANTBHAI TR | 2619 HOLLY DR | UPLAND | CA | 91784-1139 |
| LAILA MELISSA BENITEZ | 3446 WATERMARKE PL UNIT 446 | IRVINE | CA | 92612-5619 |
| DAISY TRAN | 3447 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| BRANDEN-THORNTON TRENT T / WHITE KATLYN B | 3448 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| CHRISTOPHER TR LEU | 2028 AMHERST DR | SOUTH PASADENA | CA | 91030-3906 |
| JOHN S TR JOHN HAGESTAD | 14 OAK CREST LN | NEWPORT BEACH | CA | 92660-5215 |
| RICHARD FRANCIS VACCARO | 3225 SEMINOLE CIR | FAIRFIELD | CA | 94534-7858 |
| ELGHOBASHI MARY ELLEN TR SAID | 10 ZOLA CT | IRVINE | CA | 92617-4060 |
| SETIANEGARA, TEDIYONO | 9719 CORTADA ST | EL MONTE | CA | 91733-1201 |
| SHAKIR, FERAH NAZ | 44769 AGUILA TER | FREMONT | CA | 94539-6293 |
| VELASQUEZ AARON IGNACIO-VELASQUEZ, MA CHARINA | 3143 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| KENNETH R TR FURUTA | 32 VIA RUBINO | NEWPORT COAST | CA | 92657-1607 |
| LINDA FREIBERG | PO BOX 16805 | IRVINE | CA | 92623-6805 |
| CHAUDHURI KALI PRIYO | 404 HUDSON DR | TUSTIN | CA | 92782-1710 |
| TECH CENTER EQUITIES 1 LLC | 3160 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| LEE WILLIAM TR FAMILY | 2705 N VISTA CT | ORANGE | CA | 92867-1741 |
| LEVY, BARR | 3163 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| RAZMARA CYRUS TR FAMILY | 1917 YACHT TRUANT | NEWPORT BEACH | CA | 92660-6722 |
| WEN ZHOU | 3242 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| MELINDA L AYRES | 5415 VIA CARRIZO | LAGUNA WOODS | CA | 92637-3090 |
| DIEGO R BEDOYA | 3254 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| MALOKA JENNA ELAINE | 3255 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| LE, EMI | 3256 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| ANDREA D SALLOUTI | 3257 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| DURAN REYNALDO CUARTAS, DARA | 3258 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| KO TSUI FONG CHAN, PO HANG TONY | 3259 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| STELLA WU 2017 LLC | 20452 E CRESTLINE DR | WALNUT | CA | 91789-4622 |
| HOSSEINZADEH KEYKHOSROW TR THE MAHIN SPECIAL NEEDS | 3261 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| ALEXANDER TWU | 3262 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| LILY W TR DENG | 27 N SANTA TERESITA | IRVINE | CA | 92606-0824 |

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| ZHANG, DOALING TR D ZHANG | 1520 HEYWARD ST | COLUMBIA | SC | 29205-3264 |
| MORGAN, TIMOTHY R TR T & K MORGAN TR | 28 UREY CT | IRVINE | CA | 92617-4077 |
| SADRIEH SINA | 3354 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| DONG RONG & MARY H | 152 LAWRENCE RD | ALAMEDA | CA | 94502-7750 |
| YIN, YUE | 3356 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| GOPAL, SHRI | 20121 VIA MEDICI | PORTER RANCH | CA | 91326-4045 |
| ANITA HOVSEPIAN | 3358 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| JOSEPH T TR CRUISE | 33 CASTLEROCK | IRVINE | CA | 92603-0148 |
| WINSTON ZHANG | 3360 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| MEHTA, BAIJU D | 5886 E TRAPPER TRL | ANAHEIM | CA | 92807-4733 |
| EMIL RUSKOV | 3362 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| ALI TR 2014 ALI ASGARI | 3363 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| JEFF TSU-CHEE TR HONG | 17561 17TH ST | TUSTIN | CA | 92780-1934 |
| LEE JODI J Y | 3442 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| JAW, SHYHWEN PETER | 3443 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| AMY A HSU | 81 LIVIA | IRVINE | CA | 92618-0102 |
| CHITCHIAN, SHAHAB | 3457 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| ARMEN AVAKIAN | 3460 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| ANTHONY J TR MARCOLY | 312 17TH ST | SEAL BEACH | CA | 90740-6521 |
| LIM, EMILINA M | 3462 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| PATRICIA PETERSON | 3463 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| MIHIC-DOME, RADENKA TR | 3101 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| BRYAN DUNN | 3102 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| IRMA PIETOJO | 110 VELVETLEAF | IRVINE | CA | 92620-2301 |
| MINASIAN NTASHA HAIKANUSH | 3168 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| CHUA, ARISTEDES S | 4048 STALWART DR | RANCHO PALOS VERDES | CA | 90275-6021 |
| DAVID FATTAL | 3201 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| ALI, IMAD | 3202 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| THOMAS DEREDEC | 3264 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| SONG ZHAO | 2069 NEWCASTLE DR | OXNARD | CA | 93036-6322 |
| FU, LEI | 3266 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| SHEPHERD JUSTIN M | 3268 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| GLENDALE INVESTORS LIMITED LLC | PO BOX 7150 | ALHAMBRA | CA | 91802-7150 |
| AHOO LLC | 8697 HOLLYWOOD BLVD | LOS ANGELES | CA | 90069-1415 |
| ANAYA ALISHA | 3271 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| DOUGLAS W TR D W JACKSON | 3631 OCEAN BLVD | CORONA DEL MAR | CA | 92625-3009 |
| PINCURA SANDRA H & STANLEY C / PINCURA STANLEY C | 3273 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| SHAFIZADEH, SHAWHEEN TR | 4 PARK PLZ STE 1100 | IRVINE | CA | 92614-8550 |
| THARANI, MEHIR | 25922 FAIRCOURT LN | LAGUNA HILLS | CA | 92653-7517 |
| HAYAKAWA HIDEMITSU & SAORI | 3302 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| CALVIN LAM | 1097 CHARLES ST | PASADENA | CA | 91103-2708 |
| WANG WEIPING | 3773 UNIVERSITY DR APT 217 | IRVINE | CA | 92612-4669 |
| MEHDI KHANPOUR | 3368 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| DUFFY THOMAS W TR THE FAMILY | 32 NIGHTHAWK | IRVINE | CA | 92604-3610 |
| THOMPSON RONALD W & SHELIA | 3370 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| ANDREW C FOWLER | 3371 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| XU HANG / HUANG XIUYING | PO BOX 778 | CHINO HILLS | CA | 91709-0026 |
| KANG MYUNG SOOK TR B K / KANG & M S KANG REVOC TR | 2385 VIA MARIPOSA W UNIT 1A # W | LAGUNA WOODS | CA | 92637-2022 |
| FARIBA B TR MOTLAGH | 23191 COBBLEFIELD | MISSION VIEJO | CA | 92692-1693 |
| AMAN LAL | 9205 W RUSSELL RD STE 235 | LAS VEGAS | NV | 89148-1425 |
| MUTHYALA, RAMANA BABU TR | 3523 STONER AVE | LOS ANGELES | CA | 90066-2836 |
| CHO, EUNAH | 3402 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| LUI CHRISTINA | 409 GRENADINE WAY | HERCULES | CA | 94547-2051 |
| KH & COMPANY LLC | PO BOX 11165 | CHANDLER | AZ | 85248-0003 |
| TABRIZI, PEYMAN | 40 TIMOR SEA | NEWPORT BEACH | CA | 92657-2108 |

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| IRAVANI MOZAYENI 2018 F & TRUST | 21 AURORA | IRVINE | CA | 92603-5709 |
| Y & 3M LIVING TRUST | 3468 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| THOMAS LOK SEE LEUNG | 3103 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| SHERRI MAHDAVI | 928 GOLDENROD AVE | CORONA DEL MAR | CA | 92625-1503 |
| MARTINEZ CLAUDIO / GUTIERREZ, MABEL AURORA | 3105 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| GARY R TR DILLARD | 16 RIDGECREST | ALISO VIEJO | CA | 92656-1906 |
| ELAN INSTITUTE LLC | 10 AVANZARE | IRVINE | CA | 92606-8919 |
| NICHOLAS C BURBAUM | 3108 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| JOANNE TR RAMOS | 3109 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| RUBEN EDWARD GOLDSTEIN | 3110 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| JAMES DRAPER TR FRANKLIN | 31 WATERCRESS | IRVINE | CA | 92603-0408 |
| NGUYEN DON / MA PHUONG K | 3112 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| NICOLE RENEE COMBS | 9 ENTONAR RD | RANCHO MISSION VIEJO | CA | 92694-1588 |
| AUDREY R TOWNSON | 520 GOLDEN WEST DR | REDLANDS | CA | 92373-6897 |
| GREGORY J NORYS | 4033 W DOUGLAS AVE | VISALIA | CA | 93291-4185 |
| JASON B GLAZER | 34024 W 90TH CIR | DE SOTO | KS | 66018-8500 |
| SYED JAFAR TR RAZA | 5004 BELLEVUE FALLS LN | SUGAR LAND | TX | 77479-6783 |
| KUZNETSOV, ALEKSEY | 19 SCHUBERT CT | IRVINE | CA | 92617-4037 |
| BATURIN, VLADYSLAV | 209 TALL OAK | IRVINE | CA | 92603-0664 |
| BAHRAINI, KAVEH C | 3208 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| MONFARED, FARAMARZ | 6471 DUNN DR | HUNTINGTON BEACH | CA | 92647-2909 |
| ALI TR ZAMANIAN | 47 OAK TREE LN | IRVINE | CA | 92612-2232 |
| DEANNA G TR LANSANGAN | 147 POMONA AVE | LONG BEACH | CA | 90803-3494 |
| MICHELLE WONG | 3212 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| HYE KYUNG LIM | 3213 WATERMARKE PL | IRVINE | CA | 92612-5617 |
| JUSTIN R HOWLETT | 3214 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| RICHARD GARVIN | 12604 BARRETT LN | SANTA ANA | CA | 92705-1307 |
| CAROL A PELOSI | 3303 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| JAMES J TR SCOTT | 22392 ROSEBRIAR | MISSION VIEJO | CA | 92692-4616 |
| SUD, ROHIT | 6722 SAND DUNES ST | EASTVALE | CA | 92880-3736 |
| ALFREDO H S TR ANG | 5311 154TH AVE SE | BELLEVUE | WA | 98006-5151 |
| KRIKORIAN, MARDIG S | 3307 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| BURR THOMAS V TR | 3308 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| RAJESH MULCHANDANI | 43 HIDDEN TRL | IRVINE | CA | 92603-0212 |
| RINA TIKIA | 3310 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| OIKAWA, TOMOKATSU | 1219 EL PRADO AVE | TORRANCE | CA | 90501-2708 |
| OLIA, PEGAH SHEIKH | 96 REUNION | IRVINE | CA | 92603-4243 |
| SASTRI SURESH & KAMALA TRUST | 1540 ARCHER CT | CAMPBELL | CA | 95008-5104 |
| WENDY YU TSAI | 3315 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| CRISTIAN TANASESCU | RUERGERMEISTER-WIKI STR 19 | 85521 OTTOBRUNN | | GERMANY |
| GLENN E TR NAKAMURA | 41 SARTEANO DR | NEWPORT COAST | CA | 92657-1627 |
| DANNY MANSOUR | 3405 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| NORYS GREGORY J & DEBORAH M | 3406 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| NILCHIAN MARTIN FARID | 3407 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| AK HITESHI LLC | 127 GENTLE BREEZE | IRVINE | CA | 92602-1824 |
| JACQUELINE DINDOT | 24971 HOLLYBERRY LN | LAGUNA NIGUEL | CA | 92677-3786 |
| HASHTARI, FOWZIEH TR | 3410 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| MALONE WILLIAM E & ROBIN L | 3950 S LAKESHORE DR | CROWN POINT | IN | 46307-8943 |
| PU, CHIEH TING | 3412 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| ALDOR FAMILY TRUST | 10555 BLUE GRANITE DR | SAN DIEGO | CA | 92127-3646 |
| HONG TU | 3414 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| MASSOUDIEH ARASH / MOHSENIN TINOOSH | 3415 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| STUART S TR S S GOLUB | 3116 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| CHOW KITTY WAN SUM | 16967 NW TRISTAN ST | PORTLAND | OR | 97229-1449 |
| JESSE R HSIEH | 3118 WATERMARKE PL | IRVINE | CA | 92612-5614 |

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| FUTERMAN, SHAI | 3119 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| DANNY CHI-KENG CHEN | 3120 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| AGARWALA REAL ESTATE LLC | 107 GRACE TER | PASADENA | CA | 91105-3428 |
| BAKIAN, MEHRDAD TR THE M | 3122 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| ANDREW ALEXANDER HOESLY | 3123 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| MICHAEL B YIM | 3124 WATERMARKE PL | IRVINE | CA | 92612-5614 |
| NAHIDIPOUR, ARAM TR | 28401 VIA ALFONSE | LAGUNA NIGUEL | CA | 92677-7061 |
| STEVE TSUNG-SHUN TR LIN | 30 EXPLORATION | IRVINE | CA | 92618-8850 |
| KEVIN G LUI | 3127 WATERMARKE PL | IRVINE | CA | 92612-5615 |
| AZAR TR A NIKROUY | 12501 HELENA ST | LOS ANGELES | CA | 90049-3909 |
| PHUAH, FOO KEAN | 706 SEA COTTAGE WAY | OCEANSIDE | CA | 92054-2159 |
| ZHANG, SHENG YU | 1033 E MAIN ST STE 101 | ALHAMBRA | CA | 91801-4151 |
| CHEN, CHING-CHIEN | 1125 EL SUR AVE | ARCADIA | CA | 91006-4532 |
| JIGJINNI RAJESHWARI M TR | 19025 CERRO VILLA DR | VILLA PARK | CA | 92861-2332 |
| ELIZABETH CHOI | 46 TALISMAN | IRVINE | CA | 92620-3843 |
| FU CHIESHAN / CHANG GREGORY | 3222 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| ARTESIAN WATER LLC | 30700 E SUNSET DR S | REDLANDS | CA | 92373-7448 |
| QUINN C TR Q C MACKIN | 103 CIPRESSO | IRVINE | CA | 92618-1148 |
| LIAO, FANG | 1005 E LAS TUNAS DR # 268 | SAN GABRIEL | CA | 91776-1614 |
| CARLOS T TR UY | 3226 WATERMARKE PL | IRVINE | CA | 92612-5616 |
| TSAI STEVE H / LIANG I-PING | 50 QUARTER HORSE | IRVINE | CA | 92602-0201 |
| SANJEEV TIRUNAGARAM | PO BOX 50332 | BELLEVUE | WA | 98015-0332 |
| LI, LIU | 57 PURPLE JASMINE | IRVINE | CA | 92620-3377 |
| KIM, JOON-TAE | 16402 ALEXANDER PL | CERRITOS | CA | 90703-2303 |
| LIN, KUNG HO TR THE K H | 11652 INTERVALE RD | LAS VEGAS | NV | 89135-1325 |
| CAROL JEAN TR OLANDER | 3320 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| KOTHARI BINOY & MANISHA | 3321 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| LYNNETTE L TR FRENCH | 3322 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| JODI LYN REYES JOHNSON | 3323 WATERMARKE PL | IRVINE | CA | 92612-5621 |
| BADANI, SHAUKAT | 12061 MIL PITRERO RD | SAN DIEGO | CA | 92128-5267 |
| BARAL, SUBIGYA | 3326 WATERMARKE PL | IRVINE | CA | 92612-5618 |
| FRED TR KIM FAMILY KIM | 162 S DONNA CT | ANAHEIM | CA | 92807-4007 |
| PHAN DANIEL | 3417 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| MICKEY L TR M DICK DICK | 621 LIDO PARK DR APT D3 | NEWPORT BEACH | CA | 92663-4408 |
| ALLEVATO CAMILLO E & DENISE M | 10269 MCBROOM ST | SUNLAND | CA | 91040-1221 |
| TRUONG JONATHAN | 3420 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| AZARI ARASH A | 17595 HARVARD AVE # C2350 | IRVINE | CA | 92614-8516 |
| DENNY G YEH | 3422 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| DE LA CENA, ATHALIE H | 3423 WATERMARKE PL | IRVINE | CA | 92612-5620 |
| JUSTIN SCOTT HIN LEE | 3424 WATERMARKE PL | IRVINE | CA | 92612-5619 |
| NOCE FAMILY TRUST | 49 CIELO AZUL | MISSION VIEJO | CA | 92692-7903 |
| SHEN YVONNE Y | 252 OVERBROOK | IRVINE | CA | 92620-2169 |
| GOYAL, PREEYA TR 2018 | 30757 JEDEDIAH SMITH RD | TEMECULA | CA | 92592-2652 |
| BOUSTANI, AVID | 12 MAGNOLIA DR | LADERA RANCH | CA | 92694-0711 |
| GABRIEL T BOURCHE | 24835 BYROAD WAY | LAGUNA NIGUEL | CA | 92677-6033 |
| MAI Y NGUYEN | 69 BROWN ST | PROVIDENCE | RI | 02912-9091 |
| HSU, YUAN-CHEN TR | 1705 N FAIR OAKS AVE UNIT 106 | PASADENA | CA | 91103-1668 |
| EFTEKHARI, TANDIS | 2200 WATERMARKE PL | IRVINE | CA | 92612-7685 |
| GABRIELE GINO R TR / GABRIELE ROSINA TR | 2201 WATERMARKE PL | IRVINE | CA | 92612-7685 |
| NILESH NABAR | 4944 ALEX DR | SAN JOSE | CA | 95130-2013 |
| XIE, YABO TR XIE-KUAI | 75 COMO | IRVINE | CA | 92618-0101 |
| JOY MARIE SPEER | 10 GLASGOW CIR | DANVILLE | CA | 94526-2923 |
| HARDY, MOUREEN ANN TR M A | 2262 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| CHEN, ZHONG | 7343 WASHINGTON PL | RANCHO CUCAMONGA | CA | 91730-8288 |
| FAN, HSIU-LIN | 2265 WATERMARKE PL | IRVINE | CA | 92612-7693 |

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| ALABDULLATIF ADEL AHMED / RASHEED, AREEGE MOHAMMED | 59 LIVIA | IRVINE | CA | 92618-0102 |
| LINDA R TR 2004 L FISHER | 19415 IRONWOOD LN | HUNTINGTON BEACH | CA | 92648-5566 |
| HUANG, CHING-HSIU | 2268 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| MESRI, NAEIRIKA | 2269 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| MICHAEL BUI | 2270 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| NORIEGA VERONICA L R | 2300 WATERMARKE PL | IRVINE | CA | 92612-7687 |
| SHERRY CHING CHING LEE | 21819 BUCKSKIN DR | WALNUT | CA | 91789-0916 |
| CHIANG, TSAI FENG | 2302 WATERMARKE PL | IRVINE | CA | 92612-7687 |
| IZADI-TALEYAZDI, NEGAR TR | 28311 EL SUR | LAGUNA NIGUEL | CA | 92677-4423 |
| DONALD SCOTT TR TURNER | 30821 STEEPLECHASE DR | SAN JUAN CAPISTRANO | CA | 92675-1927 |
| PENDON, SUZANA | 2363 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| PATEL, SAMIT A | 2364 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| JAMES JANESICK | 19311 SURFWAVE DR | HUNTINGTON BEACH | CA | 92648-7502 |
| YING, KUANG KENT TR | 4880 HANNAH CIR | YORBA LINDA | CA | 92886-4597 |
| BIRMINGHAM SQUARE LLC | 2367 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| MARIA PRONINA V | 2368 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| JEFFREY ASTARABADI | 2370 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| PATEL, SWETA S TR | 2400 WATERMARKE PL | IRVINE | CA | 92612-7689 |
| HAM STEFAN YOONSONG & JUSTIENE HYESEON | 2401 WATERMARKE PL | IRVINE | CA | 92612-7689 |
| FORRY HARRY L TR | 9621 PORT CLYDE DR | HUNTINGTON BEACH | CA | 92646-8430 |
| MANDI YOSYP & MARIANNA | 2462 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| BATARSEH MICHAEL NARSI TR FAMILY | 8860 WHEATLAND AVE | SUN VALLEY | CA | 91352-2832 |
| GERRY IBANEZ | 555 S PERALTA HILLS DR | ANAHEIM | CA | 92807-3520 |
| KUBICA RYAN A & KELLY B | 844 BLACK WALNUT WAY | MORGAN HILL | CA | 95037-3740 |
| AMINIKHARRAZI, TAHER TR | 2 MERIDIAN | NEWPORT COAST | CA | 92657-1638 |
| TEHRANI, BOBBACK TR B | 20 AZALEA | ALISO VIEJO | CA | 92656-2149 |
| MICHAEL ADAMS | 2106 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| INDUSTRY REAL ESTATE LLC | 1050 RIDGESIDE DR | MONTEREY PARK | CA | 91754-3729 |
| BSEISO, WAIL | PO BOX | ABU DHABI, , UNITED ARAB | | EMIRATES |
| JOHN RITCHEY | 2109 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| KUBA, ZAYD ABBAS | 25771 DILLON RD | LAGUNA HILLS | CA | 92653-5859 |
| YELENA EDUARDOVNA RAY | 2111 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| TO JASON T | 2112 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| KAMEL KHALED M | 25 PACIFICA APT 5109 | IRVINE | CA | 92618-3352 |
| LE JOHN | 2204 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| JAMSHIDI SEDIGHEH | 3 HERRINGBONE | IRVINE | CA | 92620-3450 |
| AKBARPOUR MASOUD / BAYGAN NAHID | 21152 FOXTAIL | MISSION VIEJO | CA | 92692-4028 |
| ATAIE, VAHID | 4083 PORTE DE PALMAS UNIT 105 | SAN DIEGO | CA | 92122-5119 |
| SOBHANI, SIMIN D TR | 2209 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| KURAMOTO, ERI | 2210 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| MUKESH M DASI | 2211 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| DELORA LEE AICHHOLZER | 10805 ASHBY AVE | LOS ANGELES | CA | 90064-3212 |
| CHENG YAN, ZHIHUA | 2213 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| CHIANG'S CO LLC | 2340 COFFMAN DR | TUSTIN | CA | 92782-1166 |
| JOHN QUANG LE | 2303 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| DEANA L MURRAY | 424 OGLE CIR | COSTA MESA | CA | 92627-3227 |
| LEE SAMJIK CHUNG, SUNG HEE | 2225 SCHOLARSHIP | IRVINE | CA | 92612-5681 |
| KILIC, SIDIKA TR | 2306 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| DONG TRAN | 1623 WHARTON RD | SAN JOSE | CA | 95132-2076 |
| YING SHIH KAO | 4417 VAN DYCE WAY | FAIR OAKS | CA | 95628-6124 |
| NGUYEN DUKE TR THE REVOC LIVING | 60 HAZELTON | IRVINE | CA | 92620-2189 |
| MEGAN DOUGHERTY | 2310 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| GUYEN AYSEL | 2311 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| MA SHUANGYI DRAKE, JAMES | 2312 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| RAJAN H TR KARNANI | 18419 US HIGHWAY 18 STE 1 | APPLE VALLEY | CA | 92307-2333 |

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| CHANG SHERRY XIAOYI | 880 W 1ST ST APT 808 | LOS ANGELES | CA | 90012-2474 |
| CHANG LAWRENCE CHOU, JENNY | 2403 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| HANS OSHEIM | 1454 BIRCH ST | DENVER | CO | 80220-2430 |
| SHI, JIE | 2405 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| ABDOLLAHI, PANTEHA TR | 2460 GRIVEL PL | TUSTIN | CA | 92782-1469 |
| YAZDI, ALIREZA | 4788 MEADFEILD ROAD | WEST VANCOUVER, BC, , | | CANADA |
| PHAM, HONG-LIEN T TR H T | 3 VIA BURRONE | NEWPORT COAST | CA | 92657-1407 |
| ALBERT S LEE | 622 ENCHANTED WAY | PACIFIC PALISADES | CA | 90272-2816 |
| ALONDRA JAYA PRATAMA LLC | 37 LONG BAY DR | NEWPORT BEACH | CA | 92660-9201 |
| PARISA MOGHADDAM | PO BOX 17613 | IRVINE | CA | 92623-7613 |
| DINAH TR DINAH GROSCH | 2413 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| OLGA ABELARD | 2414 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| KEVIN T TR IMH HUANG | 35 MALIBU | IRVINE | CA | 92602-1038 |
| HAROLD W TR KRAJIAN | 2690 HORACE ST | RIVERSIDE | CA | 92506-5116 |
| LIANG, HAO | 109 COYOTE BRUSH | IRVINE | CA | 92618-8873 |
| OSMAN, SHARIQ | 15271 RIVIERA LN | LA MIRADA | CA | 90638-4747 |
| SERVANDO PHILIPPE | 2120 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| ATTALLAH MAHMOUD | 19565 GRANDVIEW CIR | HUNTINGTON BEACH | CA | 92648-5571 |
| MOODY WILLIAM L & CLETA / MOODY TERA | 11125 GULF SHORE DR APT 1107 | NAPLES | FL | 34108-2788 |
| CCM CAPITAL GROUP LLC | 2123 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| VANDINH, SUONG | 2124 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| FOSTER MARIA E & LAURENCE J | 8 CANYON ISLAND DR | NEWPORT BEACH | CA | 92660-5114 |
| SHEENA THAMBAN | 6034 CAHILL AVE | TARZANA | CA | 91356-1209 |
| MOUSSAVI, ATENA | 2215 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| EMILY BUENO CAPULONG | 626 E PALM AVE UNIT 104 | BURBANK | CA | 91501-2858 |
| CHEN, CHWAN BIN TR | 1519 EMERALD LN | DIAMOND BAR | CA | 91765-4044 |
| ALAM, SAMIUL | 2218 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| SHIRLEY TR CHEN | 345 CALLE MORENO | SAN DIMAS | CA | 91773-3991 |
| ANNIE CHANG | 76 W PALM DR | ARCADIA | CA | 91007-5139 |
| ZAND, ALIREZA R TR JUNE | 1637 DUBLIN CT | INVERNESS | IL | 60067-4726 |
| ABDULLAH ALTUKHAIM | 2223 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| PO SHAN CHAN | 421 RICHMOND DR APT 113 | MILLBRAE | CA | 94030-1687 |
| DANDE, MANGALA HARIHAR | 2226 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| TRUONG, GIANG THANH | 20 OBSERVATORY | NEWPORT COAST | CA | 92657-1639 |
| GRACE TR GEEN PARK PARK | 2014 TIMBERWOOD | IRVINE | CA | 92620-0272 |
| CHRISTINE TRUONG V | 722 BONNIE CLAIRE DR | WALNUT | CA | 91789-4185 |
| CRISTIAN TANASESCU | BUERGERMEISTER-WILD, STR 19 | OTTOBRUNN, , GERMANY | | |
| DEBORAH L TR TR WILLIAMS | 451 BARLING TER | GOLETA | CA | 93117-1782 |
| CAMELI INVESTMENTS LLC | 47 GOLDEN EAGLE | IRVINE | CA | 92603-0308 |
| ELENA RAPOPORT | 2322 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| PANDYARAM, BHAVYA | 2323 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| NICOLE LISA HEITZ | 2324 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| FISHER, LIVIU | 2325 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| SALAMA, NAIM | 12002 OLD MILL RD | ROSSMOOR | CA | 90720-4323 |
| HUANG, ZHIPING TR HUANG & LI FAMILY TR | 64 BORGHESE | IRVINE | CA | 92618-0113 |
| ZMRUKHTYAN GREGORY | 297 W HIGHLAND AVE | SIERRA MADRE | CA | 91024-1840 |
| JEANNIE TR J NGO NGO | 2417 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| HAIDEE TR FIERRO FIERRO | 24317 ALEXANDRIA AVE | HARBOR CITY | CA | 90710-1808 |
| BARNES TRAVIS A | 2419 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| DOMINGO FE P | 2420 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| HEKMATSHOAR, SHOOKA | PO BOX 11061 | NEWPORT BEACH | CA | 92658-5017 |
| MICHAEL C TR MC GOVERN | 2422 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| CHEE KAN TR HO | 24801 SOLANO CT | LAGUNA HILLS | CA | 92653-5663 |
| LAURA H TAKASAKI | 2424 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| VERONA FELIPE S | 2425 WATERMARKE PL | IRVINE | CA | 92612-7690 |

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| MARIAN, NEGIN TR N M | 3108 MONTANA DEL SOL | SAN CLEMENTE | CA | 92673-6422 |
| FULLSPRING LLC | 5690 CAMINO DE BRYANT | YORBA LINDA | CA | 92887-4216 |
| ELENA M DRASKIC | 2129 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| ALEXANDER E LIVADAS | 2189 VISTA ENTRADA | NEWPORT BEACH | CA | 92660-3936 |
| ROBERT H TR PROPPER | 21 VIA LAS FLORES | RANCHO MIRAGE | CA | 92270-5204 |
| CAITLIN M TR DORNER | 2132 WATERMARKE PL | IRVINE | CA | 92612-1698 |
| WILLIAM P TR GAUDREAU | PO BOX 4732 | INCLINE VILLAGE | NV | 89450-4732 |
| MICHAEL D WHALEN | 2135 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| SHAUN A MC LEAN | 12 EL CAJON | IRVINE | CA | 92602-0949 |
| GARCIA GILDITA S TR | 1874 E CALIFORNIA BLVD | SAN MARINO | CA | 91108-1245 |
| STEINER, ZSUZSI | 7807 EMERSON AVE | LOS ANGELES | CA | 90045-1118 |
| MINASYAN JASMINE / YAZDANNIAZ SHAHRIAR | 2230 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| TEHRANI, HOSSEIN FAZELI | 247 GREENMOOR | IRVINE | CA | 92614-7932 |
| KAKWANI, SAHRA | 2314 OKEEFE PL | DAVIS | CA | 95618-0556 |
| KIMIAYI, MAJID | 2233 WATERMARKE PL | IRVINE | CA | 92612-7686 |
| KESHAVAN, VENU GOPALA | 11436 VIA CAPRI | LOMA LINDA | CA | 92354-3852 |
| PHILLIP PAUL WHITTON | 2235 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| KOO SONNY H TR | 2236 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| JOHNATHAN LEE | 2327 WATERMARKE PL | IRVINE | CA | 92612-7688 |
| KRISHNAN USHA & VENKAT | 14581 SAWLEAF AVE | IRVINE | CA | 92606-2127 |
| MAZHARI, ASSADOLLAH | 1645 KIRKWAY LN | BLOOMFIELD | MI | 48302-1360 |
| JAMES Y TR LIU | 1403 VIA ANDRES | PALOS VERDES ESTATES | CA | 90274-2845 |
| DESAI, CHIRAG M TR THE | 1736 N CHUMASH ST | ORANGE | CA | 92867-3249 |
| KOMAIE, NAHID M | 2334 WATERMARKE PL | IRVINE | CA | 92612-7694 |
| ALIA M ADIB | 2335 WATERMARKE PL | IRVINE | CA | 92612-7694 |
| ALLEN Y CHAO | 115 S MONTGOMERY WAY | ANAHEIM | CA | 92807-3528 |
| CINDY TR SEETAO | 601 E DEL MAR BLVD APT 407 | PASADENA | CA | 91101-2891 |
| HATAMBEIKI, ARSHAM | 2429 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| DABBAH JAMES | 2430 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| JANET J TR PETERSON | 2432 WATERMARKE PL | IRVINE | CA | 92612-7690 |
| SHASHAANI GHOLAMREZA & JALEH | 3 RIEZ | NEWPORT COAST | CA | 92657-0116 |
| KANG ISABELLA | 2434 WATERMARKE PL | IRVINE | CA | 92612-7696 |
| CHIA LIN CHUAH | 105 KESTREL | IRVINE | CA | 92618-1061 |
| TONY TR REBECA BEHESHTI | 4 SKYCREST | MISSION VIEJO | CA | 92692-5175 |
| SUNG HEE KIM | 2137 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| DEBORAH J FORD | 18811 DODGE AVE | NORTH TUSTIN | CA | 92705-2159 |
| FARDIN, BABAK | 2325 N CATALINA ST | LOS ANGELES | CA | 90027-1128 |
| CHEN, TONG-FU TR | 25491 HILLSBORO DR | LAGUNA NIGUEL | CA | 92677-1458 |
| FLAVIA MANCONI | 2154 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| YUAN, DONGBIN | 2829 E HILLSIDE DR | WEST COVINA | CA | 91791-3764 |
| GIDAYA, ERNESTO JR TR E & C GIDAYA LIVING TR 2007 | 6805 ALTAMOR DR | LOS ANGELES | CA | 90045-6801 |
| SHEENA FARIMA DANESH | 73 NIGHTSHADE | IRVINE | CA | 92603-0640 |
| PHILIP M TR P M MOLINA | 2159 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| FERGUSON, ANETA J | 2237 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| KELLY MARIE YOUNG | 2238 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| EDNA E HINGCO | 2239 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| C & M FINANCIAL | 7423 E ARROYO HONDO RD | SCOTTSDALE | AZ | 85266-1503 |
| AMY Y WONG | 2251 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| MAHROU, NEDDA | 2253 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| SUSAN TR 2017 S S KIM | 2254 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| ALFRED C LEE | 1019 FOSTER SQUARE LN UNIT 302 | FOSTER CITY | CA | 94404-2572 |
| YAZDI, LALEH S | 2256 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| HOJREH, BAHRAM | 16812 HALE AVE | IRVINE | CA | 92606-5021 |
| ROSS NEMEROFF | 2337 WATERMARKE PL | IRVINE | CA | 92612-7694 |
| KIM JUAT FOONG | 2338 WATERMARKE PL | IRVINE | CA | 92612-7694 |

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| MODARESI, ARTIN ANTON | 4533 MACARTHUR BLVD UNIT A400 | NEWPORT BEACH | CA | 92660-2059 |
| KIANOOSH JAFARI | 27 ROYAL VALE DR | OAK BROOK | IL | 60523-1650 |
| HUYNH HUY / PEASLEY REBECCA | 2351 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| STEVEN S OH | 2352 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| SYED MAHMOOD MUKHTAR | 2355 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| KAMRAN SHAHLA 2005 TRUST | 2356 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| SERGE JOSEPH TR AYVAZIAN | 5306 LA CANADA BLVD | LA CANADA | CA | 91011-1723 |
| AHMAD HABIBI | 2358 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| MOUNTAIN HILLS | PO BOX 28017 | SANTA ANA | CA | 92799-8017 |
| WILLIAM ZARRAS | 2549 EASTBLUFF DR UNIT B-291 | NEWPORT BEACH | CA | 92660-3500 |
| FATIGH, ABBAS | 27719 HAWTHORNE BLVD | RANCHO PALOS VERDES | CA | 90275-3401 |
| CHRISTOPHER VELASCO | 2439 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| SMITH EDITH ELIZABETH | 2452 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| LAKELAND SKIING LP | 33681 CAPSTAN DR | DANA POINT | CA | 92629-4485 |
| SUD ANURADHA COTR / SUD BHUPINDER COTR | 6722 SUN DUNES ST | EASTVALE | CA | 92880 |
| HANS S TR KEIRSTEAD | 1289 LA MIRADA ST | LAGUNA BEACH | CA | 92651-3550 |
| BSEISO WAIL & REEM | 25 BEECHWOOD | IRVINE | CA | 92604-4654 |
| XQ28 LLC | 1590 S COAST HWY STE 7 | LAGUNA BEACH | CA | 92651-3256 |
| SEN-GUPTA, INDRANIL | 2458 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| SHABESTARI, SHAHRAM | PO BOX 1934 | COSTA MESA | CA | 92628-1934 |
| ALIZADEH MASOUD / DAMAVANDI, TANNAZ REZAEI | 2140 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| SEPAHI, MOONES TR | 2141 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| ZHOU HUI F / CHEUNG ZI H | 2142 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| RORY ANN HUTCHISON | 2143 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| SCANZIO, DARLENE C TR THE | 76 CONGRESS PL | IRVINE | CA | 92602-1655 |
| DOLATKHAH KAMRAN & MARIA / DOLATKHAH MARIA | PO BOX 419 | SANTA YSABEL | CA | 92070-0419 |
| REIS, WALTER J TR W J & S A REIS LIVING TR | 2699 PLAZA HERMOSA | LAKE HAVASU CITY | AZ | 86406-7740 |
| BORHANI, AMIR TR THE | 5156 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| SHAHRI, HOMAZAD TR H | 3715 90TH AVE SE | MERCER ISLAND | WA | 98040-3715 |
| SHARAN KESWANI | 2149 WATERMARKE PL | IRVINE | CA | 92612-7691 |
| FRIEDMAN LYNNE TR | 2240 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| MICHAEL OWEN GARDNER | 806 OXFORD ST | HOUSTON | TX | 77007-1611 |
| SOTO JOSE J & GLORIA | 2242 WATERMARKE PL | IRVINE | CA | 92612-7692 |
| GEORGE TR ALEXANDER | PO BOX 12355 | ORANGE | CA | 92859-8355 |
| WANG FREDERICK TRUST | 245 WATERMARKE PL | IRVINE | CA | 92612 |
| OMORI, TOSHIYUKI TR | 2246 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| ALI AMINLARI | 519 PALOMA CT | ENCINITAS | CA | 92024-2392 |
| ISMAEL SILVA JR | PO BOX 4499 | CERRITOS | CA | 90703-4499 |
| ALLEN D HUBLER | 2249 WATERMARKE PL | IRVINE | CA | 92612-7693 |
| DEREK LIANG | 2340 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| MONFARED, FARAMARZ | 2341 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| RANDHAWA, GURKIRAN KAUR | 2342 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| BEHMARDIAN ROYA | 2343 WATERMARKE PL | IRVINE | CA | 92612-7695 |
| TIEN, LIN-SHENG WALTER | 8 ARBUSTO | IRVINE | CA | 92606-7698 |
| MOSHARAF, MONI | 27068 LA PAZ RD UNIT 440 | ALISO VIEJO | CA | 92656-3041 |
| DARRYL E DALCIN | 1941 VALLETA DR | RANCHO PALOS VERDES | CA | 90275-1207 |
| BISCARO CARLO Z TR | 5 CHARLOTTE | IRVINE | CA | 92603-3448 |
| MIRIAM AYOUB | 4 SANDY POND RD | LADERA RANCH | CA | 92694-1336 |
| MEHDI TR 2002 TR ALEM | 31951 MONARCH CRST | LAGUNA NIGUEL | CA | 92677-5451 |
| AHMAD SOHRABIAN | 2715 STEEPLECHASE LN | DIAMOND BAR | CA | 91765-3628 |
| PHILIP ANCIL K & DREW A / PHILIP OMANA | 2443 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| SONIA KEHYEYAN | 2444 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| SAVAGE JENNIFER MICHELLE | 2445 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| HUANG, TIANJIAO | 2446 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| YELENA TR OSTROVSKY | 402 ROCKEFELLER UNIT 118 | IRVINE | CA | 92612-8105 |

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| OZEKI HIDEKAZU & KIWAKO | 2448 WATERMARKE PL | IRVINE | CA | 92612-7697 |
| EPNESHAHRASHOOB FAMILY TRUST | 6411 MORNINGSIDE DR | HUNTINGTON BEACH | CA | 92648-6108 |
| CHUNG TR RYU | 2165 CHANDLER DR | TUSTIN | CA | 92782-1135 |
| FOROUGHI, SHOHREH S TR | 900 ISLAND DR APT 509 | RANCHO MIRAGE | CA | 92270-3171 |
| BRIAN J CALLE | 8038 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| FRED C TR STOLLE | 49370 VISTA MIRASOL | LA QUINTA | CA | 92253-9209 |
| RICARDO LUIS SUAREZ | 8037 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| NEIL SAUNDERS V | 901 N PENN ST UNIT P2302 | PHILADELPHIA | PA | 19123-3112 |
| MOHAMMED N SHAFIG HAID | 1402 JEFFERSON ST | DELANO | CA | 93215-2222 |
| IKON LLC | 7040 SCHOLARSHIP | IRVINE | CA | 92612-4422 |
| FATHOLLAHI, NAUSSER | 402 ROCKEFELLER UNIT 101 | IRVINE | CA | 92612-8103 |
| MONTERO, BETZAIDA | 8041 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| VARON SAMEL & SUSAN E | 8048 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| WILLIAM D HALL | 8049 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ELIZABETH A SELL | 2455 S MADRONA DR | PALM SPRINGS | CA | 92264-9516 |
| NAMI, NIMA TR NAMI LIVING | 8046 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| GREATBELLINGTON LLC | 17500 RED HILL AVE STE 160 | IRVINE | CA | 92614-5675 |
| LEZLIE GUNN | 4045 S BUFFALO DR STE A101-17 | LAS VEGAS | NV | 89147-7479 |
| KIM, HYANG JA | 8043 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| AYRIA, KAMBIZ | 8042 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| RECORDS, CAROLE M TR | 8050 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| FATHOLLAHI, NAUSSER | 8051 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| DAVID N DALTON | 74000 DESERT GARDEN TRL | PALM DESERT | CA | 92260-6852 |
| RONALD TR GARBER | 8059 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| CHANG JIMMY B | 8057 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ABRAHAM S BAHA | 8056 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ABEDI, EFFAT TR ABEDI | 8055 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| BONAKDAR MONICA | 8054 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| BAGDASARIAN, EDUARD TR BA | 609 N BEVERLY DR | BEVERLY HILLS | CA | 90210-3319 |
| ZHANG, DAOQIN | 8052 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| MAHNAZ DASTMALCHI SOTODE TRUST | 8060 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| TAMMI L TR T LINDSEY | 1741 W 15TH AVE | ANCHORAGE | AK | 99501-4911 |
| FRANZ TR BOSSHARD | 8068 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| MARK LEE | 400 SYMPHONY CIR UNIT 428 | HUNT VALLEY | MD | 21030-2054 |
| MARK LEE | 8066 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| JOHN S YUN | 1617 RIVER BIRCH CIR | ORANGE | CA | 92869-1006 |
| SOLTANI, AZIZ TR SOLTANI | 17521 JACARANDA | IRVINE | CA | 92612-2813 |
| THOMAS P TR KLAMMER | 8063 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| PLAZA PROPERTIES GROUP LLC | PO BOX 8867 | NEWPORT BEACH | CA | 92658-8867 |
| TIMOTHY SU | 8070 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| BING YANG LIU | 8071 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| MEREDITH M BARNES | 8078 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| KLEIN ALICE J | 8079 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| DESMOND Q DONNELLAN | 8077 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| MOHSENI, BARDIA | 8076 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| YANG, JIAYI TR YOUNGS | 8075 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| JOSEPH GALLADE | 8116 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| ARASH AMINIAN | 8073 SCHOLARSHIP # 509C | IRVINE | CA | 92612-5697 |
| WULKAN DANIEL | 8072 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| FATHOLLAHI, NAUSSER | 8080 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ELISA R TR GRAINGER | 8081 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| HUANG FAN YEN | 8088 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| WIEDERKEHR, URS | 8089 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| KIAN HOLDINGS LLC | 5152 ISLEWORTH CC DR | WINDERMERE | FL | 34786-8954 |
| DAVID N DALTON | PO BOX 2849 | PALM DESERT | CA | 92261-2849 |

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| IIZUKA, MAKI | 8083 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ANTOINE F FARSAI | 8082 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ALBERT D TR MINOOFAR | 8090 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| WONG JOSEPH LIVING TRUST | 16312 AURORA CREST DR | WHITTIER | CA | 90605-1368 |
| DONALD A TR HANSEN | 8095 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| YOO SANG DUCK | 910 ROOSEVELT STE 250 | IRVINE | CA | 92620-3681 |
| HAROLD TR NEWMAN | 8094 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| ALEX WAH HIN YEUNG | 8093 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| HASHAD, YEHIA A | 8092 SCHOLARSHIP | IRVINE | CA | 92612-5697 |
| YOON, MOK KOO | 3075 WILSHIRE BLVD APT 413 | LOS ANGELES | CA | 90010-1288 |
| MIKE TR MIKE SOLNIK | 400 SE 5TH AVE APT 503 | BOCA RATON | FL | 33432-5618 |
| SIOSHANSI, FARANAK | 8104 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| LEE JUN | 8103 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| DAVID H TR JOHNSON | 8102 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| JAMES P TR WALSH WALSH | 326 SAND HILL RD | PETERBOROUGH | NH | 03458-1617 |
| QZ INVESTMENT LLC | 505 S VILLA REAL STE 116 | ANAHEIM | CA | 92807-3441 |
| OMAR SOSA | 8115 SCHOLARSHIP UNIT 903 | IRVINE | CA | 92612-5698 |
| SU, HSIN YI | 8114 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| ANNIE LEE | 8113 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| ELLEGARD CHERYL O TR K E / & C O ELLEGARD REVOC TR | PO BOX 517 | SEAL BEACH | CA | 90740-0517 |
| XU, JING | 8120 SCHOLARSHIP UNIT 1001 | IRVINE | CA | 92612-5698 |
| JAIME M TR SCHVARTZMAN | 67 BLUE LAGOON | LAGUNA BEACH | CA | 92651-4231 |
| KHAZAEIZADEH, ALIREZA | 8125 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| CAROL ANN TR ZINNGRABE | 8126 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| ZANE A MIRANDA | 8124 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| ALLEN J TR MILBERT | 8123 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| AHMAD KHOSHNOUDI | 8122 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| LARRY J TR TUCKER TUCKER | 8140 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| R5MANAGEMENT LLC | 2479 E FIELD ROSE DR | SALT LAKE CITY | UT | 84121-1571 |
| MERCER, SHAIN | 8145 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| MICHAEL ALLADAWI | 8146 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| JUNG TAIK KOH | 8144 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| ZHONG, LONGTAI | 21 JEWEL FLOWER | IRVINE | CA | 92603-0406 |
| TAO YUAN | 8142 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| SEBASTIAN TR MUSCO MUSCO | 8150 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| OLD RIVER ENTERPRISES LP | 8151 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| BOUBES AMMAR TR | 8156 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| BOZORGI, SIAVOSH TR | 8157 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| SCOTT TR WELLMAN | 8155 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| NEZAMI MOHAMMAD | 8154 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| CHENG CHARLES / WU HUI T | 8152 SCHOLARSHIP | IRVINE | CA | 92612-5698 |
| JOEL LEVINE | 5039 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| SAGHAFI, AZITA | 1340 REYNOLDS AVE UNIT 116-245 | IRVINE | CA | 92614-5551 |
| KLINK PAUL F LIVING TRUST / BENJAMIN EILEEN C | 4675 MACARTHUR CT STE 1600 | NEWPORT BEACH | CA | 92660-1852 |
| PETER AUGUST TR FORMUZIS | 123 VIA JUCAR | NEWPORT BEACH | CA | 92663-4909 |
| JENNIFER C YANG | 5034 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| FARR THOMAS R | 5035 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| DIVINE HEALING & HOUSING | 5049 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| DIANAT FAMILY TRUST | 5048 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| MAHMOUD GHAYOUMIPOUR | 5 RUTHERFORD | IRVINE | CA | 92602-2410 |
| ADEL, SHOJA PETER TR P | 5040 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| BAHER FAMILY TRUST | 11625 BELLAGIO RD | LOS ANGELES | CA | 90049-2112 |
| JASMINE JUNG MIN LEE | 5044 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| GHOSTOWN CALICO LLC | 543 FULLERTON AVE | NEWPORT BEACH | CA | 92663-5135 |
| MARK ANTHONY SASKO | 2233 VISTA RODEO DR | EL CAJON | CA | 92019-3565 |

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| YUSHMANOV FAMILY TRUST | 3418 LAREDO LN | ESCONDIDO | CA | 92025-7807 |
| SALEEN ELIZABETH TR / SALEEN STEPHEN TR | 5059 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| REZA CHAYCHIAN | 16480 HARBOR BLVD STE 101 | FOUNTAIN VALLEY | CA | 92708-1361 |
| GAFFOOR, MAHOMED TR | 5051 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| CAMERON K ORR | 5050 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| SUNG BIN LEE | 5052 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| JACQUES KPODONU | 175 FREEMAN ST APT 122 | BROOKLINE | MA | 02446-3510 |
| KATHY A TR K A KARLHEIM | 5054 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| CUNG, THANH HOANG TR T & C LIVING TR | 214 HAZEL DR | CORONA DEL MAR | CA | 92625-3059 |
| MORELAND CARLA TRUST | 5056 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| TERRY M NAKAMURA | 5057 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| STANLEY ZALE TR SHUSTER | 549 EMERALD BAY | LAGUNA BEACH | CA | 92651-1257 |
| JIMMY YUE | PO BOX 7780 | ALHAMBRA | CA | 91802-7780 |
| CHANG MAN-LIN M | 108 CAMINO SOBRANTE | ORINDA | CA | 94563-2329 |
| MARK ERIK GITTIN | 5060 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| SCOTT SCHWEIZER | 5062 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| JIMMY SHUN HAO CHANG | 8536 LODGEPOLE LN | RIVERSIDE | CA | 92508-7106 |
| SUNDARARAJAN, VENKAT | A-23-6 SENI MONT KIARA | NO. 2A CHANGKAT DUTA KIARA, MONT KIARA | | KUALA LUMPUR, , MALAYSIA |
| CHIEN, CHUI-TSANG | 5759 WATERS EDGE DR | IRVING | TX | 75039-3661 |
| UMIT YASAR KURU | 5067 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| BLAKE, RONALD D TR R / C | 5079 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| JAMES TR LEU | 18837 BROOKHURST ST STE 301 | FOUNTAIN VALLEY | CA | 92708-7302 |
| KAPPA FOODS LLC | 5071 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| SOTODEH, SANAZ TR THE S | 5070 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| HOWARD LEVY | 5103 656 SCHOLARSHIP | IRVINE | CA | 92612 |
| CHENG, FANG HUEI WANG | 27702 GOLD DUST LN | LAGUNA HILLS | CA | 92653-5899 |
| GO, WILLIAM TR THE J W | 5074 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| THARANI, DILEEP | 5076 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| LISA WINKLER | 5077 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| JOHN W TR WARREN | 5089 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| ABORELL ADVISORS I LLC BY RECVR & MGMT I LLC BY RECV / ABORELL MGMT I LLC BY RECVR | 865 S FIGUEROA ST STE 2800 | LOS ANGELES | CA | 90017-2795 |
| FARBOUDMANESH TRUST | 5081 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| TONY T KING | 5080 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| BLAKE ASHLEY | PO BOX 11043 | NEWPORT BEACH | CA | 92658-5016 |
| EFRAIM DUZMAN | 5 NIDDEN | IRVINE | CA | 92603-3462 |
| MASOUDFAR, SIMA TR THE S | 5085 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| SEVVOM, HOSSEIN FAKOOR TR | 5086 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| XIAO H TR WANG | 12837 BERKHAMSTED ST | CERRITOS | CA | 90703-7233 |
| JAFARI, MEHDI TR JAFARI & TAHERI TR | 23 CANYON PEAK | NEWPORT COAST | CA | 92657-1656 |
| TAMADON, SHOKOUH | 5091 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| SALMA LLC | 5000 BIRCH ST STE 6000 | NEWPORT BEACH | CA | 92660-8141 |
| MUELLER, JACKSON W JR THE | 5092 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| DHUPCHINDA, SOMMART | 5093 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| WEISS, NATOMA JOAN TR | 5094 SCHOLARSHIP | IRVINE | CA | 92612-5695 |
| NANCY TR TAHVILDARAN | 5106 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| BARBARA J TR OFFERMAN | 743 ALTURAS DEL SOL | SANTA BARBARA | CA | 93103-2173 |
| SHARIF, MEHRAK K | 5101 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| ISHIZUKA, YASUHIRO | 5100 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| OROZCO MIGUEL A & ELIZABETH A | 5102 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| HOWARD W LEVY | 75656 VIA CORTONA | INDIAN WELLS | CA | 92210-7815 |
| MARC H TR M C GLICKMAN | 5104 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| LIANG, JEANNIE TR THE J | 2505 BUTTERNUT DR | HILLSBOROUGH | CA | 94010-6203 |
| MACK MICHAEL J | 5115 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| WONG JOSEPH LIVING TRUST | 5111 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| ALIDA SERTTHIN | 5110 SCHOLARSHIP | IRVINE | CA | 92612-5696 |

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| YONG W RHEE | 5579 LUZ DEL SOL UNIT B | LAGUNA WOODS | CA | 92637-6951 |
| SERTTHIN ALIDA SUPSAKORN | 5113 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| OLFATI, ATA TR A & S B OLFATI REVOC LIVING TR | 5114 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| KIM, EUISHIN EDMUND TR ED | 5126 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| MICHAEL A GALLADE | 5125 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| MOGHADAM, SHOHREH S | 5121 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| TAHERI, SHAHRAM S | 5120 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| MADJID MESGARZADEH | 2234 COOLIDGE HWY APT 206 | TROY | MI | 48084-3623 |
| EDITH TR WARREN C VIRAY | 6701 CENTER DR W STE 525 | LOS ANGELES | CA | 90045-1549 |
| PISCOPO ANTHONY | 5124 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| ZHANG, YUJUN | 5146 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| ASHLEY MOTAMEDI | 5145 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| HAROLD DENIS LEE | 5141 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| SUPSAKORN ROUMSIN | 5140 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| CAROL TSENG | 5142 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| MURTHY, NAGARAJ TR MURTHY | 5143 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| THANH THUY LUONG HARVEY | 2549 EASTBLUFF DR # 103 | NEWPORT BEACH | CA | 92660-3500 |
| LEE, BYUNG JOON TR LEE | 5151 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| MING CHU LIN WU | 5150 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| ELKASM, FARID TR | 5152 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| NANCY S YOUN | 5153 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| KURT R LINDSEY | PO BOX 92267 | ANCHORAGE | AK | 99509-2267 |
| JOHN TR LINK | 5155 SCHOLARSHIP | IRVINE | CA | 92612-5696 |
| EQR-TOSCANA APARTMENTS LP | LEDGER # 292 | CHICAGO | IL | 60680-0407 |
| POLE USA INVESTMENT ONE | 520 NEWPORT CENTER DR STE 350 | NEWPORT BEACH | CA | 92660-7029 |
| SANTA ANA UNIFIED SCH DISTRICT | 1601 E CHESTNUT AVE | SANTA ANA | CA | 92701-6322 |
| 18818 TELLER PARTNERS | 18818 TELLER AVE STE 200 | IRVINE | CA | 92612-1680 |
| TECOLOTE RESOURCES INC | 2465 CAMPUS DR | IRVINE | CA | 92612-1502 |
| ARAKELIAN IRVINE REAL | 14048 VALLEY BLVD | CITY OF INDUSTRY | CA | 91746-2801 |
| BOARDWALK OFFICE | 3501 JAMBOREE RD STE 230 | NEWPORT BEACH | CA | 92660-2995 |
| KCI WARNER ATRIUM LLC | 19100 VON KARMAN AVE STE 480 | IRVINE | CA | 92612-6569 |
| SRG BARDEEN LLC | 18802 BARDEEN AVE | IRVINE | CA | 92612-1521 |
| BARDEEN PARTNERS LLC | 18851 BARDEEN AVE | IRVINE | CA | 92612-1520 |
| BARDEEN ASSOCIATES LLC | 18831 BARDEEN AVE STE 200 | IRVINE | CA | 92612-6515 |
| 2532 DUPONT DRIVE LLC | 2532 DUPONT DR | IRVINE | CA | 92612-1524 |
| DUPONT FALESE LLC | 8775 FOLSOM BLVD STE 200 | SACRAMENTO | CA | 95826-3725 |
| OC AIRPORT OWNER LLC | 18881 VON KARMAN AVE STE 400 | IRVINE | CA | 92612-6525 |
| HENSEL PHELPS | 420 6TH AVE | GREELEY | CO | 80631-2332 |
| LBA RV-COMPANY X LP | 3347 MICHELSON DR STE 200 | IRVINE | CA | 92612-0687 |
| JACK RABBIT GROUP LLC | 18800 VON KARMAN AVE STE A | IRVINE | CA | 92612-1724 |
| C M STRATPLAN INC | 525 UNIVERSITY AVE | PALO ALTO | CA | 94301-1903 |
| ESSEX DUPONT LOFTS LP | PO BOX 59365 | SCHAUMBURG | IL | 60159-0365 |
| ALLERGAN PROPERTY | PO BOX 19634 | IRVINE | CA | 92623-9634 |
| GFE MACARTHUR INVESTMENTS | 7700 IRVINE CENTER DR STE 620 | IRVINE | CA | 92618-4944 |
| JG DUPONT CENTRE LLC | 4141 MACARTHUR BLVD | NEWPORT BEACH | CA | 92660-2015 |
| ALLERGAN INC | 2525 DUPONT DR | IRVINE | CA | 92612-1531 |
| HANCOCK S-REIT IRVINE CORP | 865 S FIGUEROA ST STE 3320 | LOS ANGELES | CA | 90017-5444 |
| 18800 MACARTHUR HMEJ LLC | 515 S FIGUEROA ST STE 1850 | LOS ANGELES | CA | 90071-3321 |
| TIDES HOSPITALITY LLC | 2192 DUPONT DR | IRVINE | CA | 92612-1302 |
| CENTRAL PARK WEST COMMUNITY ASSOCIATION | 1 POLARIS WAY STE 100 | ALISO VIEJO | CA | 92656-5360 |
| RESIDENCE MUTUAL | PO BOX 19626 | IRVINE | CA | 92623-9626 |
| GOLDEN HOTELS LIMITED | 5325 E PACIFIC COAST HWY | LONG BEACH | CA | 90804-4441 |
| A-WON PROPERTIES LLC | 92 ARGONAUT STE 120 | ALISO VIEJO | CA | 92656-4121 |
| DREAM SQUARE IRVINE LLC | 2029 CENTURY PARK E # 2570N | LOS ANGELES | CA | 90067-2901 |
| FLT MICHELSON LLC | 2082 MICHELSON DR | IRVINE | CA | 92612-1212 |

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| 18401 VON KARMAN PROPERTY OWNER LLC | 18301 VON KARMAN AVE | IRVINE | CA | 92612-1009 |
| 2211 MICHELSON HOLDINGS LLC | 18301 VON KARMAN AVE STE 250 | IRVINE | CA | 92612-0106 |
| PLAZA INVS & CONSULTANCY LLC | 2223 AVENIDA DE LA PLAYA STE 100 | LA JOLLA | CA | 92037-3218 |
| THE IRVINE COMPANY | PO BOX 7788 | NEWPORT BEACH | CA | 92658-7788 |
| REEP-OFC VON KARMAN CA | 1 FRONT ST STE 550 | SAN FRANCISCO | CA | 94111-5344 |
| 2042 BCD L P | 2042 BUSINESS CENTER DR | IRVINE | CA | 92612-1132 |
| RUSSELL E TR FLUTER | 2025 W BALBOA BLVD | NEWPORT BEACH | CA | 92663-4300 |
| PROPERTY RESERVE INC | 3550 GLENRIDGE DR | SHERMAN OAKS | CA | 91423-4672 |
| MCCABE PLAZA LLC | 20072 SW BIRCH ST | NEWPORT BEACH | CA | 92660-0794 |
| AZALEA L P | 42 CORPORATE PARK STE 200 | IRVINE | CA | 92606-3104 |
| 32 RANCHO CIRELE LLC | 2569 MCCABE WAY STE 200 | IRVINE | CA | 92614-5220 |
| 2515 MCCABE WAY LLC | 1100 W TOWN AND COUNTRY RD # 13 | ORANGE | CA | 92868-4600 |
| AMERICAN LOTUS BUDDHIST | 2692 BECKMAN AVE | IRVINE | CA | 92606-5101 |
| ROBCALI LLC | 59 MAIDEN LN | NEW YORK | NY | 10038-4502 |
| LAKESHORE PROPERTIES LLC | 1990 S BUNDY DR STE 500 | LOS ANGELES | CA | 90025-5245 |
| FOREFRONT 405 OWNERS | 2445 MCCABE WAY STE 100 | IRVINE | CA | 92614-4299 |
| MCCABE GROUP LLC | 18627 BROOKHURST ST # 4 | FOUNTAIN VALLEY | CA | 92708-6748 |
| SCENIC ENT LLC | 18627 BROOKHURST ST # 445 | FOUNTAIN VALLEY | CA | 92708-6748 |
| BASSMAN-BLAINE HOLDINGS | 2485 MCCABE WAY UNIT 3 | IRVINE | CA | 92614-6254 |
| PROPERTY RESERVE INC | 2332 COTNER AVE STE 301 | LOS ANGELES | CA | 90064-1848 |
| NEW SPARK HOLDINGS INC | 580 SILVER SPUR RD | ROLLING HILLS ESTATES | CA | 90275-3614 |
| 2552 WHITE ROAD LLC | 3500 W GARRY AVE | SANTA ANA | CA | 92704-6423 |
| 2572 WHITE ROAD LLC | 2572 WHITE RD | IRVINE | CA | 92614-6236 |
| CARTER FAMILY INVEST | PO BOX 696583 | SAN ANTONIO | TX | 78269-6583 |
| FARHAD ABDOLLAHI | 2500 WHITE RD STE B | IRVINE | CA | 92614-6276 |
| BASCOM AIRPORT EXEC | 26 CORPORATE PARK STE 200 | IRVINE | CA | 92606-3115 |
| ROHE PROPS INC | 26322 SAN SOUCI PL | MISSION VIEJO | CA | 92692-3299 |
| KELLY TR KELLY GRAY GRAY | 23 BLACK HAWK | IRVINE | CA | 92603-0310 |
| 2091 BUSINESS CENTER | 22939 HAWTHORNE BLVD UNIT 100 | TORRANCE | CA | 90505-3681 |
| ROCKRIVER VIII LLC | 2392 MORSE AVE | IRVINE | CA | 92614-5230 |
| S3 HOSPITALITY LLC | 2070 NEWPORT BLVD | COSTA MESA | CA | 92627-2164 |
| ROHE PROPERTIES INC | 2541 WHITE RD | IRVINE | CA | 92614-6235 |
| COOK TRUST | 127 2ND ST STE 1 | LOS ALTOS | CA | 94022-2794 |
| CAMDEN JAMBOREE | PO BOX 27329 | HOUSTON | TX | 77227-7329 |
| CORNUCOPIA INC | 1007 EMERALD BAY | LAGUNA BEACH | CA | 92651-1231 |
| BUSINESS CENTER DRIVE | 6 VENTURE STE 100 | IRVINE | CA | 92618-7347 |
| BCD 2111 PROPERTY | 2111 BUSINESS CENTER DR STE 200 | IRVINE | CA | 92612-1017 |
| HUYCKE, TRAUTE TR | 1401 EMERALD BAY | LAGUNA BEACH | CA | 92651-1234 |
| METROPOLIS GARDENS LLC | 8895 CENTRE DR 105-229 | SAN DIEGO | CA | 92122 |
| MARCOURT INVESTMENTS INC | PO BOX 579 | LOUISVILLE | TN | 37777-0579 |
| EQR-2850 KELVIN L P | 2850 KELVIN AVE | IRVINE | CA | 92614-5853 |
| 17891 CARTWRIGHT LLC | 32 DEEP SEA | NEWPORT COAST | CA | 92657-2155 |
| MAIN STREET PLAZA | PO BOX 3058 | MISSION VIEJO | CA | 92690-1058 |
| 2372 MORSE AVENUE LLC | 2372 MORSE AVE | IRVINE | CA | 92614-6234 |
| NORAM PROPERTIES LLC | 2100 MAIN ST STE 100 | IRVINE | CA | 92614-6238 |
| 17422 MURPHY SITE LLC | 17422 MURPHY AVE | IRVINE | CA | 92614-5922 |
| 17881 CARTWRIGHT RD LLC | 41 BLUE HERON | IRVINE | CA | 92603-0306 |
| CARTWRIGHT CCR LLC | 130 NEWPORT CENTER DR STE 230 | NEWPORT BEACH | CA | 92660-6979 |
| SSCA 17392 MURPHY AVE LLC | 1380 LEAD HILL BLVD STE 200 | ROSEVILLE | CA | 95661-2997 |
| HARPNBOWL LLC | 17801 CARTWRIGHT RD | IRVINE | CA | 92614-6216 |
| TLWC-IRVINE LLC | 2301 ROSECRANS AVE STE 4130 | EL SEGUNDO | CA | 90245-4966 |
| 2300SNA LLC | 1331 N CALIFORNIA BLVD STE 170 | WALNUT CREEK | CA | 94596-4535 |
| DORMY INVESTMENT LLC | 6 SKYLARK WAY | COTO DE CAZA | CA | 92679-3946 |
| MCNAMEE, SHARLEE S TR | 2400 MAIN ST STE 201 | IRVINE | CA | 92614-6271 |
| J & R MAIN STREET LLC | 31 SKYRIDGE | NEWPORT BEACH | CA | 92657-1815 |

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| THE HOUSE OF SPORTSMEN | 1432 SANTA FE DR | TUSTIN | CA | 92780-6417 |
| HARRY Z WILSON, FAMILY | 1821 MONTANA AVE APT A | SANTA MONICA | CA | 90403-1900 |
| JOHN HANCOCK LIFE INSURANCE CO | 865 S FIGUEROA ST | LOS ANGELES | CA | 90017-2543 |
| MH HOUSE IRVINE LLC | 2725 ROCKY MOUNTAIN AVE STE 200 | LOVELAND | CO | 80538-8717 |
| 17850 VON KARMAN LAND | 4000 MACARTHUR BLVD STE 110 | NEWPORT BEACH | CA | 92660-2546 |
| PMI CHARTER LLC | 777 S CALIFORNIA AVE | PALO ALTO | CA | 94304-1179 |
| BROADWAY MICHELSON LLC | 3161 MICHELSON DR STE 900 | IRVINE | CA | 92612-4409 |
| RLI EM IRVINE L P | 3 BETHESDA METRO CTR STE 1000 | BETHESDA | MD | 20814-6347 |
| 1980 MAIN LLC | 60 COLUMBUS CIR FL 19 | NEW YORK | NY | 10023-5802 |
| UNITED STATES POSTAL SERVICE | 17192 MURPHY AVE | IRVINE | CA | 92623-0400 |
| ROBERT COHEN | 10474 SANTA MONICA BLVD STE 405 | LOS ANGELES | CA | 90025-6932 |
| DENNING, JEFFREY V TR | 2851 MCGAW AVE | IRVINE | CA | 92614-5835 |
| KAY BAGRAMIAN | 538 VIA LIDO NORD | NEWPORT BEACH | CA | 92663-4948 |
| TERRACE TOWER ORANGE | 121 SW MORRISON ST STE 250 | PORTLAND | OR | 97204-3179 |
| VON KARMAN-MAIN STREET | 2323 MAIN ST | IRVINE | CA | 92614-6222 |
| 17885 VON KARMAN LLC | 150 PAULARINO AVE STE 182 | COSTA MESA | CA | 92626-3301 |
| MILLS R C & S D TRUST | 13651 YELLOWSTONE DR | SANTA ANA | CA | 92705-2657 |
| PR II & INTRACORP 2055 MAIN LLC | 895 DOVE ST STE 400 | NEWPORT BEACH | CA | 92660-8921 |
| ESSEX DERIAN L P | PO BOX 4265 | WOODLAND HILLS | CA | 91365-4265 |
| MARY MELLONE | 20221 SW CYPRESS ST | NEWPORT BEACH | CA | 92660-0714 |
| HSU, SHIH FANG TR | 25 CHARLOTTE | IRVINE | CA | 92603-3448 |
| IRVINE CO | PO BOX 182571 | COLUMBUS | OH | 43218-2571 |
| MEGATREND ENTERPRISE LLC | 11 FIRESTONE | IRVINE | CA | 92614-7049 |
| SHENMU HOLDINGS LLC | 17062 MURPHY AVE | IRVINE | CA | 92614-5914 |
| CANYON CORPORATE CENTRE LTD | PO BOX 19599 | IRVINE | CA | 92623-9599 |
| ARNE NAFISON | 21252 HILLSDALE LN | HUNTINGTON BEACH | CA | 92646-7238 |
| CANDY & SUGAR LLC | 17534 VON KARMAN AVE | IRVINE | CA | 92614-6208 |
| J & R 1901 MAIN LLC | 2525 MAIN ST STE 510 | IRVINE | CA | 92614-6681 |
| IRVINE CO | PO BOX 4349 | ANAHEIM | CA | 92803-4349 |
| 17536 VON KARMAN LLC | 23 PACIFIC MIST | NEWPORT COAST | CA | 92657-1649 |
| VK ASSOC LLC | 949 S COAST DR STE 600 | COSTA MESA | CA | 92626-7734 |
| VON KARMAN PRODUCTION LLC | 6789 QUAIL HILL PKWY # 408 | IRVINE | CA | 92603-4233 |
| DANE ELEC CORP USA | 17520 VON KARMAN AVE | IRVINE | CA | 92614-6208 |
| DANIEL HON-YING NG | 11321 DELPHINIUM AVE | FOUNTAIN VALLEY | CA | 92708-1710 |
| AIC OWNER LLC | 17755 SKY PARK CIR STE 100 | IRVINE | CA | 92614-6400 |
| KELLY PATRICIA TR BURKE | 260 BAKER ST STE 100 | COSTA MESA | CA | 92626-4579 |
| NATURA CITY LLC | 2461 HUNTINGTON DR | SAN MARINO | CA | 91108-2644 |
| GATES ALTON LLC | 15 DARTMOUTH | NEWPORT BEACH | CA | 92660-9003 |
| FREE CHAPEL ORANGE COUNTY | 1290 MCEVER RD | GAINESVILLE | GA | 30504-3930 |
| NEXGEN PHARMA INC | 46 CORPORATE PARK STE 100 | IRVINE | CA | 92606-3121 |
| SCHIFFMAN, TODD I TR | 9229 W SUNSET BLVD STE 501 | LOS ANGELES | CA | 90069-3405 |
| DIAMOND JAMBOREE LTD | 900 S SAN GABRIEL BLVD STE 200 | SAN GABRIEL | CA | 91776-2762 |
| B BRAUN MEDICAL INC | 2525 MCGAW AVE | IRVINE | CA | 92614-5841 |
| PLC ALTON APARTMENTS LLC | 23 CORPORATE PLAZA DR STE 246 | NEWPORT BEACH | CA | 92660-7944 |
| HANHAN JABER & SUHAIR | 307 PLACEMARK | IRVINE | CA | 92614-0173 |
| DEFT INC | 1611 E 4TH ST STE 200 | SANTA ANA | CA | 92701-5136 |
| WAYNE Y TR UYEMURA | 2901 PEBBLE DR | CORONA DEL MAR | CA | 92625-1518 |
| ICC-CHT LLC | 26131 RED CORRAL RD | LAGUNA HILLS | CA | 92653-6312 |
| VILLAGE WEST INVESTMENTS | 50 GRANDVIEW | IRVINE | CA | 92603-0222 |
| OC IRVINE HOLDINGS LLC | 38 CORPORATE PARK | IRVINE | CA | 92606-5105 |
| TENG FAMILY LLC | 2362 MCGAW AVE | IRVINE | CA | 92614-5832 |
| BAO DING TR BAO CHENG | 2 SHORE WALK | NEWPORT COAST | CA | 92657-2158 |
| CHEESECAKE FACTORY INC | 26901 MALIBU HILLS RD | CALABASAS | CA | 91301-5354 |
| ORANGE COUNTY CHRISTIAN | 2332 MCGAW AVE | IRVINE | CA | 92614-5832 |
| IRVINE HHG HOTEL DEV LP | 105 DECKER CT STE 500 | IRVING | TX | 75062-2790 |

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| ARMSTRONG LLLP II | 3600 BIRCH ST STE 130 | NEWPORT BEACH | CA | 92660-2641 |
| IRVINE CORPORATE PARK LLC | 16253 LAGUNA CANYON RD | IRVINE | CA | 92618-3605 |
| LEBRUNS LLC | PO BOX 19516 | IRVINE | CA | 92623-9516 |
| IRVINE BUSINESS PROPERTIES | 3330 HARBOR BLVD # 100 | COSTA MESA | CA | 92626-1502 |
| RC1 CORPORATE POINTE LLC | 19712 MACARTHUR BLVD STE 150 | IRVINE | CA | 92612-2448 |
| ARJAD, HENRY TR H & L ARJAD REVOC FAMILY TR | 16630 ASTON | IRVINE | CA | 92606-4836 |
| INFINITY AQUA INC | 6789 QUAIL HILL PKWY # 852 | IRVINE | CA | 92603-4233 |
| SHYU CO LLC | 900 S SAN GABRIEL BLVD | SAN GABRIEL | CA | 91776-2762 |
| REDHILL-METRO VI | 227 20TH ST STE 100 | NEWPORT BEACH | CA | 92663-4343 |
| TINA B NEMETH | 306 OLD RANCH RD | BRADBURY | CA | 91008-1031 |
| ASLAN MED CENTER I LLC | 41 POST | IRVINE | CA | 92618-5216 |
| GLOVIS AMERICA INC | 17305 VON KARMAN AVE STE 200 | IRVINE | CA | 92614-6674 |
| V & A ENTERPRISES | 1401 DOLPHIN TER | CORONA DEL MAR | CA | 92625-1731 |
| HUANG, YUANCHUN TR Y | 24962 FAIRTIME CIR | LAGUNA NIGUEL | CA | 92677-6010 |
| 17611 ARMSTRONG LLC | 17611 ARMSTRONG AVE | IRVINE | CA | 92614-5727 |
| WNC SKY PK LLC | 17782 SKY PARK CIR | IRVINE | CA | 92614-6404 |
| SKYPARK PARTNERS | 17870 SKY PARK CIR | IRVINE | CA | 92614-6424 |
| 17651 ARMSTRONG LLC | 4035 DOVER RD | LA CANADA | CA | 91011-4026 |
| LATISYS SPV INC | 393 INVERNESS PKWY | ENGLEWOOD | CO | 80112-5816 |
| WATERWORKS PARTNERS II | 4701 VON KARMAN AVE STE 100 | NEWPORT BEACH | CA | 92660-2161 |
| C2E COMMUNITY ASSOCIATION | 2030 MAIN ST STE 1200 | IRVINE | CA | 92614-7256 |
| SONG YAO | 2322 SYNERGY | IRVINE | CA | 92614-0168 |
| MARIA A TR HUANG | 26 BAFFIN BAY | NEWPORT COAST | CA | 92657-2113 |
| ZHANG, AMEI | 820 CHAMPION CIR | WALNUT | CA | 91789-4901 |
| CHEN, SIRONG | 3555 TILDEN AVE | LOS ANGELES | CA | 90034-6108 |
| LI, CHUNQIAN | 2282 SYNERGY | IRVINE | CA | 92614-0167 |
| JENNY CHAO-YING P ZHAO | 2141 PALERMO | TUSTIN | CA | 92782-8742 |
| WANG, LI | 2709-4688 KINGS WAY | BURNABY, BRITISH COLUMBIA | | CANADA |
| XU, JIAHUI | 2278 SYNERGY | IRVINE | CA | 92614-0167 |
| STEVEN DIFILLIPPO | 118 LARCH ROW | WENHAM | MA | 01984-1635 |
| ZHANG, LI | 2274 SYNERGY | IRVINE | CA | 92614-0167 |
| DANIEL HUANG | 17322 MURPHY AVE | IRVINE | CA | 92614-5920 |
| JOHNNY C LIU | 138 CARROTWOOD | IRVINE | CA | 92618-1183 |
| MARK T ALBERT | 2302 SYNERGY | IRVINE | CA | 92614-0168 |
| SYNERGY INVESTMENT LLC | 31 PRAIRIE GRASS | IRVINE | CA | 92603-0402 |
| LIU, XIAOMEI | 2318 SYNERGY | IRVINE | CA | 92614-0168 |
| XU, CHEN | 2320 SYNERGY | IRVINE | CA | 92614-0168 |
| HUI XIONG | 126 TOMATO SPGS | IRVINE | CA | 92618-8880 |
| GU, XIEHUA | 2310 SYNERGY | IRVINE | CA | 92614-0168 |
| JOHN A CORTES | 2336 SYNERGY | IRVINE | CA | 92614-0168 |
| IRVINE GATEWAY | 411 1ST AVE S STE 650 | SEATTLE | WA | 98104-3807 |
| IRVINE GATEWAY | 2246 SYNERGY | IRVINE | CA | 92614-0167 |
| IRVINE GATEWAY | 20 ROCKWREN | IRVINE | CA | 92604-3325 |
| IRVINE GATEWAY | 2260 SYNERGY | IRVINE | CA | 92614-0167 |
| IRVINE GATEWAY | 17700 CASTLETON ST STE 383 | CITY OF INDUSTRY | CA | 91748-5873 |
| TRAN LANI | 2200 SYNERGY | IRVINE | CA | 92614-0167 |
| YOGA RICHELLE C / HARUN RITA | 2202 SYNERGY | IRVINE | CA | 92614-0167 |
| QIAO TIANSHENG / GUO GONGHUA | 2204 SYNERGY | IRVINE | CA | 92614-0167 |
| WANG CHENG / ZHAI QINJUAN | 2208 SYNERGY | IRVINE | CA | 92614-0167 |
| LIU TAO / YANG FANG | 2210 SYNERGY | IRVINE | CA | 92614-0167 |
| NICASTRO MARK / YANG HAIYIN | 2212 SYNERGY | IRVINE | CA | 92614-0167 |
| ZHOU JIANMIN / MENG QIAN | 2218 SYNERGY | IRVINE | CA | 92614-0167 |
| YU BING / WANG QIN | 2220 SYNERGY | IRVINE | CA | 92614-0167 |
| GAO JUNMEI | 112 OUTPOST | IRVINE | CA | 92620-2234 |
| DU MIN | 52 CASPIAN | LAKE FOREST | CA | 92630-1468 |

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| GREENFIELD PROP MGMT LLC | 2226 SYNERGY | IRVINE | CA | 92614-0167 |
| QIAN GUI | 2234 SYNERGY | IRVINE | CA | 92614-0167 |
| NGO QUANG T | 2286 SYNERGY | IRVINE | CA | 92614-0167 |
| TRAN LANI | 2288 SYNERGY | IRVINE | CA | 92614-0167 |
| CHOU JERRY / CHEN CARMEN G | 2290 SYNERGY | IRVINE | CA | 92614-0167 |
| HSU PETER J | 2292 SYNERGY | IRVINE | CA | 92614-0167 |
| REN MINGHONG | 2294 SYNERGY | IRVINE | CA | 92614-0167 |
| ZHANG RONG | 126 MEASURE | IRVINE | CA | 92618-1305 |
| DONALD SPENCER DE VRIES | 17671 ARMSTRONG AVE | IRVINE | CA | 92614-5727 |
| DANIELIAN ENTERPRISES LP | 60 CORPORATE PARK | IRVINE | CA | 92606-5105 |
| 17848 SKYPARK LLC | 17848 SKY PARK CIR | IRVINE | CA | 92614-6135 |
| RC1 CORPORATE POINTE LLC | 3 CORPORATE PARK | IRVINE | CA | 92606-5111 |
| LI, XIAOPING | 4407 E ORANGE CREEK LN | ANAHEIM | CA | 92807-3505 |
| CHURCH, ST MARK | 17840 SKY PARK CIR | IRVINE | CA | 92614-6401 |
| WINTEN INVESTMENT INC | 8 CORPORATE PARK STE 300 | IRVINE | CA | 92606-5196 |
| 3U MILLIKAN LLC | 12 CARMEL WOODS | LAGUNA NIGUEL | CA | 92677-1008 |
| BARBARA C TR TAYLOR | 16871 NOYES AVE STE B | IRVINE | CA | 92606-3140 |
| SMH MILLIKAN LLC | 16842 MILLIKAN AVE | IRVINE | CA | 92606-5012 |
| ASSISTANCE LEAGUE OF | 2452 ALTON PKWY | IRVINE | CA | 92606-5037 |
| DBH ALTON PKWY LLC | 2454 ALTON PKWY | IRVINE | CA | 92606-5037 |
| GENETEX INC | 2456 ALTON PKWY | IRVINE | CA | 92606-5037 |
| SU, JIM EZAN TR PRESTIGE | 16 RONSARD | NEWPORT COAST | CA | 92657-0114 |
| CHRONICLE HOLDINGS LLC | 18021 COWAN | IRVINE | CA | 92614-6023 |
| BAYPORT MITCHELL ASSOC L | 3090 PULLMAN ST | COSTA MESA | CA | 92626-5901 |
| 1410 HIGHLAND ASSOCIATES LP | 8220 WILSHIRE BLVD # 200 | BEVERLY HILLS | CA | 90211 |
| PETER TR 2013 P PANENKA | 23 RAINBOW RDG UNIT 12 | IRVINE | CA | 92603-3728 |
| 2 CORP PARK LLC | 2 CORPORATE PARK STE 200 | IRVINE | CA | 92606-5103 |
| SHIELDS ENTRPRISES A CA | 16872 MILLIKAN AVE | IRVINE | CA | 92606-5012 |
| COWAN IRVINE LLC | 18012 COWAN STE 200 | IRVINE | CA | 92614-6823 |
| CHURCH, EVANGELICAL | 17422 ARMSTRONG AVE | IRVINE | CA | 92614-5724 |
| STANFORD IRVINE LLC | 888 S FIGUEROA ST STE 1900 | LOS ANGELES | CA | 90017-5324 |
| PRV MILLIKAN LLC | 16901 MILLIKAN AVE | IRVINE | CA | 92606-5011 |
| NEWPORT FEDERAL | 4425 JAMBOREE RD STE 250 | NEWPORT BEACH | CA | 92660-3002 |
| CHENGSON'S PROPERTY LP | PO BOX 39123 | DOWNEY | CA | 90239-0123 |
| BRCH HOLDING LLC | 9303 GREENLEAF AVE | SANTA FE SPRINGS | CA | 90670-3029 |
| WU HAI CHEN | 16423 KNOLL STONE CIR | CERRITOS | CA | 90703-2004 |
| B BRAUN MEDICAL INC | 824 12TH AVE | BETHLEHEM | PA | 18018-3524 |
| NOEVIR CO LTD | 1095 MAIN ST | IRVINE | CA | 92614-6715 |
| ORANGE COUNTYS UNITED WAY | 18012 MITCHELL S | IRVINE | CA | 92614-6008 |
| THE GOSSEN GROUP LLC | 18002 COWAN | IRVINE | CA | 92614-6812 |
| JONES, FLETCHER JR TR | 7300 W SAHARA AVE | LAS VEGAS | NV | 89117-2756 |
| 2481 ALTON LLC | 223 S BEVERLY DR STE 209 | BEVERLY HILLS | CA | 90212-3855 |
| CHRISTIAN TR SCHWARTZ | 16781 NOYES AVE | IRVINE | CA | 92606-5123 |
| KHOSHBIN, MANUCHEHR TR | 18071 FITCH STE 100 | IRVINE | CA | 92614-6086 |
| CONNOR PARTNERS | 16842 HALE AVE | IRVINE | CA | 92606-5021 |
| RNR PROPERTY LEASING LLC | 4521 CAMPUS DR | IRVINE | CA | 92612-2621 |
| EE & GE PROPERTIES LLC | PO BOX 64457 | LOS ANGELES | CA | 90064-0457 |
| CHRISTINA O TR QUINN | 3001 VIA LA SELVA | PALOS VERDES ESTATES | CA | 90274-1047 |
| GREYLIGHT PROPERTIES LLC | 19100 VON KARMAN AVE STE 950 | IRVINE | CA | 92612-6583 |
| UNIVERSAL PROP ONE | 129 W WILSON ST | COSTA MESA | CA | 92627-1586 |
| IRVINE CIRCLE LLC | 16402 CONSTRUCTION CIR E | IRVINE | CA | 92606-4408 |
| ERD ENTERPRISES LIMITED PARTENSHIP | PO BOX 1299 | LAKE FOREST | CA | 92609-1299 |
| KHALIL, MUNIR | 26 CALAIS | NEWPORT COAST | CA | 92657-1055 |
| DAVID T DAVUTOGLU | 1820 TAHUNA TER | CORONA DEL MAR | CA | 92625-1822 |
| 16752 MILLIKAN LLC | 17 TIDEMARK | LAGUNA NIGUEL | CA | 92677-4235 |

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| ALTON SELF STORAGE LP | 17671 COWAN STE 125 | IRVINE | CA | 92614-6075 |
| 3M COMPANY | PO BOX 33441 | SAINT PAUL | MN | 55133-3441 |
| 18061 FITCH LLC | 18061 FITCH | IRVINE | CA | 92614-6018 |
| PASEO DEL MAR OWNERS ASSN | 124 UNITY | IRVINE | CA | 92614-0900 |
| THE SAID COHEN FAMILY | PO BOX 17942 | IRVINE | CA | 92623-7942 |
| JEDCO INC | 21841 STARFIRE LN | HUNTINGTON BEACH | CA | 92646-7909 |
| COURTNEY, GEORGE G III TR | 41 RITZ COVE DR | DANA POINT | CA | 92629-4227 |
| HALE AVENUE PROPERTIES | 56 CORAL LK | IRVINE | CA | 92614-5443 |
| ROGER C TR PORTER | 537 VIA LIDO SOUD | NEWPORT BEACH | CA | 92663-4931 |
| WHITTLE INVESTORS-STATE COLLEGE | 301 E COLORADO BLVD STE 800 | PASADENA | CA | 91101-1917 |
| IJ ENTS LLC | 16851 HALE AVE | IRVINE | CA | 92606-5020 |
| RAY LEE TR TAYLOR | 301 N SALTAIR AVE | LOS ANGELES | CA | 90049-2914 |
| REYNOLDS RE HOLDINGS LLC | 1791 REYNOLDS AVE | IRVINE | CA | 92614-5711 |
| NINYO, MIYAKE, GOODMAN | 17991 FITCH | IRVINE | CA | 92614-6079 |
| LUCILLE H TR MACDONALD | PO BOX 462 | LAHAINA | HI | 96767-0462 |
| IRIDIUM PROP INVEST LLC | 2201 ALTON PKWY | IRVINE | CA | 92606-5033 |
| FITCH LLC | 6025 W SLAUSON AVE | CULVER CITY | CA | 90230-6507 |
| MILLIKAN IVESTMENTS LLC | 16592 HALE AVE | IRVINE | CA | 92606-5005 |
| 16782 HALE AVENUE LLC | 36 SALT BUSH | IRVINE | CA | 92603-0417 |
| BAKKEN INDSTRL PROP LLC | 14421 AGARITA RD | AUSTIN | TX | 78734-2011 |
| CAMINO CENTER | PO BOX 7467 | MENLO PARK | CA | 94026-7467 |
| ELO INVESTMENTS INC | 10402 VILLA DEL CERRO | SANTA ANA | CA | 92705-1484 |
| TW LOS ANGELES LLC | 2301 PRIVATE RD | NEWPORT BEACH | CA | 92660-3623 |
| BARROT BROTHERS FAMILY | 1881 KAISER AVE | IRVINE | CA | 92614-5707 |
| SOUTHERN CAL DIST | 17951 COWAN | IRVINE | CA | 92614-6000 |
| THRIFTY OIL CO | 13116 IMPERIAL HWY | SANTA FE SPRINGS | CA | 90670-4817 |
| CWN PROPERTIES I | 168 CRESCENT BAY DR | LAGUNA BEACH | CA | 92651-1321 |
| ROLAND A TR TRUST CHILDS | 3137 FREDERICK ST | SANTA MONICA | CA | 90405-5805 |
| 1761 REYNOLDS AVE INC | 832 VIA LIDO NORD | NEWPORT BEACH | CA | 92663-5525 |
| 2911 DOW LLC | 10841 THORLEY RD | SANTA ANA | CA | 92705-2459 |
| 17500 GILLETTE LLC | 17500 GILLETTE AVE | IRVINE | CA | 92614-5610 |
| JAMES J MEYER | 5 WIGHTMAN CT | DANA POINT | CA | 92629-4147 |
| KENT J TR WILKEN | 6 BEACON BAY | NEWPORT BEACH | CA | 92660-7217 |
| EXETER 16259 DE LLC | 2312 TOUHY AVE | ELK GROVE VILLAGE | IL | 60007-5329 |
| CWN PROPERTIES I | 16721 MILLIKAN AVE | IRVINE | CA | 92606-5009 |
| OC MITCHELL LLC | 17912 MITCHELL S | IRVINE | CA | 92614-6014 |
| CHASE PROPERTIES LLC | 1792 KAISER AVE | IRVINE | CA | 92614-5706 |
| BERNEY PROPERTIES INC | 24040 CAMINO DEL AVION STE A-204 | MONARCH BEACH | CA | 92629-4005 |
| 17672 COWAN L P | 1600 DOVE ST STE 480 | NEWPORT BEACH | CA | 92660-1433 |
| DIMITRY HANY TR DIMITRY / FAMILY TR 2011 | 15963 OAK TREE XING | CHINO HILLS | CA | 91709-2261 |
| COXCOM INC | 6205 PEACHTREE DUNWOODY RD 12TH FL | ATLANTA | GA | 30328-4524 |
| MONTANA HOLDINGS LLC | 17551 GILLETTE AVE | IRVINE | CA | 92614-5609 |
| RICHARD W TR SILVER | 1187 MARINE DR | LAGUNA BEACH | CA | 92651-1330 |
| HNP REAL ESTATE INVESTMENTS LLC-MCGAW | 146 FOUNDERS POINTE S | BLOOMINGDALE | IL | 60108-1402 |
| NUGGET LLC | 16811 HALE AVE STE A | IRVINE | CA | 92606-5066 |
| ROBERT M TR NIBEEL | 7 WEYMOUTH CT | NEWPORT BEACH | CA | 92660-4212 |
| DENTAL EXCELLENCE LLC | 16811 HALE AVE STE C | IRVINE | CA | 92606-5066 |
| KERR GARY J | 16811 HALE AVE | IRVINE | CA | 92606-5050 |
| ALFRED E TR BALDWIN | 20 CORPORATE PLAZA DR | NEWPORT BEACH | CA | 92660-7901 |
| ROYER MANSION LLC | 17702 MITCHELL N | IRVINE | CA | 92614-6013 |
| 1672 REYNOLDS LLC | 3505 CADILLAC AVE STE F3 | COSTA MESA | CA | 92626-1431 |
| PENTAGON A INVESTMENTS | 17872 MITCHELL N # 150 | IRVINE | CA | 92614-6034 |
| MCIAC LLC | 1762 KAISER AVE | IRVINE | CA | 92614-5706 |
| MILLIKAN LLC | 16662 MILLIKAN AVE | IRVINE | CA | 92606-5008 |
| BRE CA OFFICE OWNER LLC | PO BOX A3879 | CHICAGO | IL | 60690-3879 |

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| CALIFORNIA PORTLAND | 2025 E FINANCIAL WAY | GLENDORA | CA | 91741-4692 |
| BEREAN COMMUNITY CHURCH | 17 SANDERLING | IRVINE | CA | 92604-2806 |
| KALILI AZARIAN LLC | 16722 HALE AVE | IRVINE | CA | 92606-5007 |
| KTN PACIFIC COAST PROPERTIES LLC | 1701 REYNOLDS AVE | IRVINE | CA | 92614-5711 |
| 1852 MC GAW LLC | PO BOX 18557 | IRVINE | CA | 92623-8557 |
| MALTESE LLC | 17712 MITCHELL N | IRVINE | CA | 92614-6013 |
| TWENTY SIX FORTY TWO LLC | 3975 LANDMARK ST | CULVER CITY | CA | 90232-2354 |
| MARK L TR CRAIG | 1791 KAISER AVE | IRVINE | CA | 92614-5703 |
| GRANITE TRUST IRV LLC | 3550 WILSHIRE BLVD STE 840 | LOS ANGELES | CA | 90010-2433 |
| KELLOGG FAMILY LLC | 14740 CODY LN | SARATOGA | CA | 95070-6018 |
| IRVINE PUMP HOUSE NO. 1 | 1732 KAISER AVE | IRVINE | CA | 92614-5706 |
| TRUMBLE PROPERTIES LLC | 16331 CONSTRUCTION CIR E | IRVINE | CA | 92606-4406 |
| KINETIC ENERGY INC | 100 W MACARTHUR BLVD | SANTA ANA | CA | 92707-4908 |
| MITCHELL NORTH BUILDING | 17842 MITCHELL N STE 100 | IRVINE | CA | 92614-6834 |
| FUTUREPROOFING LLC | 17691 MITCHELL N | IRVINE | CA | 92614-6827 |
| MOMENTUM TEXTILES INC | 17811 FITCH | IRVINE | CA | 92614-6001 |
| ACTION ENTERPRISES | 2439 ROSEMEAD BLVD | EL MONTE | CA | 91733-1530 |
| D SCOTT TR OLIVET | 1881 MCGAW AVE | IRVINE | CA | 92614-5733 |
| KENNETH BERNARD COOPER | 3 VISTA LESINA | NEWPORT BEACH | CA | 92657-1405 |
| CONSTRUCTION CIRCLE LLC | PO BOX 52427 | ATLANTA | GA | 30355-0427 |
| CARDINAL INVS PROPERTIES-ARMST | 17182 ARMSTRONG AVE | IRVINE | CA | 92614-5718 |
| KHOSH, ROCKNY | 16692 HALE AVE STE B | IRVINE | CA | 92606-5052 |
| 3339 EXPOSITION PLACE L P | 3322 CAROLINE AVE | CULVER CITY | CA | 90232-7430 |
| 52 KARMAN LLC / VON KARMAN DAY LLC | 4751 WILSHIRE BLVD STE 203 | LOS ANGELES | CA | 90010-3860 |
| COWAN PACIFIC LLC | 17682 COWAN STE 100 | IRVINE | CA | 92614-1609 |
| ELO INVESTMENTS INC | 17780 FITCH STE 200 | IRVINE | CA | 92614-6060 |
| CURTIS G GOOD | 16661 MILLIKAN AVE | IRVINE | CA | 92606-5028 |
| SAI GRAM PROPERTIES LLC | 1761 KAISER AVE | IRVINE | CA | 92614-5705 |
| R & W PROPERITES | 2906 CARTA TAZA | SAN CLEMENTE | CA | 92673-3813 |
| 17701 MITCHELL LLC | 31132 CEANOTHUS DR | LAGUNA BEACH | CA | 92651-6929 |
| 1562 REYNOLDS LLC | 2618 SAN MIGUEL DR UNIT 370 | NEWPORT BEACH | CA | 92660-5437 |
| LEASE ALL PROPERTIES | PO BOX 18388 | ANAHEIM | CA | 92817-8388 |
| KAPAAR INC | PO BOX 8112 | NEWPORT BEACH | CA | 92658-8112 |
| JUERGEN TR KROGMANN | 1545 E OCEAN BLVD | NEWPORT BEACH | CA | 92661-1433 |
| KUNO, KATHY M TR THE KMK | 16291 CONSTRUCTION CIR E | IRVINE | CA | 92606-4459 |
| BKM 17500 REDHILL | 3185 PULLMAN ST | COSTA MESA | CA | 92626-3320 |
| BOND INTERNATIONAL GROUP INC | 17500 RED HILL AVE STE 100 | IRVINE | CA | 92614-5673 |
| OWEIS, ZOHAIR M TR OWEIS | 16541 SILKTREE ST | FOUNTAIN VALLEY | CA | 92708-2347 |
| SUN GROUP PROPERTIES LLC | 17500 RED HILL AVE STE 140 | IRVINE | CA | 92614-5674 |
| KIMBALL AVE LLC | PO BOX 19068 | IRVINE | CA | 92623-9068 |
| RYMAS GROUP LLC | 34 MONTGOMERY | NEWPORT BEACH | CA | 92660-9109 |
| GMCI3168 LLC | 27 REDHAWK | IRVINE | CA | 92604-3263 |
| SVETLANA TAYLOR | 1615 ARCH BAY DR | NEWPORT BEACH | CA | 92660-6023 |
| STAR BANDIT LLC | 17500 RED HILL AVE | IRVINE | CA | 92614-5645 |
| OCOHBO LLC | 17500 RED HILL AVE STE 250 | IRVINE | CA | 92614-7600 |
| IRISH CONSTRUCTION | 2641 RIVER AVE | ROSEMEAD | CA | 91770-3301 |
| HANANO STEPHEN SHOJI | 373 N ELK GLEN LN | ORANGE | CA | 92869-6531 |
| 12 VON KARMAN LLC | 16782 VON KARMAN AVE STE 12 | IRVINE | CA | 92606-2417 |
| VON KARMAN PROPERTIES LP | 3731 6TH AVE STE 100 | SAN DIEGO | CA | 92103-4383 |
| YAMTASTIC LLC | 16782 VON KARMAN AVE, IT 20 | IRVINE | CA | 92606 |
| HAUSON CORPORATION | 5402 AMALFI DR | IRVINE | CA | 92603-3400 |
| ANTHONY TR HYNES | 267 CRESCENT BAY DR | LAGUNA BEACH | CA | 92651-1322 |
| J & R MANAGEMENT | 14705 MOCKINGBIRD DR | GERMANTOWN | MD | 20874-3341 |
| LEE, CHIA-SHEN | 16782 VON KARMAN AVE STE 25 | IRVINE | CA | 92606-2418 |
| SLIPSTICK INVESTMENTS LLC | 16782 VON KARMAN AVE STE 24 | IRVINE | CA | 92606-2418 |

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| VON KARMAN AVE LLC | 16782 VON KARMAN AVE STE 30 | IRVINE | CA | 92606-2419 |
| CHUN JUNG LIAO | 16782 VON KARMAN AVE STE 31 | IRVINE | CA | 92606-2419 |
| PETERI PROPERTIES LLC | 16782 VON KARMAN AVE STE 33 | IRVINE | CA | 92606-2419 |
| PENICK PROPERTIES LP | 17152 ARMSTRONG AVE | IRVINE | CA | 92614-5718 |
| ANDREW DOSSETT TRUST THE / DOSSETT ANDREW J COTR | 1305 E BALBOA BLVD | NEWPORT BEACH | CA | 92661-1421 |
| IJ ENTERPRISES LLC | 16631 MILLIKAN AVE | IRVINE | CA | 92606-5028 |
| FITCH, MITCHELL CORP | 17711 MITCHELL N | IRVINE | CA | 92614-6028 |
| ABDUL TR ALIAFF | 17191 ARMSTRONG AVE | IRVINE | CA | 92614-5717 |
| GLENN LOUIS TR ROWE | 7 LAKE MENDOCINO DR | RANCHO MIRAGE | CA | 92270-5820 |
| BAGLEY-AIRTH PROP LP | 1780 MITCHELL N | IRVINE | CA | 92614 |
| EYCHART LIMITED | 1672 KAISER AVE | IRVINE | CA | 92614-5700 |
| I T CONSTRUCTION LLC | 17841 MITCHELL N | IRVINE | CA | 92614-6003 |
| SAINT MONTSERRAT HOSPICE CARE INC | 17702 COWAN | IRVINE | CA | 92614-6012 |
| MVH MC GAW L P | 5 FLORES | IRVINE | CA | 92612-2657 |
| 17872 COWAN LLC | 17872 COWAN | IRVINE | CA | 92614-6010 |
| SBLP IRVINE LLC | 4514 COLE AVE STE 1500 | DALLAS | TX | 75205-4220 |
| GLENN R TR MANN | PO BOX 3906 | SAN CLEMENTE | CA | 92674-3906 |
| MITCHELL NORTH LLC | 26825 CHELSEA LN | LAGUNA HILLS | CA | 92653-7507 |
| JANET ANNE TR EVERSMEYER | 1961 VISTA DEL ORO | NEWPORT BEACH | CA | 92660-3927 |
| CORY, CHARLES F JR TR | 16632 HALE AVE STE 125 | IRVINE | CA | 92606-5074 |
| SAYAGO & PARDON INC | 17666 FITCH | IRVINE | CA | 92614-6022 |
| SYSCO NEWPORT MEAT COMPANY | 16691 HALE AVE | IRVINE | CA | 92606-5025 |
| DEWEY'S RUBBISH SERVICE | PO BOX 1450 | CHICAGO | IL | 60690-1450 |
| S C E CO | 2050 N GLASSELL ST | ORANGE | CA | 92865-3306 |
| HOLLIDAY ROCK CO INC | 1401 N BENSON AVE | UPLAND | CA | 91786-2166 |
| COWAN PROPERTIES LLC | 5675 CONCOURS | ONTARIO | CA | 91764-5395 |
| EXTRA SPACE PROPERTIES | PO BOX 320099 | ALEXANDRIA | VA | 22320-4099 |
| GREENER FOREVER PROP LLC | 27 DONOVAN | IRVINE | CA | 92620-3882 |
| REDUS CA PROPERTIES LLC | 3563 PHILLIPS HWY SUITE 601 E | JACKSONVILLE | FL | 32207 |
| RADHA SOAMI SOCIETY | 1420 REYNOLDS AVE | IRVINE | CA | 92614-5501 |
| PRH I LP | PO BOX 3683 | RANCHO SANTA FE | CA | 92067-3683 |
| TDT LANGLEY LLC | 1822 LANGLEY AVE | IRVINE | CA | 92614-5624 |
| GF CAP | 2922 DAIMLER ST | SANTA ANA | CA | 92705-5811 |
| ORANGE COUNTY | PO BOX 14184 | ORANGE | CA | 92863-1584 |
| PAMELA C TR BLEDSOE | 1950 W CORPORATE WAY UNIT 16973 | ANAHEIM | CA | 92801-5373 |
| LA PUERTA ABIERT CHURCH | 17751 MITCHELL N | IRVINE | CA | 92614-6028 |
| RICHARD C TR HUNSAKER | PO BOX 2423 | SANTA ANA | CA | 92707-0423 |
| KAZOOKA LLC | PO BOX 19218 | IRVINE | CA | 92623-9218 |
| CHURCH DEVELOPMENT FUND | PO BOX 19700 | IRVINE | CA | 92623-9700 |
| BOYS AND GIRLS CLUBS OF CENTRAL ORANGE COAST FOUNDATION | 17701 COWAN STE 110 | IRVINE | CA | 92614-6061 |
| 17701 COWAN STR LLC | 17701 COWAN STE 120 | IRVINE | CA | 92614-6061 |
| INTERNATIONAL SOCIETY FOR CHILDREN WITH CANCER | 17701 COWAN STE 130 | IRVINE | CA | 92614-6061 |
| PERALTA LLC | 17701 COWAN STE 140 | IRVINE | CA | 92614-6061 |
| JAMBOREE HOLDINGS LLC | 17701 COWAN STE 200 | IRVINE | CA | 92614-6840 |
| SES PROPERTY LLC | 17701 COWAN STE 210 | IRVINE | CA | 92614-6840 |
| JAMBOREE HOLDINGS II LLC | 17701 COWAN STE 220 | IRVINE | CA | 92614-6840 |
| HBGB TRUST | 16305 SWINGLEY RIDGE RD STE 350 | CHESTERFIELD | MO | 63017-1802 |
| TRACY D TR BRILES BRILES | 17701 COWAN STE 240 | IRVINE | CA | 92614-6840 |
| EDI HEALTH GROUP | 17701 COWAN STE 250 | IRVINE | CA | 92614-6841 |
| TECHNOLOGY WARRANTY | 17701 COWAN STE 150 | IRVINE | CA | 92614-6820 |
| PASCARELLA OLGA A TR / PASCARELLA LIVING TR | 10570 DRAPER AVE | LOS ANGELES | CA | 90064-4410 |
| BRYAN INDUSTRIAL PROPERTIES INC | 146 E ORANGETHORPE AVE | ANAHEIM | CA | 92801-1208 |
| MICHAEL J TR STOLL | 73 OLD COURSE DR | NEWPORT BEACH | CA | 92660-4268 |
| NICHOLAS TR ALEXANDER | 1851 LANGLEY AVE | IRVINE | CA | 92614-5623 |
| LION FORCE LLC | 1278 GLENNEYRE ST PMB 81 | LAGUNA BEACH | CA | 92651-3103 |

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|---|---|---|---|---|
| MILLER ARMSTRONG LLC | 15411 ALBRIGHT ST | PACIFIC PALISADES | CA | 90272 |
| 16251 BUILDING LLC | 4337 N DESERTS GATE CIR | MESA | AZ | 85207-7241 |
| RGP PROPERTY LLC | 17101 ARMSTRONG AVE | IRVINE | CA | 92614-5730 |
| VIRGINIA C TR RILEY | 1529 DOLPHIN TER | CORONA DEL MAR | CA | 92625-1733 |
| TRANSMIX CORP | 1501 BELVEDERE RD | WEST PALM BEACH | FL | 33406-1501 |
| WTW PROPERTIES LLC | 1144 W GROVE AVE | ORANGE | CA | 92865-4131 |
| ADIVE LLC | 1752 LANGLEY AVE | IRVINE | CA | 92614-5699 |
| KOK INVESTMENT CO | 17752 COWAN | IRVINE | CA | 92614-6012 |
| MARGARET A TR CHIDESTER | 17762 COWAN 1ST FL | IRVINE | CA | 92614-6899 |
| MUNROE BALDWIN LLC | 210 WHALERS WALK UNIT 31 | SAN PEDRO | CA | 90731-7276 |
| HALE INVESTMENTS LLC | 16601 HALE AVE | IRVINE | CA | 92606-5025 |
| AFCOWAN LLC | 17772 COWAN | IRVINE | CA | 92614-6012 |
| SOO KWANG TR KIM | 12 VIA PERAZUL | NEWPORT COAST | CA | 92657-1609 |
| DAVIS, MARY ANNE TR M A & J A DAVIS LIVING TR | 2500 BUNGALOW PL | CORONA DEL MAR | CA | 92625-1526 |
| KENSRUE ENTERPRISES | 16882 ARMSTRONG AVE | IRVINE | CA | 92606-4936 |
| KINGSTON KOHR LLC | 4521 CAMPUS DR # 168 | IRVINE | CA | 92612-2621 |
| GOLDEN TRIANGLE GROUP LLC | 48900 MILMONT DR | FREMONT | CA | 94538-7316 |
| IRVINE ARMSTRONG PROPERTY | 16808 ARMSTRONG AVE | IRVINE | CA | 92606-2415 |
| SHERMAN L TR PICKRELL | 424 E ALTON AVE | SANTA ANA | CA | 92707-4242 |
| SMJJ INVESTMENTS LLC | 1682 LANGLEY AVE | IRVINE | CA | 92614-5620 |
| BONNIE TR HENDRIE | 424 REDLANDS AVE | NEWPORT BEACH | CA | 92663-4807 |
| MCKENZIE LAND LLC | 16400 DALLAS PKWY STE 400 | DALLAS | TX | 75248-2643 |
| E & S MANAGEMENT SERVICES | 22901 SAVI RANCH PKWY STE A | YORBA LINDA | CA | 92887-4615 |
| POMM LLC | PO BOX 1639 | NEWPORT BEACH | CA | 92659-1639 |
| SUN SURGERY CENTER INC | 7801 CENTER AVE STE 203 | HUNTINGTON BEACH | CA | 92647-9118 |
| LOTTER & LOTTER LLC | PO BOX 7322 | NEWPORT BEACH | CA | 92658-7322 |
| AJS INVESTMENT LLC | 52 GEORGETOWN | IRVINE | CA | 92612-2671 |
| INFINITY GLOBAL GROUP INC | 17815 NEWHOPE ST STE F | FOUNTAIN VALLEY | CA | 92708-5426 |
| MDT LAND HOLDING LLC | 1161 ORLANDO ST | TUSTIN | CA | 92780-6197 |
| JNP HOLDINGS LLC | 1565 MCGAW AVE STE C | IRVINE | CA | 92614-5670 |
| SOBAHLANU LLC | 1371 REYNOLDS AVE | IRVINE | CA | 92614-5528 |
| RRM PROPERTIES LTD | PO BOX 1659 | CORONA | CA | 92878-1659 |
| DAVID JUANG | 1681 LANGLEY AVE | IRVINE | CA | 92614-5619 |
| CARTER DAVIS LLC | 17372 EASTMAN | IRVINE | CA | 92614-5522 |
| RANDY BOHART | 17175 GILLETTE AVE | IRVINE | CA | 92614-5602 |
| 17177 GILLETTE LLC | 17177 GILLETTE AVE BLDG 3 | IRVINE | CA | 92614-7603 |
| SANGKI PROPERTY LLC | 16101 CONSTRUCTION CIR W | IRVINE | CA | 92606-4455 |
| JOHN B EWLES INC | 8200 KATELLA AVE STE 203 | STANTON | CA | 90680-3250 |
| OLIVE TREE HOUSE LLC | 16 POMPEII | IRVINE | CA | 92606-0602 |
| F3 PROPERTIES LLC | 3843 S BRISTOL ST STE 210 | SANTA ANA | CA | 92704-7426 |
| KETTERING INVESTMENTS LLC | 1682 KETTERING | IRVINE | CA | 92614-5614 |
| GC NET LEASE IRVINE | 18818 TELLER AVE STE 277 | IRVINE | CA | 92612-1612 |
| OFFYSPRING LLC | 18141 DARMEL PL | SANTA ANA | CA | 92705-1901 |
| 1891 ALTON INC | 1891 ALTON PKWY | IRVINE | CA | 92606-4992 |
| L CHRISTIAN TR SCHWARTZ | 2401 SANTIAGO DR | NEWPORT BEACH | CA | 92660-3649 |
| TEECO PRODUCTS INC | 16881 ARMSTRONG AVE | IRVINE | CA | 92606-4913 |
| JOSEPH JAY TR MANOOGIAN | 5 BLD HOLLAND | IRVINE | CA | 92618 |
| ACUMAX LLC | 9585 PUFFIN AVE | FOUNTAIN VALLEY | CA | 92708-5844 |
| BRADMORE INVESTMENT | 4096 GLENCOE AVE | MARINA DEL REY | CA | 90292-5608 |
| KETTERING INVESTMENT | 2418 N RIDGEPARK LN | ORANGE | CA | 92867-1915 |
| NORTHWIND PROPERTIES LLC | 17280 RED HILL AVE | IRVINE | CA | 92614-5628 |
| RTED IRVINE LLC | PO BOX 18528 | IRVINE | CA | 92623-8528 |
| HEALTHWAVE GROUP LLC | 18895 ROCKINGHORSE LN | HUNTINGTON BEACH | CA | 92648-1550 |
| JM276 LLC | 17955 SKY PARK CIR STE C | IRVINE | CA | 92614-6375 |
| PAUL R TR WOJDYNSKI | 17248 RED HILL AVE | IRVINE | CA | 92614-5628 |

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|---|---|---|---|---|
| IRVINE RED HILL LLC | 5290 SHAWNEE RD STE 300 | ALEXANDRIA | VA | 22312-2377 |
| CAIFORNIA OCCUPATIONAL | 17232 RED HILL AVE | IRVINE | CA | 92614-5628 |
| TODD W HANNA | 24311 LAS NARANJAS DR | LAGUNA NIGUEL | CA | 92677-2118 |
| ROBERT A TR WELLS | 3 LA SENDA PL | LAGUNA BEACH | CA | 92651-6738 |
| T & R WARNER PROPERTIES | 12999 ARROYO ST | SAN FERNANDO | CA | 91340-1548 |
| JEROME MEZZASALMA | 17200 RED HILL AVE | IRVINE | CA | 92614-5628 |
| DERBY HOLDINGS LTD | 6228 BALACLAVA ST | VANCOUVER, BC, , CANADA | | V6N 1 |
| JEFFREY B TR LEWIS LEWIS | 2464 BAYSHORE DR | NEWPORT BEACH | CA | 92663-5605 |
| MARUCHAN INC | 15800 LAGUNA CANYON RD | IRVINE | CA | 92618-3103 |
| JACOB BUILDING LLC | 17312 EASTMAN | IRVINE | CA | 92614-5522 |
| DANTMAN LLC | 4790 IRVINE BLVD # 105-298 | IRVINE | CA | 92620-1973 |
| WHITE, WILLIAM T III TR W | 3197 AIRPORT LOOP DR STE A | COSTA MESA | CA | 92626-3424 |
| GILLETTE EXECUTIVE CENTER OWNERS ASSOCIATION | 17042 GILLETTE AVE | IRVINE | CA | 92614-5601 |
| LIU, GEORGE TR G & M LIU LIVING TR | 17072 GILLETTE AVE | IRVINE | CA | 92614-5601 |
| 3DP KETTERING LLC | 1681 KETTERING | IRVINE | CA | 92614-5613 |
| MARUCHAN INC | 1902 DEERE AVE | IRVINE | CA | 92606-4819 |
| BR INVESTORS | PO BOX 16243 | IRVINE | CA | 92623-6243 |
| H F LEE LLC | 10 CYPRESS POINT LN | NEWPORT BEACH | CA | 92660-5208 |
| RICOH DEV OF CAL INC | 1100 VALENCIA AVE | TUSTIN | CA | 92780-6428 |
| DUNITZ-DAIMLER ST LLC | 1900 AVENUE OF THE STARS STE 2475 | LOS ANGELES | CA | 90067-4512 |
| PCC ROLLMET INC | 1822 DEERE AVE | IRVINE | CA | 92606-4817 |
| RED HILL INCOME PARTNERS | 2765 SAND HILL RD STE 200 | MENLO PARK | CA | 94025-7099 |
| PEC DAIMLER 1 LLC | 100 BUSH ST STE 550 | SAN FRANCISCO | CA | 94104-3903 |
| SCHONWIT PROPERTIES LLC | 151 KALMUS DR STE M3A | COSTA MESA | CA | 92626-7934 |
| TSA LLC | 17365 DAIMLER ST | IRVINE | CA | 92614-5510 |
| PENINSULA CRD INC | 2885 TEMPLE AVE | SIGNAL HILL | CA | 90755-2212 |
| OPUS 11 LLC | 16500 GALE AVE | CITY OF INDUSTRY | CA | 91745-1712 |
| UNIPEX LLC | 17335 DAIMLER ST | IRVINE | CA | 92614-5510 |
| TCMK PROPERTIES LLC | 6672 SILENT HARBOR DR | HUNTINGTON BEACH | CA | 92648-2642 |
| MMM INTERNATIONAL LLC | 11380 7TH ST | RCH CUCAMONGA | CA | 91730-5518 |
| BILLY F MATHIS INC | 1036 CHANTILLY CIR | SANTA ANA | CA | 92705-6108 |
| ASTON & BROWNING LLC | 6135 E EDGEMONT DR | ORANGE | CA | 92867-2452 |
| 1622 BROWNING CORP | 1622 BROWNING | IRVINE | CA | 92606-4809 |
| BGI HOLDINGS I LLC | 400 MONTGOMERY ST STE 400 | SAN FRANCISCO | CA | 94104-1213 |
| BOCK DEVELOPMENT CO LLC | 1692 DEERE AVE STE A | IRVINE | CA | 92606-4888 |
| JKJ HOLDING A LLC | 1651 BROWNING | IRVINE | CA | 92606-4808 |
| 1962 BARRANCA PARKWAY LLC | 105 W BETHANY DR | ALLEN | TX | 75013-3712 |
| JOHN ROBERT TR BERCAW | 1715 BAYADERE TER | CORONA DEL MAR | CA | 92625-1806 |
| STEVEN JAMES ESPINOSA | 1621 BROWNING | IRVINE | CA | 92606-4828 |
| SHARON CAWTHRA MORRISON | 620 E DYER RD | SANTA ANA | CA | 92705-5612 |
| MRC POLYGON LLC | 650 LOMBARDY LN | LAGUNA BEACH | CA | 92651-2911 |
| LANCASTER S P & M L FAM TRUST | 1207 STARBOARD WAY | CORONA DEL MAR | CA | 92625-1321 |
| MONTE VERDE REDHAWK LLC | 16580 ASTON | IRVINE | CA | 92606-4805 |
| YEBO GOGO LLC | 3431 OCEAN BLVD | CORONA DEL MAR | CA | 92625-3259 |
| DOJO 17 LLC | 1581 BROWNING | IRVINE | CA | 92606-4806 |
| SIGMA TRIDENT LLC | 970 W 190TH ST STE 620 | TORRANCE | CA | 90502-1070 |
| KALMUS PROPERTIES LLC | 17171 DAIMLER ST | IRVINE | CA | 92614-5508 |
| DIRK STEVEN HOLCOMB | 13312 MONTECITO | TUSTIN | CA | 92782-8803 |
| DRABKIN-ANAHEIM VENTURE | 4580 E THOUSAND OAKS BLVD STE 350 | WESTLAKE VILLAGE | CA | 91362-7200 |
| RITA CHING-PUI TR KO | 14371 ROSEWOOD CIR | TUSTIN | CA | 92780-2362 |
| KAYDAD LLC | 4343 VON KARMAN AVE STE 350 | NEWPORT BEACH | CA | 92660-2091 |
| 17072 DAIMLER LLC | 17072 DAIMLER ST | IRVINE | CA | 92614-5548 |
| MANNY WEBER | 2306 PORT LERWICK PL | NEWPORT BEACH | CA | 92660-5425 |
| JOSEPH F TR FONG | 16520 ASTON | IRVINE | CA | 92606-4805 |
| EASTER SEALS SOUTHERN | 1063 MCGAW AVE STE 100 | IRVINE | CA | 92614-5554 |

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|---|---|---|---|---|
| MAAY ASSOC LLC | 16782 RED HILL AVE STE A | IRVINE | CA | 92606-4821 |
| TULIPER FREDERICK E TR | 51 SANTA BARBARA DR | ALISO VIEJO | CA | 92656-1622 |
| DU & LI FAMILY TRUST | PO BOX 62185 | IRVINE | CA | 92602-6072 |
| BLUEGRASS FOLDING CARTON | 1600 BARRANCA PKWY | IRVINE | CA | 92606-4823 |
| GHATAODE, RAVI | 1 SUNRISE | NEWPORT COAST | CA | 92657-1653 |
| 1700 BARRANCA CO | 760 W 16TH ST STE A1 | COSTA MESA | CA | 92627-4319 |
| MARUKOME USA INC | 17132 PULLMAN ST | IRVINE | CA | 92614-5524 |
| JUNE COLLIER EKLUND | 1121 DURYEA AVE | IRVINE | CA | 92614-5519 |
| GAGOS PROPERTIES LTD L P | 1319 J ST | MODESTO | CA | 95354-0924 |
| TONHO INTERNATIONAL INC | 125 PACIFIC COAST HWY | HERMOSA BEACH | CA | 90254-5356 |
| THOMAS J LAVENTURE | 1091 DURYEA AVE | IRVINE | CA | 92614-5517 |
| JOHN TR WASHER | 1100 SANDPIPER DR | CORONA DEL MAR | CA | 92625-1407 |
| CDB INVESTMENTS LP | 16530 BAKE PKWY STE 200 | IRVINE | CA | 92618-4685 |
| CHENGXING INVESTMENT LLC | 400 SPECTRUM CENTER DR STE 1550 | IRVINE | CA | 92618-5026 |
| SHEA HMS LP | 2 ADA STE 200 | IRVINE | CA | 92618-5325 |
| IRVINE CENTER SPE LLC | 2955 MAIN ST 3RD FL | IRVINE | CA | 92614-2530 |
| SPECTRUM GATEWAY HOTELS | 520 NEWPORT CENTER DR STE 600 | NEWPORT BEACH | CA | 92660-7037 |
| SPECTRUM HOTEL GROUP LLC | 1360 E 9TH ST STE 300 | CLEVELAND | OH | 44114-1730 |
| PPC IRVINE CENTER | 7700 IRVINE CENTER DR | IRVINE | CA | 92618-2923 |
| M4 PACIFICA LLC | 4450 MACARTHUR BLVD # FL2ND | NEWPORT BEACH | CA | 92660-2045 |
| CANOPI LLC | 35 MARBLE SANDS | NEWPORT BEACH | CA | 92660-9100 |
| NEW PHASE FT LLC | 108 PACIFICA STE 300 | IRVINE | CA | 92618-7435 |
| FOOTHILL EASTERN TRANSPORTATION CORRIDOR | 125 PACIFICA STE 100 | IRVINE | CA | 92618-3324 |
| HSRE IRVINE MOB LLC | 444 W LAKE ST STE 2100 | CHICAGO | IL | 60606-0069 |

# 3. Opportunity Sites Letter examples, dated March 9, 2021

Community Development cityofirvine.org
City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 9, 2021

NRG HOLDING LIMITED
3270 BEAUDRY TER
GLENDALE, CA 91208

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under State mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

Your property at 12 Mauchley has been initially identified as a potential opportunity site for residential development. The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest.

The City respectfully requests your consideration for potential future residential development on your property. We would like to discuss this opportunity in further detail. Please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 31, 2021. If you are interested, please do not let this opportunity pass you by. If you are not interested, we would like to hear from you to remove your property from the list. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael
Director of Community Development

**主旨： 爾灣市住宅要素更新 - 未來住宅用地**

尊敬的爾灣市業主：

爾灣市正著手更新 2021-2029 年規劃期的住宅要素，也即是第 6 次住宅要素更新。根據州要求，我們必須規劃大量未來住宅單元，其中包括平價住宅。在第 6 次更新中，我們致力於物色可因應未來住宅開發的潛在用地。如需關於住宅要素更新的更多資訊，請造訪 www.cityofirvine.org/housingelementupdate。

您位於 12 Mauchley 的物業已初步認定為住宅開發的潛在用地。本市目前不考慮購買您的物業以轉為住宅。我們只是在嘗試物色適合或可以用於未來住宅開發的用地，暫不考慮目前分區。雖然尚未做出任何承諾或決策，我們仍希望徵詢您的意向。

本市懇請您考慮針對您物業的未來潛在住宅開發工作。我們很樂意與您深入討論此機會。請透過電子郵件或電話方式與我們聯繫：


**CHARLES KOVAC**
住宅管理師
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
高級規劃師
mchao@cityofirvine.org
949-724-6395

或郵寄至： Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


我們期盼在 2021 年 3 月 31 日前收到您的答覆。如果對此有興趣，切勿錯過此機會。如果對此無興趣，也請做出回應，以便我們將您的物業從清單中移出。請在方便時儘早與我們聯繫。

感謝撥冗關注此事。

謹上
Pete Carmichael
社區發展主任

**主题： 尔湾住房要素更新 - 未来住房用地**

尊敬的尔湾业主：

尔湾市正着手更新 2021-2029 年规划期的“住房要素”，也即是第 6 次住房要素更新。根据本州规定，我们必须规划大量未来住房单位，其中包括经济适用房。在第 6 次更新中，我们致力于物色可供未来住房开发的潜在用地。如需有关住房要素更新的更多信息，请访问 www.cityofirvine.org/housingelementupdate。

您位于 12 Mauchley 的物业已被初步认定为住房开发潜在用地。本市目前不考虑收购您的物业以转为住房。我们只是在尝试物色适合或可以用于未来住房开发的用地，暂不考虑现有分区。虽然尚未做出任何承诺或决策，我们仍希望征询您的意向。

本市敬请您考虑针对您物业的未来潜在住房开发工作。我们很乐意与您深入讨论此机会。请通过电子邮件或电话方式与我们联系：


**CHARLES KOVAC**
住房管理员
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
高级规划师
mchao@cityofirvine.org
949-724-6395

或寄信至： Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


我们期盼在 2021 年 3 月 31 日前收到您的回信。如果对此感兴趣，切勿错过此机会。如果无意于此，也恳请您做出答复，以便我们将您的物业从清单中移除。请在方便时尽快与我们联系。

感谢拨冗关注此事。

恭祝康泰
Pete Carmichael
社区发展主任

사안: **Irvine 주택 요건 업데이트 – 향후 주거용 용지**

Irvine 부동산 소유주님께

Irvine 시는 2021~2029 계획 기간의 주택 요건을 업데이트하고 있습니다. 6 차 주택 요건 업데이트에서도 관련 내용을 참조하실 수 있습니다. 주에서 지시하는 바에 따라, 저소득층용 주택을 포함해 일정한 수의 향후 주택 세대를 계획해야 합니다. 6 차 업데이트의 일환으로 추후 주거용 개발에 적합한 잠재적 용지를 파악하는 작업을 시행하고 있습니다. 주택 요건 업데이트에 대한 자세한 사항은 웹사이트 www.cityofirvine.org/housingelementupdate 를 참고하십시오.

12 Mauchley 에 위치한 귀하의 부동산은 주택 개발에 적합한 잠재적 용지로 초기 확인되었습니다. 시에서는 귀하의 부동산을 주거용 전환을 위해 매입하려는 의사가 없습니다. 당국의 의도는 현 구역 구분과 관계없이 향후 택지 개발이 가능하거나 적합한 잠재적 택지를 파악하고자 하는 것입니다. 어떠한 책무가 발생하거나 판단이 결정되는 것은 아니나, 귀하의 생각에 대해 알아보고자 합니다.

시 당국에서는 귀하가 소유하신 부동산의 향후 잠재적 택지 개발에 있어 어떻게 고려하시는지 여쭙고 싶습니다. 해당 건에 대해 자세한 사항을 논의하려고 합니다. 다음 연락처로 이메일 또는 전화를 통해 연락해 주십시오.

**CHARLES KOVAC**
주택 담당 책임자
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
선임 기획자
mchao@cityofirvine.org
949-724-6395

우편 연락처: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

2021 년 3 월 31 일까지 연락해 주시면 감사하겠습니다. 해당 건에 관심이 있으신 경우, 기회를 놓치지 마십시오. 해당 건에 관심이 없으시다면, 직접 연락하셔서 귀하의 부동산을 목록에서 삭제하겠다는 의사를 밝혀주십시오. 가능한 한 빠른 시일 내에 연락해 주십시오.

해당 사안에 소중한 시간과 관심을 가져 주셔서 감사합니다.

감사합니다.
Pete Carmichael
커뮤니티 개발국장

**件名： アーバイン住宅エレメントの更新 - 将来の宅地計画**

アーバインに土地を所有する皆様：

アーバイン市は 2021 年～2029 年を計画期間として、「第 6 期住宅エレメントの更新」という名称で住宅エレメントの更新を行っています。州の要請に基づき、将来的に、低価格住宅を含め大規模な住宅建築を計画する必要があります。第 6 期の更新の一環として、市では将来の住宅開発に対応できる潜在的な宅地の特定を行っています。住宅エレメントの更新作業については、www.cityofirvine.org/housingelementupdate をご覧ください。

貴殿の所有する 12 Mauchley の土地が、住宅開発の対象宅地として特定されています。市は宅地への転用を目的とした土地の買収は予定していません。現在の区画に関係なく、将来的に宅地開発に適している、または可能な土地を特定している段階です。現段階では確約や決定事項は一切ありませんが、この計画に関心があるかどうかをお聞かせいただきたくご連絡させていただきました。

貴殿の所有する土地を活かした将来の住宅開発計画についてご検討いただければ幸いです。この機会について、詳しくお話しできればと思います。メールまたは電話にてご連絡ください。

**CHARLES KOVAC**
住宅管理者
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
シニア・プランナー
mchao@cityofirvine.org
949-724-6395

お手紙の場合：
Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

2021 年 3 月 31 日までにご返信いただけましたら幸いです。ご興味がおありの場合は、この機会を逃さないよう、できるだけお早めにご連絡ください。ご興味がない場合には、計画のリストから貴殿の土地を除外いたしますので、お知らせいただけますでしょうか。

お手数をおかけしますが、よろしくお願いいたします。

敬具
Pete Carmichael
コミュニティ開発責任者

**Chủ đề:** **Cập Nhật Yếu Tố Nhà Lưu Trú ở Irvine – Những Khu Vực Nhà Lưu Trú Tương Lai**

Kính gửi Chủ Hộ tại Irvine:

Thành Phố Irvine đang trong quá trình cập nhật Yếu Tố Nhà Ở của mình cho giai đoạn quy hoạch năm 2021-2029, hay còn gọi là Cập Nhật Yếu Tố Nhà Ở chu kỳ 6. Theo yêu cầu của Tiểu Bang, chúng tôi phải quy hoạch một số lượng đáng kể đơn vị nhà ở trong tương lai, bao gồm nhà ở giá rẻ. Là một phần trong quá trình cập nhật chu kỳ 6, chúng tôi đang xác định các địa điểm tiềm năng có thể điều chỉnh thích hợp với sự phát triển khu dân cư sau này. Để biết thêm thông tin về những nỗ lực cập nhật Yếu Tố Nhà Ở, vui lòng vào trang www.cityofirvine.org/housingelementupdate.

Bất động sản của quý vị tại 12 Mauchley ban đầu được xác định là địa điểm có cơ hội tiềm năng phát triển khu dân cư. Thành Phố không xem xét tiếp quản tài sản của quý vị để chuyển sang nhà ở. Chúng tôi chỉ đơn giản cố gắng xác định những địa điểm có khả năng thích hợp hoặc khả năng để phát triển khu dân cư trong tương lai cho dù việc phân vùng hiện tại là gì. Mặc dù chưa có sự cam kết hay quyết định nào, chúng tôi muốn đánh giá sự quan tâm của quý vị.

Thành Phố trân trọng đề nghị quý vị xem xét sự phát triển khu dân cư tiềm năng trong tương lên trên cơ ngơi tài sản của quý vị. Chúng tôi muốn thảo luận cơ hội này một cách chi tiết hơn. Vui lòng liên hệ với chúng tôi qua email hoặc điện thoại theo số:

**CHARLES KOVAC**
Quản Lý Nhà Ở
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Nhân Viên Quy Hoạch Cấp Cao
mchao@cityofirvine.org
949-724-6395

Hoặc qua thư từ gửi đến: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

Chúng tôi hy vọng nhận được thông tin từ quý vị trước 31 tháng Ba, 2021. Nếu quý vị quan tâm, xin đừng để cơ hội này trôi qua. Nếu quý vị không quan tâm, chúng tôi muốn biết thông tin từ quý vị để loại bỏ cơ sở của quý vị ra khỏi danh sách. Vui lòng liên hệ với chúng tôi khi thuận tiện với quý vị nhất.

Cám ơn quý vị đã dành thời gian và quan tâm đến vấn đề này.

Trân trọng kính chào,
Pete Carmichael
Giám Đốc Phát Triển Cộng Đồng

**Asunto: Actualización del informe de vivienda de Irvine: sitios de vivienda futuros**

Estimado propietario de Irvine:

La Ciudad de Irvine está en proceso de actualizar su informe de vivienda para el periodo de planificación de 2021 a 2029, conocido también como el 6.º ciclo de actualización del informe de vivienda. Por orden del estado, debemos planificar un número considerable de unidades de vivienda futuras, incluyendo viviendas asequibles. Como parte del 6.º ciclo de actualización, estamos trabajando para identificar sitios que podrían ser adecuados para el desarrollo residencial en el futuro. Para obtener más información sobre los esfuerzos de actualización del informe de vivienda, visite www.cityofirvine.org/housingelementupdate.

Su propiedad de 12 Mauchley se identificó inicialmente como un sitio de oportunidad potencial para desarrollo residencial. La Ciudad no está considerando comprar su propiedad para convertirla en vivienda. Solo estamos intentando identificar sitios en los que el desarrollo residencial podría ser adecuado o viable en el futuro, independientemente de la zonificación actual. Aunque no se tomó ninguna decisión ni se hizo ningún compromiso, queremos saber su interés.

La Ciudad solicita respetuosamente su consideración de un posible desarrollo residencial futuro en su propiedad. Queremos hablar con usted sobre esta oportunidad detalladamente. Comuníquese con nosotros por correo electrónico o por teléfono a:

**CHARLES KOVAC**
Administrador de viviendas
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Coordinadora sénior
mchao@cityofirvine.org
949-724-6395

O envíe una carta a: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

Esperamos tener una respuesta suya antes del 31 de marzo de 2021. Si está interesado, no deje pasar esta oportunidad. Si no está interesado, queremos tener una respuesta suya para quitar su propiedad de la lista. Comuníquese con nosotros en cuanto pueda.

Gracias por su tiempo y su atención a este asunto.

Atentamente,
Pete Carmichael
Director de Desarrollo de la Comunidad

**موضوع:** **به‌روزرسانی بخش مسکن Irvine – مکان‌های مسکن آینده**

مالک گرامی ملک Irvine:

شهر Irvine در مرحله به‌روزرسانی بخش مسکن خود برای دوره برنامه‌ریزی 2021-2029 است که از آن به‌عنوان به‌روزرسانی بخش مسکن چرخه 6 ام نیز یاد می‌شود. مطابق با حکم دولت، ما موظف هستیم برای ساخت تعداد قابل توجهی از واحدهای مسکونی آینده، از جمله مسکن ارزان‌قیمت، برنامه‌ریزی کنیم. به عنوان بخشی از به‌روزرسانی چرخه 6 ام، ما در تلاشیم مکان‌های بالقوه‌ای را شناسایی کنیم که ممکن است در آینده از نظر رشد مسکونی مناسب باشند. برای کسب اطلاعات بیشتر در خصوص اقدامات به‌روزرسانی بخش مسکن، لطفاً به سایت www.cityofirvine.org/housingelementupdate مراجعه کنید.

در وهله اول، ملک شما واقع در 12 Mauchley به‌عنوان یک موقعیت بالقوه برای رشد مسکونی شناخته شده است. این شهر در نظر ندارد ملک شما را برای تبدیل به مسکن خریداری کند. ما به واقع در حال تلاش برای شناسایی مکان های احتمالی هستیم که امکان رشد مسکونی در آینده صرف‌نظر از منطقه‌بندی فعلی مناسب یا امکان‌پذیر باشد. با وجود اینکه هیچ تعهد و تصمیمی اتخاذ نشده است، ما می‌خواهیم علاقه شما را بسنجیم.

این شهر احتراماً خواستار توجه شما برای رشد بالقوه مسکونی ملک شما در آینده است. مایلیم جزئیات بیشتری در مورد این فرصت مطرح کنیم. لطفا از طریق ایمیل یا تلفن با ما تماس بگیرید:

**CHARLES KOVAC**
مدیر امور اسکان
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
برنامه‌ریز ارشد
mchao@cityofirvine.org
949-724-6395

یا از طریق ارسال نامه به:
Charles Kovac, Housing Administrator
City of Irvine
Civic Center Plaza 1
Irvine, CA 92606

امیدواریم تا 31 مارس 2021 به ما اطلاع دهید. در صورت تمایل، لطفاً این فرصت را از دست ندهید. در صورت عدم تمایل، ما را مطلع کنید تا ملکتان را از لیست خذف نماییم. لطفاً در اولین فرصت با ما تماس بگیرید.

با تشکر از وقت و توجهتان به این موضوع.

با احترام،
Pete Carmichael
مدیر توسعه جامعه

**الموضوع:** **تحديث حول بند الإسكان في مدينة إرفاين - مواقع الإسكان المستقبلية**

عزيزي السيد/السيدة مالك(ة) العقار في إرفاين:

تعمل مدينة إرفاين على تحديث بند الإسكان لفترة التخطيط الممتدة بين 2021 و2029، التي يشار إليها أيضًا باسم تحديث بند الإسكان للدورة السادسة. بموجب تكليف الولاية، يجب علينا التخطيط لعدد كبير من الوحدات السكنية المستقبلية، بما في ذلك الإسكان الميسور التكلفة. وكجزء من تحديث الدورة السادسة، نعمل على تحديد المواقع المحتملة التي يمكنها استيعاب التطوير السكني في المستقبل. للحصول على معلومات إضافية حول جهود تحديث بند الإسكان، يرجى زيارة www.cityofirvine.org/housingelementupdate.

تم تحديد الممتلكات الخاصة بك في 12 Mauchley باعتباره مبدئيًا أحد مواقع الفرص المحتملة للتطوير السكني. لا تفكر المدينة في الاستحواذ على عقارك لتحويله إلى أحد مواقع الإسكان. بل نحاول ببساطة تحديد المواقع المحتملة التي قد تشكل فرصة محتملة أو قد تكون مناسبة للتطوير السكني في المستقبل بغض النظر عن تقسيم المناطق الحالي. وبالرغم من عدم اتخاذ أي التزامات أو قرارات، نود معرفة مدى اهتمامك.

وتطلب منك المدينة أن تتفضل بالنظر في إمكانية التطوير السكني المستقبلي المحتمل لممتلكاتك. ونود مناقشة هذه الفرصة معك بمزيد من التفصيل. يرجى الاتصال بنا عبر البريد الإلكتروني أو الهاتف على:

**تشارلز كوفاك**
مسؤول الإسكان
CKovac@cityofirvine.org
949-724-7452

**ميليسا تشاو**
مسؤول تخطيط أول
mchao@cityofirvine.org
949-724-6395

أو عبر خطاب إلى:
Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

نتطلع إلى أن نسمع منك بحلول 31 مارس 2021. إذا كنت مهتمًا، فيرجى ألا تدع هذه الفرصة تفوتك. إذا لم تكن مهتمًا، فنود أن نسمع منك لإزالة ممتلكاتك من القائمة. يرجى التواصل معنا في أقرب وقت ممكن.

نشكرك على وقتك واهتمامك بهذه المسألة.

مع خالص الاحترام،
بيت كارمايكل
مدير التنمية المجتمعية

Community Development cityofirvine.org
City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 9, 2021

Von Karman-Main Street
2323 Main St.
Irvine, CA 92614

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under State mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

Your property at 2323 Main St. has been initially identified as a potential opportunity site for residential development. The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest.

The City respectfully requests your consideration for potential future residential development on your property. We would like to discuss this opportunity in further detail. Please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 31, 2021. If you are interested, please do not let this opportunity pass you by. If you are not interested, we would like to hear from you to remove your property from the list. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael
Director of Community Development

主旨： **爾灣市住宅要素更新 - 未來住宅用地**

尊敬的爾灣市業主：

爾灣市正著手更新 2021-2029 年規劃期的住宅要素，也即是第 6 次住宅要素更新。根據州要求，我們必須規劃大量未來住宅單元，其中包括平價住宅。在第 6 次更新中，我們致力於物色可因應未來住宅開發的潛在用地。如需關於住宅要素更新的更多資訊，請造訪 www.cityofirvine.org/housingelementupdate。

您位於 2323 Main St. 的物業已初步認定為住宅開發的潛在用地。本市目前不考慮購買您的物業以轉為住宅。我們只是在嘗試物色適合或可以用於未來住宅開發的用地，暫不考慮目前分區。雖然尚未做出任何承諾或決策，我們仍希望徵詢您的意向。

本市懇請您考慮針對您物業的未來潛在住宅開發工作。我們很樂意與您深入討論此機會。請透過電子郵件或電話方式與我們聯繫：


**CHARLES KOVAC**
住宅管理師
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
高級規劃師
mchao@cityofirvine.org
949-724-6395

或郵寄至： Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


我們期盼在 2021 年 3 月 31 日前收到您的答覆。如果對此有興趣，切勿錯過此機會。如果對此無興趣，也請做出回應，以便我們將您的物業從清單中移出。請在方便時儘早與我們聯繫。

感謝撥冗關注此事。

謹上
Pete Carmichael
社區發展主任

**主题：　　尔湾住房要素更新 - 未来住房用地**

尊敬的尔湾业主：

尔湾市正着手更新 2021-2029 年规划期的“住房要素”，也即是第 6 次住房要素更新。根据本州规定，我们必须规划大量未来住房单位，其中包括经济适用房。在第 6 次更新中，我们致力于物色可供未来住房开发的潜在用地。如需有关住房要素更新的更多信息，请访问 www.cityofirvine.org/housingelementupdate。

您位于 2323 Main St. 的物业已被初步认定为住房开发潜在用地。本市目前不考虑收购您的物业以转为住房。我们只是在尝试物色适合或可以用于未来住房开发的用地，暂不考虑现有分区。虽然尚未做出任何承诺或决策，我们仍希望征询您的意向。

本市敬请您考虑针对您物业的未来潜在住房开发工作。我们很乐意与您深入讨论此机会。请通过电子邮件或电话方式与我们联系：


**CHARLES KOVAC**
住房管理员
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
高级规划师
mchao@cityofirvine.org
949-724-6395

或寄信至： Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606


我们期盼在 2021 年 3 月 31 日前收到您的回信。如果对此感兴趣，切勿错过此机会。如果无意于此，也恳请您做出答复，以便我们将您的物业从清单中移除。请在方便时尽快与我们联系。

感谢拨冗关注此事。

恭祝康泰
Pete Carmichael
社区发展主任

**사안: Irvine 주택 요건 업데이트 – 향후 주거용 용지**

Irvine 부동산 소유주님께

Irvine 시는 2021~2029 계획 기간의 주택 요건을 업데이트하고 있습니다. 6 차 주택 요건 업데이트에서도 관련 내용을 참조하실 수 있습니다. 주에서 지시하는 바에 따라, 저소득층용 주택을 포함해 일정한 수의 향후 주택 세대를 계획해야 합니다. 6 차 업데이트의 일환으로 추후 주거용 개발에 적합한 잠재적 용지를 파악하는 작업을 시행하고 있습니다. 주택 요건 업데이트에 대한 자세한 사항은 웹사이트 www.cityofirvine.org/housingelementupdate 를 참고하십시오.

2323 Main St. 에 위치한 귀하의 부동산은 주택 개발에 적합한 잠재적 용지로 초기 확인되었습니다. 시에서는 귀하의 부동산을 주거용 전환을 위해 매입하려는 의사가 없습니다. 당국의 의도는 현 구역 구분과 관계없이 향후 택지 개발이 가능하거나 적합한 잠재적 택지를 파악하고자 하는 것입니다. 어떠한 책무가 발생하거나 판단이 결정되는 것은 아니나, 귀하의 생각에 대해 알아보고자 합니다.

시 당국에서는 귀하가 소유하신 부동산의 향후 잠재적 택지 개발에 있어 어떻게 고려하시는지 여쭙고 싶습니다. 해당 건에 대해 자세한 사항을 논의하려고 합니다. 다음 연락처로 이메일 또는 전화를 통해 연락해 주십시오.

**CHARLES KOVAC**
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우편 연락처: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

2021 년 3 월 31 일까지 연락해 주시면 감사하겠습니다. 해당 건에 관심이 있으신 경우, 기회를 놓치지 마십시오. 해당 건에 관심이 없으시다면, 직접 연락하셔서 귀하의 부동산을 목록에서 삭제하겠다는 의사를 밝혀주십시오. 가능한 한 빠른 시일 내에 연락해 주십시오.

해당 사안에 소중한 시간과 관심을 가져 주셔서 감사합니다.

감사합니다.
Pete Carmichael
커뮤니티 개발국장

**件名：　　アーバイン住宅エレメントの更新 - 将来の宅地計画**

アーバインに土地を所有する皆様：

アーバイン市は 2021 年～2029 年を計画期間として、「第 6 期住宅エレメントの更新」という名称で住宅エレメントの更新を行っています。州の要請に基づき、将来的に、低価格住宅を含め大規模な住宅建築を計画する必要があります。第 6 期の更新の一環として、市では将来の住宅開発に対応できる潜在的な宅地の特定を行っています。住宅エレメントの更新作業については、www.cityofirvine.org/housingelementupdate をご覧ください。

貴殿の所有する 2323 Main St. の土地が、住宅開発の対象宅地として特定されています。市は宅地への転用を目的とした土地の買収は予定していません。現在の区画に関係なく、将来的に宅地開発に適している、または可能な土地を特定している段階です。現段階では確約や決定事項は一切ありませんが、この計画に関心があるかどうかをお聞かせいただきたくご連絡させていただきました。

貴殿の所有する土地を活かした将来の住宅開発計画についてご検討いただければ幸いです。この機会について、詳しくお話しできればと思います。メールまたは電話にてご連絡ください。

**CHARLES KOVAC**
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**MELISSA CHAO**
シニア・プランナー
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949-724-6395

お手紙の場合：　Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

2021 年 3 月 31 日までにご返信いただけましたら幸いです。ご興味がおありの場合は、この機会を逃さないよう、できるだけお早めにご連絡ください。ご興味がない場合には、計画のリストから貴殿の土地を除外いたしますので、お知らせいただけますでしょうか。

お手数をおかけしますが、よろしくお願いいたします。

敬具
Pete Carmichael
コミュニティ開発責任者

**Chủ đề:　Cập Nhật Yếu Tố Nhà Lưu Trú ở Irvine – Những Khu Vực Nhà Lưu Trú Tương Lai**

Kính gửi Chủ Hộ tại Irvine:

Thành Phố Irvine đang trong quá trình cập nhật Yếu Tố Nhà Ở của mình cho giai đoạn quy hoạch năm 2021-2029, hay còn gọi là Cập Nhật Yếu Tố Nhà Ở chu kỳ 6. Theo yêu cầu của Tiểu Bang, chúng tôi phải quy hoạch một số lượng đáng kể đơn vị nhà ở trong tương lai, bao gồm nhà ở giá rẻ. Là một phần trong quá trình cập nhật chu kỳ 6, chúng tôi đang xác định các địa điểm tiềm năng có thể điều chỉnh thích hợp với sự phát triển khu dân cư sau này. Để biết thêm thông tin về những nỗ lực cập nhật Yếu Tố Nhà Ở, vui lòng vào trang www.cityofirvine.org/housingelementupdate.

Bất động sản của quý vị tại 2323 Main St. ban đầu được xác định là địa điểm có cơ hội tiềm năng phát triển khu dân cư. Thành Phố không xem xét tiếp quản tài sản của quý vị để chuyển sang nhà ở. Chúng tôi chỉ đơn giản cố gắng xác định những địa điểm có khả năng thích hợp hoặc khả năng để phát triển khu dân cư trong tương lai cho dù việc phân vùng hiện tại là gì. Mặc dù chưa có sự cam kết hay quyết định nào, chúng tôi muốn đánh giá sự quan tâm của quý vị.

Thành Phố trân trọng đề nghị quý vị xem xét sự phát triển khu dân cư tiềm năng trong tương lên trên cơ ngơi tài sản của quý vị. Chúng tôi muốn thảo luận cơ hội này một cách chi tiết hơn. Vui lòng liên hệ với chúng tôi qua email hoặc điện thoại theo số:

**CHARLES KOVAC**
Quản Lý Nhà Ở
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Nhân Viên Quy Hoạch Cấp Cao
mchao@cityofirvine.org
949-724-6395

Hoặc qua thư từ gửi đến: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

Chúng tôi hy vọng nhận được thông tin từ quý vị trước 31 tháng Ba, 2021. Nếu quý vị quan tâm, xin đừng để cơ hội này trôi qua. Nếu quý vị không quan tâm, chúng tôi muốn biết thông tin từ quý vị để loại bỏ cơ sở của quý vị ra khỏi danh sách. Vui lòng liên hệ với chúng tôi khi thuận tiện với quý vị nhất.

Cám ơn quý vị đã dành thời gian và quan tâm đến vấn đề này.

Trân trọng kính chào,
Pete Carmichael
Giám Đốc Phát Triển Cộng Đồng

**Asunto: Actualización del informe de vivienda de Irvine: sitios de vivienda futuros**

Estimado propietario de Irvine:

La Ciudad de Irvine está en proceso de actualizar su informe de vivienda para el periodo de planificación de 2021 a 2029, conocido también como el 6.º ciclo de actualización del informe de vivienda. Por orden del estado, debemos planificar un número considerable de unidades de vivienda futuras, incluyendo viviendas asequibles. Como parte del 6.º ciclo de actualización, estamos trabajando para identificar sitios que podrían ser adecuados para el desarrollo residencial en el futuro. Para obtener más información sobre los esfuerzos de actualización del informe de vivienda, visite www.cityofirvine.org/housingelementupdate.

Su propiedad de 2323 Main St. se identificó inicialmente como un sitio de oportunidad potencial para desarrollo residencial. La Ciudad no está considerando comprar su propiedad para convertirla en vivienda. Solo estamos intentando identificar sitios en los que el desarrollo residencial podría ser adecuado o viable en el futuro, independientemente de la zonificación actual. Aunque no se tomó ninguna decisión ni se hizo ningún compromiso, queremos saber su interés.

La Ciudad solicita respetuosamente su consideración de un posible desarrollo residencial futuro en su propiedad. Queremos hablar con usted sobre esta oportunidad detalladamente. Comuníquese con nosotros por correo electrónico o por teléfono a:

**CHARLES KOVAC**
Administrador de viviendas
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Coordinadora sénior
mchao@cityofirvine.org
949-724-6395

O envíe una carta a: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

Esperamos tener una respuesta suya antes del 31 de marzo de 2021. Si está interesado, no deje pasar esta oportunidad. Si no está interesado, queremos tener una respuesta suya para quitar su propiedad de la lista. Comuníquese con nosotros en cuanto pueda.

Gracias por su tiempo y su atención a este asunto.

Atentamente,
Pete Carmichael
Director de Desarrollo de la Comunidad

**موضوع:** **به‌روزرسانی بخش مسکن Irvine – مکان‌های مسکن آینده**

مالک گرامی ملک Irvine:

شهر Irvine در مرحله به‌روزرسانی بخش مسکن خود برای دوره برنامه‌ریزی 2021-2029 است که از آن به‌عنوان به‌روزرسانی بخش مسکن چرخه 6 ام نیز یاد می‌شود. مطابق با حکم دولت، ما موظف هستیم برای ساخت تعداد قابل توجهی از واحدهای مسکونی آینده، از جمله مسکن ارزان‌قیمت، برنامه‌ریزی کنیم. به عنوان بخشی از به‌روزرسانی چرخه 6 ام، ما در تلاشیم مکان‌های بالقوه‌ای را شناسایی کنیم که ممکن است در آینده از نظر رشد مسکونی مناسب باشند. برای کسب اطلاعات بیشتر در خصوص اقدامات به‌روزرسانی بخش مسکن، لطفاً به سایت www.cityofirvine.org/housingelementupdate مراجعه کنید.

در وهله اول، ملک شما واقع در 2323 Main St. به‌عنوان یک موقعیت بالقوه برای رشد مسکونی شناخته شده است. این شهر در نظر ندارد ملک شما را برای تبدیل به مسکن خریداری کند. ما به واقع در حال تلاش برای شناسایی مکان های احتمالی هستیم که امکان رشد مسکونی در آینده صرف‌نظر از منطقه‌بندی فعلی مناسب یا امکان‌پذیر باشد. با وجود اینکه هیچ تعهد و تصمیمی اتخاذ نشده است، ما می‌خواهیم علاقه شما را بسنجیم.

این شهر احتراماً خواستار توجه شما برای رشد بالقوه مسکونی ملک شما در آینده است. مایلیم جزئیات بیشتری در مورد این فرصت مطرح کنیم. لطفا از طریق ایمیل یا تلفن با ما تماس بگیرید:

**CHARLES KOVAC**
مدیر امور اسکان
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
برنامه‌ریز ارشد
mchao@cityofirvine.org
949-724-6395

یا از طریق ارسال نامه به:
Charles Kovac, Housing Administrator
City of Irvine
Civic Center Plaza 1
Irvine, CA 92606

امیدواریم تا 31 مارس 2021 به ما اطلاع دهید. در صورت تمایل، لطفاً این فرصت را از دست ندهید. در صورت عدم تمایل، ما را مطلع کنید تا ملکتان را از لیست خذف نماییم. لطفاً در اولین فرصت با ما تماس بگیرید.

با تشکر از وقت و توجهتان به این موضوع.

با احترام،
Pete Carmichael
مدیر توسعه جامعه

**الموضوع:** **تحديث حول بند الإسكان في مدينة إرفاين - مواقع الإسكان المستقبلية**

عزيزي السيد/السيدة مالك(ة) العقار في إرفاين:

تعمل مدينة إرفاين على تحديث بند الإسكان لفترة التخطيط الممتدة بين 2021 و2029، التي يشار إليها أيضًا باسم تحديث بند الإسكان للدورة السادسة. بموجب تكليف الولاية، يجب علينا التخطيط لعدد كبير من الوحدات السكنية المستقبلية، بما في ذلك الإسكان الميسور التكلفة. وكجزء من تحديث الدورة السادسة، نعمل على تحديد المواقع المحتملة التي يمكنها استيعاب التطوير السكني في المستقبل. للحصول على معلومات إضافية حول جهود تحديث بند الإسكان، يرجى زيارة www.cityofirvine.org/housingelementupdate.

تم تحديد الممتلكات الخاصة بك في 2323 Main St. باعتباره مبدئيًا أحد مواقع الفرص المحتملة للتطوير السكني. لا تفكر المدينة في الاستحواذ على عقارك لتحويله إلى أحد مواقع الإسكان. بل نحاول ببساطة تحديد المواقع المحتملة التي قد تشكل فرصة محتملة أو قد تكون مناسبة للتطوير السكني في المستقبل بغض النظر عن تقسيم المناطق الحالي. وبالرغم من عدم اتخاذ أي التزامات أو قرارات، نود معرفة مدى اهتمامك.

وتطلب منك المدينة أن تتفضل بالنظر في إمكانية التطوير السكني المستقبلي المحتمل لممتلكاتك. ونود مناقشة هذه الفرصة معك بمزيد من التفصيل. يرجى الاتصال بنا عبر البريد الإلكتروني أو الهاتف على:

**تشارلز كوفاك**
مسؤول الإسكان
CKovac@cityofirvine.org
949-724-7452

**ميليسا تشاو**
مسؤول تخطيط أول
mchao@cityofirvine.org
949-724-6395

أو عبر خطاب إلى:
Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

نتطلع إلى أن نسمع منك بحلول 31 مارس 2021. إذا كنت مهتمًا، فيرجى ألا تدع هذه الفرصة تفوتك. إذا لم تكن مهتمًا، فنود أن نسمع منك لإزالة ممتلكاتك من القائمة. يرجى التواصل معنا في أقرب وقت ممكن.

نشكرك على وقتك واهتمامك بهذه المسألة.

مع خالص الاحترام،
بيت كارمايكل
مدير التنمية المجتمعية

# 4. Opportunity Sites Letter Mailing List (30)

| PA | Project Name | Project Address (approximate range) | Tract | Lot | APN | Property Owner Name | Street Address | City | State | Zip Code |
|---|---|---|---|---|---|---|---|---|---|---|
| 36 | | ? | 28-23-24 | 2 | 430-163-09 | NEXGEN PHARMA INC | 46 CORPORATE PARK STE 100 | IRVINE | CA | 92606 |
| 36 | Deft | 17451 Von Karman Ave | 45/42 | 3 | 435-111-06 | DEFT INC | 1611 E 4TH ST, STE 200 | SANTA ANA | CA | 92701 |
| 36 | NEC Von Karman & Main | 2323 Main St | 77/88 | 1 | 435-151-61 | VON KARMAN-MAIN STREET | 2323 MAIN ST | IRVINE | CA | 92614 |
| 10 | | 15058 Harvard Ave | 1/88 | 190 | 434-051-03 | SBE | | | | |
| 10 | | ? | 1/88 | 188 | 449-015-28 | STATE OF CALIFORNIA | 3347 MICHELSON DR # 100 | IRVINE | CA | 92612 |
| 11 | Heritage Point Apartments | 1 - 23 Topeka | 9405 | 1 | 449-462-24 | HERTIAGE POINT INVEST CO | 949 S COAST DR #600 | COSTA MESA | CA | 92626 |
| 12 | | ? | 1/88 | 246 | 466-011-38 | CITY OF IRVINE | PO BOX 19575 | IRVINE | CA | 92623 |
| 12 | | ? | 1/88 | 246 | 466-011-38 | CLEAN ENERGY | 4675 MACARTHUR CT, STE 800 | NEWPORT BEACH | CA | 92660 |
| 15 | | ? | 1/88 | 202 | 452-111-48 | ASLAN COMPANIES INC | 14252 CULVER DR STE A-305 | IRVINE | CA | 92604 |
| 19 | Bommers! Irvine Amusement Park | 3405 & 3409 Michelson Dr | 113/8-10 | 1 | 453-251-09 | IRVINE RECREATION PARK | 3415 MICHELSON DR | IRVINE | CA | 92612 |
| 19 | Bommers! Irvine Amusement Park | 3405 Michelson Dr | 113/8-10 | 1 | 453-251-04 | IRVINE RECREATION PARK | 3415 MICHELSON DR | IRVINE | CA | 92612 |
| 32 | Ada Technology Park | 20 Ada | 87-LL-63 | 1 | 590-143-01 | LASERGRAPHICS INC | 20 ADA | IRVINE | CA | 92618 |
| 32 | | 22 Mauchley | 87-LL-63 | 2 | 590-143-05 | MAUCHLY PROPERTIES LLC | 31906 VIA COYOTE | COTO DE CAZA | CA | 92679 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837053 | NRG HOLDING LIMITED | 3270 BEAUDRY TER | GLENDALE | CA | 91208 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837054 | MAUCHLY CR LLC | 12 MAUCHLY, UNIT B | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837055 | ZELEZNIK, LOU | 29862 HIDDENWOOD | LAGUNA NIGUEL | CA | 92677 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837056 | 12 MAUCHLY LLC | 3002 DOW AVE, STE 218 | TUSTIN | CA | 92780 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837057 | COSMETIC CAR CARE INC | 12 MAUCHLY BLDG F | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837058 | MARCUS, JAMES ARTHUR TR | 300 VIA LOS TILOS | SAN CLEMENTE | CA | 92673 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837059 | GUTIERREZ, ALFREDO ELIAS | 12 MAUCHLY #G | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837060 | MOORE, JOHN BRADLEY | 1025 WYKOFF WAY | LAGUNA BEACH | CA | 92651 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837061 | MAUCHLY IRVINE PROPERTY | 12 MAUCHLY #I | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837062 | KALWANI, RAMESH U TR | 12 MAUCHLY, STE J | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837063 | EKIMAE LLC | 12 MAUCHLY, UNIT 102 | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837064 | LAGUNA CANYON INVESTMENT | 10 SYCAMORE CANYON DR | DOVE CANYON | CA | 92679 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837065 | GENERAL CORPORATION | 12 MAUCHLY, UNIT M | IRVINE | CA | 92618 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837066 | OONG, WILLIAM TR | PO BOX 54272 | IRVINE | CA | 92619 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837067 | MATSING INVESTMENTS LLC | 5 FRANKLIN | IRVINE | CA | 92620 |
| 32 | Southpointe Business Center | 12 Mauchley | 258-19 | 1 | 93837068 | LAGUNA CANYON INVESTMENT | 10 SYCAMORE CANYON DR | DOVE CANYON | CA | 92679 |
| 34 | | 501 Wald | 97-194 | 3 | 588-202-12 | SBE | | | | |
| 35 | Albertsons WH & distribution | 9300 Toledo Way | 80-619 | 1 | 591-061-08 | CENTERPOINT PROPERTIES TRUST TR ALBERTSONS LLC | 1371 OAKLAND BLVD STE 200 | WALNUT CREEK | CA | 94596 |
| 35 | | ? | 83-618 | 2 | 591-074-04 | PARKER HANNIFIN CORP | 6035 PARKLAND BLVD | CLEVELAND | OH | 44124 |
| 35 | | ? | 83-618 | 3 | 591-074-04 | PARKER HANNIFIN CORP | 6035 PARKLAND BLVD | CLEVELAND | OH | 44124 |
| 35 | | ? | 83-621 | 1 | 591-074-02 | PARKER HANNIFIN CORP | 6035 PARKLAND BLVD | CLEVELAND | OH | 44124 |
| 35 | former Mazda dealership | 11 Auto Center Dr | 76/1-3 | 3 | 590-013-01 | IMAI PROPERTIESINC | 11 AUTO CENTER DR | IRVINE | CA | 92618 |
| 38 | | | 1/88 | 0 | 434-391-50 | SBE | | | | |
| 38 | | | 1/88 | 0 | 434-391-51 | SBE | | | | |
| 38 | | | 1/88 | 0 | 434-402-20 | SOUTHERN CALIFORNIA EDISON COMPANY | PO BOX 800 | ROSEMEAD | CA | 91770 |
| 38 | | | 1/88 | 0 | 434-402-21 | SBE | | | | |

# 5. Religious Institution Outreach Letter, dated March 26, 2021

Community Development cityofirvine.org
City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 26, 2021

**Subject: Irvine Housing Element Update – Additional Housing Opportunities in Combination with an Existing Religious Institution**

Dear Sir or Madam:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under State mandate, we must plan for a significant number of future housing units, including affordable housing. For additional information, please visit www.cityofirvine.org/housingelementupdate.

As part of the update to the Housing Element, the City is interested in accurately estimating potential new housing units and would like to know if you have any interest in developing housing in combination with your existing religious institution on your property in the next eight years.

If you have any questions or would like to report plans for future housing development on your property, please contact us by April 9, 2021 via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Sincerely,

Kerwin Lau
Manager of Planning Services

cc: Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

# 6. Religious Institution Outreach Responses

**From:** Melissa Chao
**To:** Pam Nathanson
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Response to Irvine Housing Element Update
**Date:** Friday, April 2, 2021 9:25:49 AM

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Dear Pamela:

Thank you for responding. We greatly appreciate you letting us know.

Kindest regards,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

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**From:** Pam Nathanson <pam@universitysynagogue.org>
**Sent:** Friday, April 2, 2021 8:36 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Response to Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

In response to the attached letter we received, please note that ***we will not be developing housing units on our property for the projected time period.***

A message regarding the same was left on both of your respective voicemails this morning.

Should you have any questions, please let me know.

Thank you,
*Pamela Nathanson*
*University Synagogue*
*3400 Michelson Drive*
*Irvine, CA 92612*
*949-553-3535 ext#243*

**St. Thomas More Parish**
**51 Marketplace**
**Irvine, CA 92602**

April 6, 2021

Kerwin Lau, Manager Planning Services
City of Irvine
P.O. Box 19575
Irvine, CA 92623-9575

Dear Mr. Lau,

Thank you for your inquiry dated March 26, 2021 wherein you asked if we have any interest in developing housing on our property within the next eight years. We have no plans to do so as the entirety of our property has been committed to the building of and use of our church.

In Christ,

Rev. John E. Janze
Pastor

JEJ/sem

**Phone: (949) 551-8601** **Fax: (949) 551-5879**

# 7. Religious Institution Mailing List (100)

| Account name | Account address | Account | Account | Account Zipcode | Mailing address | Mailing City | Mailing State | Mailing Zipcode |
|---|---|---|---|---|---|---|---|---|
| SHEPHERDS GROVE PRESBYTERIAN CHURCH | 4445 ALTON PKWY | IRVINE | CA | 92604-4705 | 4445 ALTON PKWY | IRVINE | CA | 92604-4705 |
| IRVINE UNITED CONGREGATIONAL CHURCH | 4915 ALTON PKWY | IRVINE | CA | 92604-8606 | 4915 ALTON PKWY | IRVINE | CA | 92604-8606 |
| ST PAUL'S GREEK ORTHODOX CHURCH | 4949 ALTON PKWY | IRVINE | CA | 92604-8606 | 4949 ALTON PKWY | IRVINE | CA | 92604-8606 |
| HIS KINGDOM MINISTRIES DBA KINGDOM AIRWAVES | 5051 ALTON PKWY AP | IRVINE | CA | 92604-8618 | 5051 ALTON PKWY APT 83 | IRVINE | CA | 92604-8618 |
| ST JOHN NEUMANN CATHOLIC CHURCH | 5101 ALTON PKWY | IRVINE | CA | 92604-8605 | 5101 ALTON PKWY | IRVINE | CA | 92604-8605 |
| SJN CHARITIES - OC GRAN FONDO; | 5101 ALTON PKWY | IRVINE | CA | 92604-8605 | 5101 ALTON PKWY | IRVINE | CA | 92604-8605 |
| THE JOURNEY CHRISTIAN CHURCH | 4849 ALTON PKWY | IRVINE | CA | 92604-8607 | 4849 ALTON PKWY | IRVINE | CA | 92604-8607 |
| ETERNITY CHURCH OC | 24 ARBORSIDE | IRVINE | CA | 92603-0110 | 24 ARBORSIDE | IRVINE | CA | 92603-0110 |
| HARVEST CHRISTIAN FELLOWSHIP | 17600 GILLETTE AVE | IRVINE | CA | 92614-5715 | 6115 ARLINGTON AVE | RIVERSIDE | CA | 92504-1911 |
| MARK A THOMAS MINISTRIES INC | 3233 ARLINGTON AVE | RIVERSIDE | CA | 92506-3247 | 5198 ARLINGTON AVE | RIVERSIDE | CA | 92504-2603 |
| IRVINE CANAAN CHRISTIAN COMMUNITY CHURCH | 16812 ARMSTRONG AV | IRVINE | CA | 92606-4916 | 16808 ARMSTRONG AVE STE 100 | IRVINE | CA | 92606-8278 |
| IRVINE CANAAN CHRISTIAN COMMUNITY CHURCH | 16808 ARMSTRONG AV | IRVINE | CA | 92606-2415 | 16808 ARMSTRONG AVE STE 100 | IRVINE | CA | 92606-8278 |
| CALVARY CHAPEL LIVING WORD | 17101 ARMSTRONG AV | IRVINE | CA | 92614-5742 | 17101 ARMSTRONG AVE STE 103 | IRVINE | CA | 92614-5742 |
| SWORDS FOR CHRIST | 17252 ARMSTRONG AV | IRVINE | CA | 92614-5737 | 17252 ARMSTRONG AVE STE H | IRVINE | CA | 92614-5737 |
| EVANGELICAL FORMOSAN CHURCH OF IRVINE | 17422 ARMSTRONG AV | IRVINE | CA | 92614-5724 | 17422 ARMSTRONG AVE | IRVINE | CA | 92614-5724 |
| SAINT ANDREWS EPISCOPAL CHURCH | 4400 BARRANCA PKW | IRVINE | CA | 92604-4739 | 4400 BARRANCA PKWY | IRVINE | CA | 92604-4739 |
| CHABAD OF IRVINE | 5010 BARRANCA PKW | IRVINE | CA | 92604-4652 | 5010 BARRANCA PKWY | IRVINE | CA | 92604-4652 |
| NEW LIFE MISSION CHURCH | 200 CULTIVATE | IRVINE | CA | 92618-1029 | 15375 BARRANCA PKWY STE B207 | IRVINE | CA | 92618-2213 |
| WOODBRIDGE COMMUNITY CHURCH | 5000 BARRANCA PKW | IRVINE | CA | 92604-4652 | 5000 BARRANCA PKWY | IRVINE | CA | 92604-4652 |
| IRVINE AGAPE CHRISTIAN CHURCH | 5 BLAZING STAR | IRVINE | CA | 92604-3060 | 5 BLAZING STAR | IRVINE | CA | 92604-3060 |
| ALL SAINTS REFORMED PRESBYTERIAN CHURCH IRVINE | 14 BRENTWOOD | IRVINE | CA | 92620-0208 | 14 BRENTWOOD | IRVINE | CA | 92620-0208 |
| KALEIDOSCOPE CHURCH | 26 BRIARWOOD | IRVINE | CA | 92604-3755 | 26 BRIARWOOD | IRVINE | CA | 92604-3755 |
| CITYREACH CHURCH IRVINE | 3035 PERRYSVILLE AVE | PITTSBURG | PA | 15214-2624 | 8000 BROOKTREE RD | WEXFORD | PA | 15090-9474 |
| CONGREGATION B'NAI ISRAEL | 2111 BRYAN AVE | TUSTIN | CA | 92782-8382 | 2111 BRYAN AVE | TUSTIN | CA | 92782-8382 |
| NEWPORT CHURCH | 2727 CAMPUS DR | IRVINE | CA | 92612-1602 | 2727 CAMPUS DR | IRVINE | CA | 92612-1602 |
| THE CHURCH OF JESUS CHRIST OF LDS | 23 LAKE RD | IRVINE | CA | 92604-4579 | 7 CASTLEBAR | IRVINE | CA | 92618-4043 |
| INTERNATIONAL BIBLICAL SEMINARY | 10 CEDAR TREE LN | IRVINE | CA | 92612-2203 | 10 CEDAR TREE LN | IRVINE | CA | 92612-2203 |
| AIT MISSION ORGANIZATION | 8 CORPORATE PARK S | IRVINE | CA | 92606-5196 | 8 CORPORATE PARK STE 300 | IRVINE | CA | 92606-5196 |
| ST ZLATA BULGARIAN ORTHODOX CHURCH | 53 COSTERO AISLE | IRVINE | CA | 92614-5940 | 53 COSTERO AISLE | IRVINE | CA | 92614-5940 |
| SO CAL NETWORK ASSEMBLIES OF GOD | 17951 COWAN | IRVINE | CA | 92614-6000 | 17951 COWAN | IRVINE | CA | 92614-6000 |
| CENTER CHURCH | 15 SOARING HAWK | IRVINE | CA | 92614-7464 | 14252 CULVER DR # A408 | IRVINE | CA | 92604-0317 |
| DISCIPLE COMMUNITY CHURCH | 17502 DAIMLER ST | IRVINE | CA | 92614-5516 | 17502 DAIMLER ST | IRVINE | CA | 92614-5516 |
| AMERICAN INT'L PUTI (BODHI) DHARMA SOCIETY | 24 DEL CARLO | IRVINE | CA | 92606-8824 | 24 DEL CARLO | IRVINE | CA | 92606-8824 |
| SOUTHERN CALIFORNIA NEW VISION CHURCH | 13200 RED HILL AVE | TUSTIN | CA | 92780-3839 | 23820 ENRIQUEZ DR | DIAMOND BAR | CA | 91765-1743 |
| UNITED CHINESE CHRISTIAN CHURCH OF IRVINE | 4052 ESCUDERO DR | IRVINE | CA | 92620-3211 | 4052 ESCUDERO DR | IRVINE | CA | 92620-3211 |
| IXTHUS CHURCH | 38 EXPLORATION | IRVINE | CA | 92618-8850 | 38 EXPLORATION | IRVINE | CA | 92618-8850 |
| BREAD OF LIFE GREAT PARK CHURCH | 2 FARADAY | IRVINE | CA | 92618-2756 | 2 FARADAY STE B | IRVINE | CA | 92618-2756 |
| BIBLES FOR AMERICA INCORPORATED | 355 GODDARD STE 100 | IRVINE | CA | 92618-4640 | 355 GODDARD STE 100 | IRVINE | CA | 92618-4640 |
| THE CLOUD CHURCH | 11 GODDARD | IRVINE | CA | 92618-4600 | 11 GODDARD | IRVINE | CA | 92618-4600 |
| BETHEL KOREAN CHURCH | 18700 HARVARD AVE | IRVINE | CA | 92612-0699 | 18700 HARVARD AVE | IRVINE | CA | 92612-0699 |
| SAINT ELIZABETH ANN SETON CHURCH | 9 HILLGATE | IRVINE | CA | 92612-3265 | 9 HILLGATE | IRVINE | CA | 92612-3265 |
| FORWARD CHURCH | 6 HUGHES STE 160 | IRVINE | CA | 92618-2062 | 6 HUGHES STE 160 | IRVINE | CA | 92618-2062 |
| CHINESE COMMUNITY BAPTIST CHURCH OF SOUTH ORANGE COUNTY | 6 HUGHES STE 160 | IRVINE | CA | 92618-2062 | 6 HUGHES STE 160 | ALISO VIEJO | CA | 92656 |
| CELEBRATION CENTRE | 3943 IRVINE BLVD STE | IRVINE | CA | 92602-2400 | 3943 IRVINE BLVD STE 75 | IRVINE | CA | 92602-2400 |
| CHURCH IN IRVINE CORPORATION | 4252 IRVINE CENTER D | IRVINE | CA | 92604-3200 | 4252 IRVINE CENTER DR | IRVINE | CA | 92604-3200 |
| VOYAGERS BIBLE CHURCH | 6000 IRVINE CENTER D | IRVINE | CA | 92618-4586 | 6000 IRVINE CENTER DR | IRVINE | CA | 92618-4586 |
| GOOD SHEPHERD LUTHERAN CHURCH LCMC | 4800 IRVINE CENTER D | IRVINE | CA | 92604-3300 | 4800 IRVINE CENTER DR | IRVINE | CA | 92604-3300 |
| IRVINE ONNURI CHURCH | 17200 JAMBOREE RD | IRVINE | CA | 92614-5828 | 17200 JAMBOREE RD | IRVINE | CA | 92614-5828 |
| THE HILL CHURCH AT IRVINE | 43 JONQUIL | IRVINE | CA | 92618-1513 | 43 JONQUIL | IRVINE | CA | 92618-1513 |
| THE LORD IS MY LIFE MINISTRIES | 14851 JEFFREY RD SPC | IRVINE | CA | 92618-8328 | 8251 LA PALMA AVE # 265 | BUENA PARK | CA | 90620-3205 |
| CALIFORNIA SATSANG SOCIETY | 1851 LANGLEY AVE | IRVINE | CA | 92614-5623 | 1851 LANGLEY AVE | IRVINE | CA | 92614-5623 |
| WORLDWIDE BIBLE MINISTRY | 4228 MANHATTAN BE | LAWNDAL | CA | 90260-2614 | 4228 MANHATTAN BEACH BLVD | LAWNDALE | CA | 90260-2614 |
| ST THOMAS MORE CATHOLIC PARISH | 51 MARKET PL | IRVINE | CA | 92602-1601 | 51 MARKET PL | IRVINE | CA | 92602-1601 |
| VAISHNAV SAMAJ OF SOUTHERN CALIFORNIA | 1882 MCGAW AVE | IRVINE | CA | 92614-5741 | 1882 MCGAW AVE | IRVINE | CA | 92614-5741 |
| ORANGE COUNTY CHRISTIAN | 2332 MCGAW AVE | IRVINE | CA | 92614-0102 | 2332 MCGAW AVE | IRVINE | CA | 92614-0102 |
| FREE CHAPEL OC | 2777 MCGAW AVE | IRVINE | CA | 92614-5837 | 2777 MCGAW AVE | IRVINE | CA | 92614-5837 |
| UNIVERSITY SYNAGOGUE / SOUTH COAST | 3400 MICHELSON DR | IRVINE | CA | 92612-1618 | 3400 MICHELSON DR | IRVINE | CA | 92612-1618 |
| CONGREGATION SHIR HA-MA' ALOT | 3652 MICHELSON DR | IRVINE | CA | 92612-1727 | 3652 MICHELSON DR | IRVINE | CA | 92612-1727 |
| IRVINE COMMUNITY MIKVEH INC | 3900 MICHELSON DR | IRVINE | CA | 92612-1765 | 3900 MICHELSON DR | IRVINE | CA | 92612-1765 |
| ASSOCIATION FOR DAO ENLIGHTENMENT | 16841 MILLIKAN AVE | IRVINE | CA | 92606-5011 | 16841 MILLIKAN AVE | IRVINE | CA | 92606-5011 |
| BEREAN COMMUNITY CHURCH | 17911 MITCHELL S | IRVINE | CA | 92614-6015 | 17911 MITCHELL S | IRVINE | CA | 92614-6015 |
| CROSSLINE COMMUNITY CHURCH | 23331 MOULTON PKW | LAGUNA H | CA | 92653-1210 | 23331 MOULTON PKWY | LAGUNA HILLS | CA | 92653-1210 |
| INGLESIA MONTE SION IRVINE | 8 HAMMOND STE 103 | IRVINE | CA | 92618-1601 | 24922 MUIRLANDS BLVD TRLR 78 | EL TORO | CA | 92630-4838 |
| MARINERS CHURCH | 5001 NEWPORT COAS | IRVINE | CA | 92603-0164 | 5001 NEWPORT COAST DR | IRVINE | CA | 92603-0164 |
| CROSSWAY COMMUNITY CHURCH | 351 OAK PL STE A | BREA | CA | 92821-4123 | 351 OAK PL STE A | BREA | CA | 92821-4123 |
| THE CHARLES H. HARRELL III FOUNDATION | 4152 OLD MILL ST | IRVINE | CA | 92604-2232 | 4152 OLD MILL ST | IRVINE | CA | 92604-2232 |
| PACIFIC CHURCH OF IRVINE | 15 ORANGE TREE | IRVINE | CA | 92618-4507 | 15 ORANGE TREE | IRVINE | CA | 92618-4507 |
| IRVINE FIRST SAMOAN ASSEMBLY OF GOD | 125 PALENCIA | IRVINE | CA | 92618-0899 | 125 PALENCIA | IRVINE | CA | 92618-0899 |
| ORANGE COUNTY SINGLES FOR CHRIST | 3186 PULLMAN ST | COSTA ME | CA | 92626-3306 | PO BOX 7072 | NEWPORT BEACH | CA | 92658-7072 |
| REDEEMER PRESBYTERIAN CHURCH OF ORANGE COUNTY | 3700 CAMPUS DR STE | NEWPORT | CA | 92660-2603 | PO BOX 9708 | NEWPORT BEACH | CA | 92658-9708 |
| THE BLESSINGS FOUNDATION INC | 17870 SKY PARK CIR ST | IRVINE | CA | 92614-6449 | PO BOX 18410 | IRVINE | CA | 92623-8410 |
| CHURCH DEVELOPMENT FUND INC | 17701 COWAN STE 100 | IRVINE | CA | 92614-6061 | PO BOX 19700 | IRVINE | CA | 92623-9700 |
| CHINESE ALLIANCE CHURCH OF ORANGE COUNTY | 1842 REYNOLDS AVE | IRVINE | CA | 92614-5714 | PO BOX 61356 | IRVINE | CA | 92602-6045 |
| EVANGEL BIBLE CHURCH OF OC | 10 DE FRST | IRVINE | CA | 92620-3332 | PO BOX 60001 | IRVINE | CA | 92602-6000 |
| BANNER CHURCH | 2950 E IMPERIAL HWY | BREA | CA | 92821-6715 | PO BOX 80481 | SAN MARINO | CA | 91118-8481 |
| HI MISSION | 4412 RAFAEL ST | IRVINE | CA | 92604-2245 | 4412 RAFAEL ST | IRVINE | CA | 92604-2245 |
| VIDYA SABHA INC | 15 RAINSTAR | IRVINE | CA | 92614-5413 | 15 RAINSTAR | IRVINE | CA | 92614-5413 |
| OUR LADY OF PEACE KOREAN CATHOLIC | 14010 REMINGTON | IRVINE | CA | 92620-5703 | 14010 REMINGTON | IRVINE | CA | 92620-5703 |
| INTERNATIONAL GRACE MINISTRY | 9221 RESEARCH DR | IRVINE | CA | 92618-4286 | 9221 RESEARCH DR | IRVINE | CA | 92618-4286 |
| HARVEST COMMUNITY CHURCH OF IRVINE | 20 LAKE RD | IRVINE | CA | 92604-4567 | 9235 RESEARCH DR | IRVINE | CA | 92618-4286 |
| SCIENCE OF THE SOUL | 1420 REYNOLDS AVE | IRVINE | CA | 92614-5501 | 1420 REYNOLDS AVE | IRVINE | CA | 92614-5501 |
| IRVINE HEBRON CHURCH | 2691 RICHTER AVE STE | IRVINE | CA | 92606-5124 | 2691 RICHTER AVE STE 121 | IRVINE | CA | 92606-5124 |
| URIM CHURCH | 15520 ROCKFIELD BLV | IRVINE | CA | 92618-2792 | 15520 ROCKFIELD BLVD STE F | IRVINE | CA | 92618-2792 |
| VEDIC SPIRITUAL CENTER/SRI SIVA KAMESWARI TEMPLE | 3198 AIRPORT LOOP D | COSTA ME | CA | 92626-3439 | 213 ROCKVIEW | IRVINE | CA | 92612-3235 |
| SADDLEBACK VALLEY COMMUNITY CHURCH | 18842 TELLER AVE | IRVINE | CA | 92612-1615 | 1 SADDLEBACK PKWY | LAKE FOREST | CA | 92630-8700 |
| NEW LIFE ONE WAY | 36 SALTON | IRVINE | CA | 92602-2425 | 36 SALTON | IRVINE | CA | 92602-2425 |
| MISSIONARY CHURCH OF THE DISCIPLES | 915 E CHESTNUT AVE A | SANTA AN | CA | 92701-6435 | 15906 E SAN BERNARDINO RD | COVINA | CA | 91722-3939 |
| GRACE CITY FREE WILL BAPTIST CHURCH | 14978 SAND CANYON | IRVINE | CA | 92618-2111 | 14978 SAND CANYON AVE STE C | IRVINE | CA | 92618-2111 |
| GIANT WITHIN MINISTRIES | 1267 WILLIS ST STE 200 | REDDING | CA | 96001-0400 | 15642 SAND CANYON AVE UNIT 51984 | IRVINE | CA | 92619-5267 |
| IRVINE COMMUNITY CHURCH | 14804 SAND CANYON | IRVINE | CA | 92618-1726 | 14804 SAND CANYON AVE | IRVINE | CA | 92618-1726 |
| GLOBAL LIFE ENRICHMENT CENTER | 16371 SCIENTIFIC | IRVINE | CA | 92618-4354 | 16371 SCIENTIFIC | IRVINE | CA | 92618-4354 |
| DCF | 35 SPARROWHAWK | IRVINE | CA | 92604-3225 | 35 SPARROWHAWK | IRVINE | CA | 92604-3225 |
| FAITH EVANGELICAL LUTHERAN CHURCH | 349 STANFORD CT | IRVINE | CA | 92612-1619 | 349 STANFORD CT | IRVINE | CA | 92612-1619 |
| CAMPUS CRUSADE FOR CHRIST INT'L | 16 TECHNOLOGY DR ST | IRVINE | CA | 92618-2329 | 16 TECHNOLOGY DR STE 205 | IRVINE | CA | 92618-2329 |
| CHRIST OUR REDEEMER AME CHURCH | 45 TESLA | IRVINE | CA | 92618-4603 | 45 TESLA | IRVINE | CA | 92618-4603 |
| SAVING GRACE COMMUNITY CHURCH | 26731 LAREDO LN | LAKE FORE | CA | 92630-5719 | 25422 TRABUCO RD STE 105-267 | LAKE FOREST | CA | 92630-2791 |
| ISLAMIC CENTER OF IRVINE | 2 TRUMAN ST | IRVINE | CA | 92620-5742 | 2 TRUMAN ST | IRVINE | CA | 92620-5742 |
| IRVINE JOONGANG BAPTIST CHURCH | 240 GODDARD | IRVINE | CA | 92618-4625 | 4 VAN BUREN | IRVINE | CA | 92620-3795 |
| IRVINE BAPTIST CHURCH | 5101 WALNUT AVE | IRVINE | CA | 92604-2469 | 5101 WALNUT AVE | IRVINE | CA | 92604-2469 |
| CHINESE BAPTIST CHURCH | 12012 YALE CT | IRVINE | CA | 92620-0210 | 12012 YALE CT | IRVINE | CA | 92620-0210 |

# 8. Hotel Outreach Letter example, dated May 3, 2021

cityofirvine.org

City of Irvine, 1 Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

May 3, 2021

**Subject: Irvine Housing Element Update – Additional Housing Opportunities in Combination with an Existing Hotel**

Dear Sir or Madam:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under state mandate, we must plan for a significant number of future housing units, including affordable housing. For additional information, please visit cityofirvine.org/HEUpdate.

As part of the update to the Housing Element, the City is interested in accurately estimating potential new housing units. We would like to know if you have any interest in developing housing in combination with your existing hotel on your property in the next eight years. Opportunities to develop residential uses could involve converting existing rooms into residential uses on either specific floors or the entire hotel, or policies to house hotel workers on-site. All conversions must meet the U.S. Census definition of a "housing unit" as follows:

> A housing unit is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants do not live and eat with other persons in the structure and which have direct access from the outside of the building or through a common hall... Living quarters of the following types are excluded from the housing unit inventory: Dormitories, bunkhouses, and barracks; quarters in predominantly transient hotels, motels, and the like, except those occupied by persons who consider the hotel their usual place of residence; quarters in institutions, general hospitals, and military installations except those occupied by staff members or resident employees who have separate living arrangements.

Given the on-going (affordable) housing crisis in California, the City continues to monitor the availability of various funding sources such as the State's Project Homekey and Roomkey programs, the former of which provided significant grant funding opportunities in 2020. The City would also like to gauge your interest in participating in such programs. Additionally, the City may be able to facilitate partnerships with affordable housing developers.

The City is not considering the acquisition of your property for conversion to housing. However, if you have any questions, are potentially interested in selling your property to help provide more housing opportunities in your community, or would like to report plans for future housing development on your property in the next eight years, please contact Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395 by May 14, 2021.

Sincerely,

Kerwin Lau
Manager of Planning Services

ec: Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

# 9. Hotel Outreach Letter Mailing List (28)

| Account name | Account address | Primary Contact Name | Mailing address | Mailing City | Mailing State | Mailing Zipcode |
|---|---|---|---|---|---|---|
| REPUBLIC INN LLC | 16520 BAKE PKWY STE 230 | AYBARS ATIK | 16520 BAKE PKWY STE 230 | IRVINE | CA | 92618-4689 |
| TONHO INTERNATIONAL INC. | 1660 BARRANCA PKWY | CHENG WEI CHEN | 1660 BARRANCA PKWY | IRVINE | CA | 92606-4823 |
| IRVINE GUEST HOUSE | 4 CARSON | SOOK HEE KIM | 4 CARSON | IRVINE | CA | 92620-3311 |
| DKN HOTEL LLC | 42 CORPORATE PARK STE 200 | KIRAN PATEL | 42 CORPORATE PARK STE 200 | IRVINE | CA | 92606-3104 |
| BP RESORT LLC | 17370 RED HILL AVE | KIRAN DAHYA | 42 CORPORATE PARK STE 200 | IRVINE | CA | 92606-3104 |
| BRE SSP PROPERTY OWNER LLC | 17601 FITCH | CHARLES T KING | 100 DUNBAR ST STE 402 | SPARTANBURG | SC | 29306-5189 |
| TIDES HOSPITALITY LLC | 2192 DUPONT DR | SHETAL PATEL | 2192 DUPONT DR | IRVINE | CA | 92612-1328 |
| PHG IRVINE PARK PLACE LLC | 3309 MICHELSON DR | STEVEN ARNOLD | 2532 DUPONT DR | IRVINE | CA | 92612-1524 |
| SPECTRUM HOTEL GROUP LLC | 90 PACIFICA | TIMOTHY R BUSCH | 2532 DUPONT DR | IRVINE | CA | 92612-1524 |
| LQ MANAGEMENT LLC | 14972 SAND CANYON AVE | KEITH CLINE | 909 HIDDEN RDG STE 600 | IRVING | TX | 75038-3822 |
| MARRIOTT INTERNATIONAL INC | 7905 IRVINE CENTER DR | TERESA BRUSCA | 7905 IRVINE CENTER DR | IRVINE | CA | 92618-3207 |
| COURTYARD BY MARRIOTT IRVINE SPECTRUM | 7955 IRVINE CENTER DR | JONATHON VOPINEK | 7955 IRVINE CENTER DR | IRVINE | CA | 92618-3207 |
| GOLDEN HOTEL LTD PARTNERSHIP | 18700 MACARTHUR BLVD | MICHAEL WANG | 18700 MACARTHUR BLVD | IRVINE | CA | 92612-1409 |
| 18800 MACARTHUR HMEJ LLC | 18800 MACARTHUR BLVD | QINGHUI LU | 18800 MACARTHUR BLVD | IRVINE | CA | 92612-1410 |
| RLJ EM IRVINE LESSEE LP | 2120 MAIN ST | HOWARD B ISAACSON | 2120 MAIN ST | IRVINE | CA | 92614-6219 |
| SELECT HOTELS GROUP LLC | 2320 MAIN ST | PETER J SEARS | 2320 MAIN ST | IRVINE | CA | 92614-6223 |
| COURTYARD BY MARRIOTT | 2701 MAIN ST | KARLYN BRETZ | 2701 MAIN ST | IRVINE | CA | 92614-6230 |
| RESIDENCE INN BY MARRIOTT-IRVINE | 2855 MAIN ST | ROBERT D OLSON | 2855 MAIN ST | IRVINE | CA | 92614-5901 |
| LANGUAGE / HOST FAMILY | 5 MARIPOSA | SUSANA SILVA | 5 MARIPOSA | IRVINE | CA | 92604-3062 |
| RESIDENCE INN BY MARRIOTT | 10 MORGAN | RUBY MACIAS | 10 MORGAN | IRVINE | CA | 92618-2003 |
| S3 HOSPITALITY LLC | 2381 MORSE AVE | SHETAL PATEL | 2381 MORSE AVE | IRVINE | CA | 92614-6233 |
| HOTEL IRVINE FINANCE LLC | 17900 JAMBOREE RD | JUSTIN KIM | 550 NEWPORT CENTER DR, NCD 550-3-3 | NEWPORT BEACH | CA | 92660-7011 |
| EXTENDED STAY AMERICA #9620 | 30 TECHNOLOGY DR | BRUCE HAASE | PO BOX 49550 | CHARLOTTE | NC | 28277-9550 |
| HPT TRS IHG-I INC | 16150 SAND CANYON AVE | RAY ROBINSON | 16150 SAND CANYON AVE | IRVINE | CA | 92618-3715 |
| IRVINE MARRIOTT LLC | 18000 VON KARMAN AVE | KARA KOPETSKY | 18000 VON KARMAN AVE | IRVINE | CA | 92612-1004 |
| SONESTA INTERNATIONAL HOTELS CORPORATION | 17941 VON KARMAN AVE | STEPHEN MIANO | 17941 VON KARMAN AVE | IRVINE | CA | 92614-6253 |
| CAMBRIDGE TRS INC | 17941 VON KARMAN AVE | JOHN MURRAY | 17941 VON KARMAN AVE | IRVINE | CA | 92614-6253 |
| HPT TRS IHG-2 INC / CANDLEWOOD | 16150 SAND CANYON AVE | JOHN G MURRAY | 255 WASHINGTON ST STE 230 | NEWTON | MA | 02458-1644 |

# 10. Opportunity Sites Correspondence with Property Owners & Representatives for Site Inventory Development

**Melissa Chao**

**From:** Melissa Chao
**Sent:** Tuesday, March 9, 2021 4:38 PM
**To:** agill@intracorphomes.com
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** RE: IBC Residential

**Categories:** Yellow Category

Hi Alex:

As part of the HEU, the State requires the City to submit a site inventory that demonstrates the capacity to accommodate the State mandated RHNA numbers by income level. The City is required to identify specific sites and the realistic number of units for each site. For non-vacant sites, the State requires "substantial evidence" that the existing use will likely be discontinued in 2021-2029 (i.e., HEU planning period). The "gold standard" is a letter from the property owner stating their intention to develop the property with residences during the planning period.

Subsequent to the HEU, the City will embark on phase 2 of the General Plan Update and an associated Zoning Ordinance Amendment to support the HEU/RHNA. We have three years after the adoption of the HEU to balance the applicable policies (e.g., land use and circulation) in the GP as well as upzone/rezone/raise caps and/or create or amend overlays, etc. The City must plan for and maintain the capacity to accommodate the RHNA units whereas the market dictates whether the units are built.

We will be hosting one meeting based on the date/time polled with the highest confirmation level. If you are unable to make the final meeting time, we can schedule a separate call to discuss at your request. I will add you to the HEU/GPU interest list.

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

***What is Your Availability?***

**Virtual Meeting on Future Housing Sites**

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable

housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Tuesday, March 9, 2021 12:20 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: IBC Residential

FYI ...

Charles

**From:** Alex Gill <agill@intracorphomes.com>
**Sent:** Tuesday, March 9, 2021 12:19 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** IBC Residential

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles:

I received your letter on updating the Housing Element and wanted to inquire if you will be raising the residential cap in the IBC. We've done a number of projects in IBC and would like to do more. It would be good to better understand your process.

Thanks,
Alex

**Alex Gill | Vice President, Development**
dir (949) 757-8460 | cel (714) 679-1118

**From:** Melissa Chao
**To:** Alex Portney; Charles Kovac
**Cc:** Jaimee Bourgeois; Sun-Sun Murillo; Lisa Thai
**Subject:** RE: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom
**Date:** Wednesday, March 17, 2021 5:30:33 PM

---

Hi Alex:

Thank you for your idea re: the Boring Company Loop tunnel.

As we eventually shift our focus from the HEU to the GPU in Fall 2021, we will be examining the extent of the changes needed to the Circulation Element to accommodate the demands created by the 6th cycle RHNA/HEU.

I have copied key staff in Transportation Department. We are always looking at alternative and active modes of transportation and shifting people out of their vehicles.

Thanks again,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Alex Portney <sbl.alex@gmail.com>
**Sent:** Tuesday, March 16, 2021 4:04 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Jacob Daigneau (Contractor) <JDaigneau@cityofirvine.org>
**Subject:** Re: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks for the invite! It was interesting.

In the spirit of "any and all ideas being welcome" below is the link to the tunnel concept in my comment. I think it would alleviate some concerns the Council had addressed about masterplanning vs random development at the Council Meeting while being much more affordable than Light Rail for example.You could also do this in the IBC to link Tustin Station and John Wayne, but it's more complex with Tustin as a partner.

https://twitter.com/AlexPortney/status/1371901342063554560

Thanks for your time.

On Wed, Mar 10, 2021 at 5:10 PM Melissa Chao <MChao@cityofirvine.org> wrote:

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort

will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Melissa Chao

**From:** Andrea Maloney <amaloney@sapettorealestate.com>
**Sent:** Thursday, March 18, 2021 10:45 AM
**To:** Melissa Chao; Charles Kovac
**Cc:** Pam Sapetto; Melissa Chao
**Subject:** Re: Irvine Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa:
Thank you.

**Andrea Maloney**
Sapetto Real Estate Solutions, Inc.
One Park Plaza, #600,PMB 313
Irvine, CA 92614
949-683-3271
amaloney@sapettorealestate.com

**From:** Melissa Chao <MChao@cityofirvine.org>
**Date:** Wednesday, March 17, 2021 at 3:43 PM
**To:** Andrea Maloney <amaloney@sapettorealestate.com>, Charles Kovac <ckovac@cityofirvine.org>
**Cc:** Pam Sapetto <psapetto@sapettorealestate.com>, Melissa Chao <mchao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element Update

Hi Andrea:

17451 Von Karman is on the City's opportunity sites list.

We will keep you, Pam, and Steve apprised as the HEU process progresses.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Andrea Maloney <amaloney@sapettorealestate.com>
**Sent:** Wednesday, March 17, 2021 2:20 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Pam Sapetto <psapetto@sapettorealestate.com>
**Subject:** Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To City of Irvine:

Following up on the Housing Element discussion on March 16, 2021, we are writing to request that the Desmond Ventures property at 17451 Von Karman Avenue (APN 435-11-06) in Planning Area 36 be included in site inventory for future residential development. The site is 5.9 acres in the IBC and within walking distance of the Diamond Jamboree retail center. It is on Von Karman Avenue, bound on the south and west by railway track and McGaw Avenue to the north. Between 2015 and 2017 the property owner filed applications to allow for property to be included in the residential overlay for IBC and proposed residential development but the City Council did not allow the GPA to move forward because of the IBC unit cap. The property owner representative is Steve Kane at Charles, Kane and Dye, LLP, 949-852-8868 or skane@ckdcounsel.com
Please let us know if you have any questions.
Thank you.

**Andrea Maloney**
Sapetto Real Estate Solutions, Inc.
One Park Plaza, #600,PMB 313
Irvine, CA 92614
949-683-3271
amaloney@sapettorealestate.com

## Melissa Chao

**From:** White, Andy <Andy.White@colliers.com>
**Sent:** Tuesday, March 30, 2021 2:05 PM
**To:** Melissa Chao
**Cc:** Charles Kovac; Hitta Mosesman
**Subject:** RE: Irvine Housing Element Letter

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank You Melissa!

Andy

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, March 30, 2021 1:36 PM
**To:** White, Andy <Andy.White@colliers.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element Letter

Hi Andy:

Thank you for discussing 16902 &16912 Von Karman with me yesterday. I added both properties to the housing opportunities sites list.

As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

For your reference, attached is a Q&A for the March 16, 2021 Future Housing Sites meeting.

Lastly, I added you to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** White, Andy <Andy.White@colliers.com>
**Sent:** Tuesday, March 23, 2021 12:01 PM
**To:** Melissa Chao <MChao@cityofirvine.org>

**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** RE: Irvine Housing Element Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Just accepted it.

THX

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, March 23, 2021 11:57 AM
**To:** White, Andy <Andy.White@colliers.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** RE: Irvine Housing Element Letter

Hi Andy:

I sent a meeting invite at 1:30 pm. If it doesn't work just let me know. My schedule is open on Monday (3/29) afternoon, so anytime will work for me at this point.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** White, Andy <Andy.White@colliers.com>
**Sent:** Tuesday, March 23, 2021 11:49 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** RE: Irvine Housing Element Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

HI Mellissa – This week is shot already, but how about next week?

Monday afternoon?

THX

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 17, 2021 7:08 PM
**To:** White, Andy <Andy.White@colliers.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element Letter

Hi Andy:

I'm just circling back and wanted to share the presentation from yesterday's meeting. Sorry I was unable to call you on Monday.

Do you have availability on Thursday or Friday for a call?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** White, Andy <Andy.White@colliers.com>
**Sent:** Friday, March 12, 2021 9:34 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Housing Element Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Melissa

Looking forward to talking Monday.

I will also be available Tuesday at 3:00.

Andy

Sent from my iPhone

> On Mar 12, 2021, at 9:19 AM, Melissa Chao <MChao@cityofirvine.org> wrote:
>
> Hi Andy:
>
> Thank you for reaching out to us re: 16902 &16912 Von Karman. City staff and our housing consultant, Hitta, who I have copied on this email are hosting a virtual meeting next Tuesday. Please join us if you happen to be available at 3 p.m.
>
> I'm officially off work today, but need to some "quiet time" to finish another HEU-related work task that is time sensitive. I will call you on Monday to touch base regarding your properties.
>
> Sincerely,
> Melissa
>
> <image002.jpg>
>
> ***You're Invited***
> **6th Cycle Housing Element Update -**

# Virtual Meeting on Future Housing Sites
# March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser.

**Webinar ID:**
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**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** White, Andy <Andy.White@colliers.com>
**Sent:** Thursday, March 11, 2021 6:38 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Irvine Housing Element Letter
**Importance:** High

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Charles and Melissa –

I received the letter below regarding a property I own in Irvine at 16902 &16912 Von Karman.

I am interested is potentially converting the site to residential use per the letter.

Please let me know what I need to do or who I need to talk to for this.

Thank,
Andy
949-378-7296
<image003.jpg>

**Andy White**
Senior Vice President | Orange County
**Dir 949 724 5580** | Mob +1 949 378 7296
Main +1 949 724 5500 |
andy.white@colliers.com
License No. 01304645

**Colliers International**
3 Park Plaza, Suite 1200 | Irvine, CA 92614 | USA
**www.colliers.com**

<image004.png>

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

## City of Irvine Future Housing Sites
## Virtual Meeting on March 16, 2021 from 3 – 4 p.m.
## Q & A and Comments Received

| Question or Comment | Answer or Response |
|---|---|
| How can we ask question later? | By raising hand, inputting question or comment in the Q & A box, or by contacting Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org and Melissa Chao, Senior Planner, at mchao@cityofirvine.org for assistance. |
| If ADUs built as affordable units, particularly low/very low, how will that affordability be protected? For what period of time? | There is no requirement for affordability or period of affordability. Staff will follow any guidance on Accessory Dwelling Unit or ADU affordability provided by HCD.<br><br>In terms of meeting the City's RHNA allocation, HCD indicated that jurisdictions could only base their ADU projections on historical data. For Irvine, we average five (5) ADUs per year, so HCD guidance is to allow for a maximum of five times (5x) the historical amount per year. In other words, Irvine can get credit for approximately 25 ADUs per year. |
| Does the Housing Element require CEQA review? | Yes, the Housing Element Update (HE) requires CEQA (environmental) review. The completion of the HE will follow with an assessment of the changes needed to the other General Plan elements/chapters (such as land use, circulation, and safety). Once the 6th Cycle HE is adopted by the Council |

| | |
|---|---|
| | and submitted to HCD for certification review, staff will embark on the General Plan Update (GPU), and associated Zoning Ordinance Amendment, to the extent needed, to update the policies and regulatory framework to support the adopted HE. It is anticipated that an Environmental Impact Report (EIR), if required, will be completed with this subsequent GPU/ZOA effort with an estimate of three (3) years to complete. |
| UCI Faculty member, housing scholar, and renter, are renters also stakeholder? Or only property owners? | Everyone is considered a "stakeholder" in the HE process, including but not limited to homeowners, renters, persons of all ages, persons with disabilities, veterans, homeless and persons are risk, businesses, and property owners.<br><br>This particular "future housing sites" meeting is targeted towards non-residential property owners in the Irvine Business Complex (Planning Area 36, IBC) and Spectrum for the purposes of identifying potential opportunity sites.<br><br>The City will host several general community workshops and more focused subject matter meeting(s) starting in April and will publicize those through the project webpage, social media, press releases, and email notifications. |
| How many sites is the City hoping to identify? Is there a number of sites the state want each city to offer as potential development sites? | Irvine needs to identify enough sites to cover our RHNA allocation by income level plus a buffer for "no net loss" which is a new requirement for 2021. Each city has a different RHNA allocation from the Southern California Council of Governments (SCAG). Irvine's RHNA allocation is the highest in Orange County, and the fifth highest in the SCAG region (i.e., after City of LA, unincorporated LA County, unincorporated Riverside County, and City of Long Beach). SCAG represents six counties, 191 cities and more than 19 million residents. |
| Will housing units under construction now but not ready for occupancy until 2022 be counted to the current cycle or the 6th cycle? | Any residential building permit issued on or after July 1, 2021 will count towards the 6th cycle RHNA allocation. |

| | |
|---|---|
| It seems like the only way to identify sufficient sites to produce the required number of opportunities is to suggest or imply upzoning or rezoning. What is the City's response to this? | Even though the City is still working on compiling opportunity sites and developing the site inventory, it is likely that eventual rezoning may be required for areas such as the IBC to accommodate the RHNA allocation by income level. |
| Irvine Homeowners Associations are particularly opposed to ADUs, so that might be a mute point. Although according to recent state bills, the state should be able to overrule such practices | Assembly Bill 670 (2019) prohibits a HOA from prohibiting the construction or use of an ADU for a lot zoned for single-family use. However, a HOA can still impose "reasonable" standards regarding the design and development of ADUs, where feasible. |
| One of the constraints to more residential development in the IBC is the requirement to transfer DIV's from another site. Will the City be considering adding a provision to allocate additional intensity to a site as determined by the City and not through a DIV transfer from another site. | This would be evaluated as part of a subsequent GPU/ZOA process. |
| Have you given any thought of the time frame of adopting the subsequent GPAs and zoning amendments to implement the Housing Element? | We anticipate the subsequent GPU/ZOA/EIR will be completed in 2.5 to 3 years. |
| How do the housing caps in IBC and other area work with the HE update? | It is likely that the maximum unit caps and/or allowed densities may need to be revisited as part of a subsequent GPU/ZOA process. |
| I'm just a resident of Irvine, but I'd like to nominate the 100+ acres of County owned land at the Great Park. I think our City sued to block building 2,000+ units there. What if we used our leverage instead to increase units here and pressure OC to build more affordable units?<br><br>Also, I have a proposal for a Boring Company Loop tunnel serving Irvine Station and Spectrum district. Las Vegas and Ontario Calif are moving forward with tunnels in their communities. My twitter handle is @alexportney or search #irvine #rhna if you want to check it out. | Comment noted.<br><br>Any site that can accommodate residential uses will be considered. |

| | |
|---|---|
| Your answer is really concerning. Coming from a city (a) government (public sector supposed to serve public, not private interests) | Although not certain what this statement is in reference to, the City is not prioritizing private interests over public interests or vice versa. HThe City is specifically reaching out to property owners in this meeting for assistance in identifying their property as a potential opportunity sites. |
| If we own property that is commercially zoned but are considering the possibility of converting it to residential, what conversations and when should we have with the City about changes to zoning? | Now is the best time to have any conversations with City staff about potential opportunity sites for the site inventory so that staff and our HE consultant can plan accordingly. |
| What could happen if HCD doesn't certify the Housing Element the City submits? | Without a HCD-certified HE, Irvine will face substantial fines and penalties and be subject to a 4-year RHNA/HE cycle (instead of the customary 8-year cycle). Additionally, Irvine will be ineligible for critical state and federal grants.<br><br>Lastly, without a certified HE, the State may disallow the issuance of building permits resulting in a potential loss of local land use control and a jurisdiction may be open to litigation based on a legally inadequate General Plan (where the HE is one required topical chapter). |
| With other 10K housing units at lower income, how will the City ensure affordable housing for this population is addressed on the sites that are proposed to increase capacity or intensity for developments? (Aside from inclusionary) We see many of these sites being developed as market rate now. | In 2012, the State ceased operating local redevelopment agencies, which served as an important component of the affordable housing development landscape. Staff recognizes that funding is a constraint as no City has enough revenues to fund affordable housing development completely.<br><br>As part of the HE process, the City will consider a multi-pronged strategy to support/encourage affordable housing development such as: (1) converting existing units to affordable units; (2) extending expiring affordability covenants; (3) updating Irvine's inclusionary housing ordinance; (4) layering affordable housing funding from the State such as tax credits and grants; and (5) state density bonus laws. |
| Is there a cost involved in changing zoning from office to residential? | In general, there are costs associated with processing the necessary discretionary development applications (e.g. General Plan Amendment, Zone |

| | |
|---|---|
| | Change, EIR) to change zoning requirements from office to allowing residential uses. Typically, these costs are the responsibility of the property owner or applicant, but in this case the City will be laying the general ground work with a subsequent GPU/ZOA/EIR, to the extent necessary. However, the property owner (i.e., applicant) would still need to process the specific discretionary application(s) and appropriate CEQA documentation to develop the actual residential project. |
| Will this meeting be available as a recorded meeting? Is the slide deck available. | This meeting was not recorded to facilitate a free flow conversation.<br><br>City staff will distribute the slide deck to all meeting attendees and post relevant information on the project webpage at www.cityofirvine.org/housingelementupdate. |
| Just wanted to clarify that the subsequent GPA/Zoning updates could also include individual requests for GPA/Zone Changes to approve residential. | Yes, the City would consider individual GPA/ZC applications for residential to be incorporated to the extent there is no conflict with the City-initiated GPA/ZOA/EIR. However, this would be determined as part of a subsequent GPU on a case-by-case basis and not the HE. |
| Can you give a quick overview of when you will publish the housing opportunities sites? | Staff anticipates finalizing the site inventory in Spring 2021. A public review of the draft HE (with site inventory) and CEQA documentation is anticipated to be available in Summer 2021. |
| Is the City open to considering sites/properties outside the IBC and near the Irvine train station? | Any site that can safely accommodate residential uses will be considered. As the HE process progresses, the City Council will ultimately decide on the final site inventory to be submitted to the State for certification.<br><br>Please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org and Melissa Chao, Senior Planner, at mchao@cityofirvine.org to discuss opportunities for assistance. |
| What is the position of the City Council regarding the RHNA numbers? Eager? Enthusiastic? | Throughout the RHNA process (i.e., methodology and allocation), the City has voiced our concerns over the sizeable RHNA allocation and our ability to realistically accommodate the units. |

| | |
|---|---|
| | As directed by the City Council on October 26, 2020, the City filed an appeal of its Draft RHNA allocation to reduce our allocation. SCAG rejected the City's appeal. The City received its final allocation of 23,610 units on March 4, 2021. |
| Since Irvine failed to meet its very low and low income RHNA allocations for the 5th cycle HE, Irvine is subject to SB 35. Very low and low income is systemically left behind so we know the outcome. | Comment noted. |
| Very low and low income is generally taken care of by affordable housing developers. How does the City participate in the "capital stack?" | Irvine encourages non-profit developers like Jamboree Housing. We recognize that affordable housing development often requires subsidies from the City.<br><br>In 2011, the State's budget crisis greatly reduced available funding.<br><br>To be viable, affordable housing developments need to tap into multiple strategies and layered funding sources such as State funding and grants, and by-right automatic density bonus. |
| How to incentivize at lower affordability levels? Requires a variety of strategies. Think of land use as a subsidy or incentive. Apply more rigorous inclusionary requirements in industrial areas. Want to provide deeper affordability levels and comprehensive services to support the residents. | Comment noted. |
| How long to complete the rezone? | A rezoning effort could take 2.5 to 3 years and would occur after the adoption of the HE in October 2021. |
| What percentage of units are required to be low income? | The City's adopted inclusionary housing requirement is 15 percent. For example, if 100 units are developed then 15 units (or 15 percent) are required to be affordable where 5 units are very low income, 5 units are low income, and 5 units are moderate income. |

## Melissa Chao

**From:** Tim Gehrich
**Sent:** Friday, April 23, 2021 9:30 AM
**To:** Marika Poynter; Kerwin Lau; Hitta Mosesman; Melissa Chao
**Cc:** Pete Carmichael
**Subject:** FW: Atrium Hotel Repurposing

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Marika:

Can we add the Atrium Hotel in the IBC to our HEU site inventory list. The property owner has reached out to me expressing an interest. A few other properties along the MacArthur corridor (across from John Wayne Airport) have been included. I didn't see his property on our list, but seems appropriate to me.

Thanks,

Tim

**TIMOTHY N. GEHRICH** | DEPUTY DIRECTOR | COMMUNITY DEVELOPMENT
949-724-6363 | 1 Civic Center Plaza, Irvine, CA 92606
tgehrich@cityofirvine.org | cityofirvine.org

**From:** Mike Wang <mwang@venquest.com>
**Sent:** Friday, April 23, 2021 9:22 AM
**To:** Tim Gehrich <tgehrich@cityofirvine.org>
**Cc:** Pete Carmichael <PCarmichael@cityofirvine.org>; John Wang <johnwang@pcrscorp.com>
**Subject:** Re: Atrium Hotel Repurposing

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Tim,

Thank you for your willingness to help us repurposing Atrium Hotel. We are also considering redevelopment of our site for residential use. Are you able to help get our parcel ( almost 7 acres) be included as an " opportunity site" for the new housing element study? Please contact me at (949) 374-7797.

Best regards,

Michael Wang
Atrium Hotel

On Mar 2, 2021, at 5:11 PM, Tim Gehrich <tgehrich@cityofirvine.org> wrote:

Hello Mr. Wang:

As a follow-up to our meeting last week, I did track down a contact at the County of Orange regarding the County's Emergency Home Assistance Program. This would be related to whether any monies are available at the County level to provide housing for homeless or those at risk of being homeless, that could include medically at risk seniors.

Following our meeting, and after further consideration, I think it would be best for you as the property owner to reach out to the County and inquire as to their programs. If, after your discussions with the County, you would like to pursue a modification to the use of the hotel, I will make myself available to meet with you to discuss options and process.

The County contact is: Jason Austin at OC Health Care Agency. E-mail: JAustin@ochca.com

Please let me know if you have any follow-up questions.

Thank you,

Tim

<image001.png>

**TIMOTHY N. GEHRICH** | DEPUTY DIRECTOR | COMMUNITY DEVELOPMENT
949-724-6363 | 1 Civic Center Plaza, Irvine, CA 92606
tgehrich@cityofirvine.org | cityofirvine.org

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, April 6, 2021 5:43 PM
**To:** Azad Sabounjian
**Cc:** Sam Sabounjian; Melissa Chao
**Subject:** RE: Irvine Housing Element Update- Future Housing Sites

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Azad:

I have added 17421 Von Karman Ave to the housing opportunity sites list.

As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added you and Sam to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Note Friday, April 2, was Charles' last day with the City of Irvine, so please direct any future questions/concerns to me.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Azad Sabounjian <Azad.sabounjian@promartinc.com>
**Sent:** Tuesday, April 6, 2021 2:30 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Sam Sabounjian <Sam.Sabounjian@promartinc.com>
**Subject:** RE: Irvine Housing Element Update- Future Housing Sites

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Hi Melissa,

I apologize for the delay in getting back to you. Yes, we would be interested in including 17421 Von Karman as a potential housing opportunity site. Please let me know if you have any questions.

All the Best

*Azad Alex Sabounjian*
President | **PRO-MART INDUSTRIES, INC.**
17421 Von Karman Ave. | Irvine, CA 92614

Phone 1.949.428.7700 ext. 111
azad.sabounjian@promartinc.com
www.promartinc.com





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**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Friday, April 2, 2021 4:26 PM
**To:** Azad Sabounjian <Azad.sabounjian@promartinc.com>; Sam Sabounjian <Sam.Sabounjian@promartinc.com>
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element Update- Future Housing Sites

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Hi Azad:

I just left a voicemail on your mobile. We are working from home due to Covid, so please leave a message and I can call you back or feel free to email me.

For your reference, please find attached a recent presentation and Q&A handout for future housing sites.

Would you be interested in including 17421 Von Karman as a potential housing opportunity site?

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Wednesday, March 31, 2021 3:05 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Irvine Housing Element Update- Future Housing Sites

FYI …

Charles

**From:** Azad Sabounjian <Azad.sabounjian@promartinc.com>
**Sent:** Wednesday, March 31, 2021 1:41 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>

**Cc:** Sam Sabounjian <Sam.Sabounjian@promartinc.com>
**Subject:** Irvine Housing Element Update- Future Housing Sites

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Good Afternoon Charles,

We just received your letter last week informing us regarding Future Housing Sites. We are interested in this planning project and I would like to discuss with you for this potential opportunity at your convenience. Please call me at my mobile phone # i949—903-5590. Thank you.

All the Best

*Azad Alex Sabounjian*
**President | 17421 LLC**
17421 Von Karman Ave. | Irvine, CA 92614
Phone 1.949.428.7700 ext. 111
azad.sabounjian@promartinc.com
www.promartinc.com






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## Melissa Chao

**From:** Melissa Chao
**Sent:** Thursday, April 29, 2021 6:46 PM
**To:** Craig Borstein; Erik Pfahler
**Cc:** Loren Borstein; Melissa Chao
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA
**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Craig:

Thank you for your letter.

I will add your property to the housing opportunity sites list for consideration by the City Council for inclusion in the Housing Element site inventory.

If your property is confirmed by the City Council, City staff will ensure that any proposed residential and/or mixed-use overlay is designed to include your property. Please be assured that your property will continue to be subject to the existing General Plan and Zoning Ordinance regulations.

Please feel free to contact me with any further questions/concerns. The City is here to support the community and your continued success.

Sincerest regards,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Craig Borstein <Craig@borsteinenterprises.com>
**Sent:** Tuesday, April 27, 2021 3:50 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Erik Pfahler <Erik@borsteinenterprises.com>
**Cc:** Loren Borstein <Loren@borsteinenterprises.com>
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

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Melissa,

Thank you for following up. I apologize for the delay. Attached is our letter for your review. Please feel free to reach out with any questions.

With Regards,

-Craig

BORSTEIN ENTERPRISES

**Craig Borstein** / President, Income Properties Division
Craig@borsteinenterprises.com

**Borstein Enterprises**
Phone: 310-582-1991 x209 / Fax: 310-582-1999 / Cell: 310-963-4697
11766 Wilshire Blvd., Suite 820, Los Angeles, CA 90025
www.borsteinenterprises.com

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, April 27, 2021 12:36 PM
**To:** Erik Pfahler <Erik@borsteinenterprises.com>
**Cc:** Craig Borstein <Craig@borsteinenterprises.com>; Loren Borstein <Loren@borsteinenterprises.com>
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

Hi Erik:

I just wanted to circle back and check if your team has reached a verdict.

Please let me know by the end of this week, April 30.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Erik Pfahler <Erik@borsteinenterprises.com>
**Sent:** Wednesday, March 24, 2021 3:12 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Craig Borstein <Craig@borsteinenterprises.com>; Loren Borstein <Loren@borsteinenterprises.com>
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

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Perfect, thanks Melissa.. we will get back to you shortly.

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 24, 2021 3:11 PM
**To:** Erik Pfahler <Erik@borsteinenterprises.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Craig Borstein <Craig@borsteinenterprises.com>; Loren Borstein <Loren@borsteinenterprises.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

Hi Erik:

If it is a yes, please confirm you would like you property at _____address range consisting of _____APN(s) totaling ## acres to be included as a housing opportunity site. Also, If you have other comments or suggestions, please let us know.

If it is a no, please let us know as well.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Erik Pfahler <Erik@borsteinenterprises.com>
**Sent:** Wednesday, March 24, 2021 3:00 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Craig Borstein <Craig@borsteinenterprises.com>; Loren Borstein <Loren@borsteinenterprises.com>
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

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Thank you Melissa, this is very helpful.

Yes I am a representative for the Borstein family.
What specific feedback would you like from us?
Is it a simple yes or no answer to being included?
Or would you like us to add more specificity if it's a yes answer?

**Erik Pfahler** / Senior Vice President
erik@borsteinenterprises.com
**Borstein Enterprises**
11766 Wilshire Boulevard., Suite 820, Los Angeles, CA 90025
Phone: 310-582-1991 x203 / Cell: 310-864-3330 Fax: 310-582-1999
www.borsteinenterprises.com

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 24, 2021 2:35 PM
**To:** Erik Pfahler <Erik@borsteinenterprises.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Craig Borstein <Craig@borsteinenterprises.com>; Loren Borstein <Loren@borsteinenterprises.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

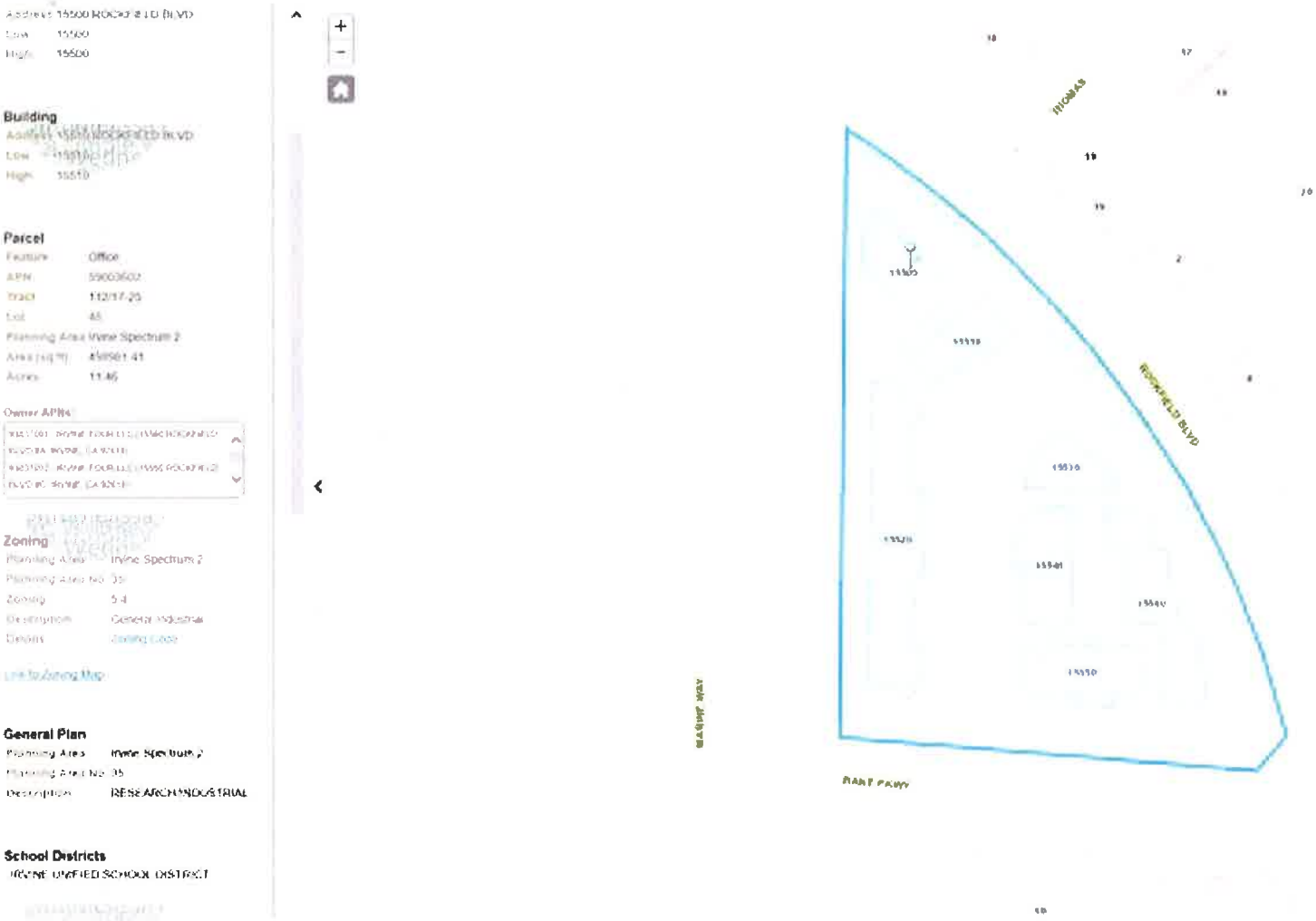
Hi Erik:

Please see my responses in red below.

By chance, is this your property? I spoke to a building owner that indicated the Borstein family owned the land beneath their units.

Feel free to contact us with any further questions/concerns.

Thanks,
Melissa




**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Erik Pfahler <Erik@borsteinenterprises.com>
**Sent:** Wednesday, March 24, 2021 11:28 AM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Craig Borstein <Craig@borsteinenterprises.com>; Loren Borstein <Loren@borsteinenterprises.com>
**Subject:** Housing Element update - response to request - 15500 Rockfield Blvd, Irvine CA

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Hi Melissa and Charles,

I am writing to ask a question regarding the letter received from you dated March 1st regarding the housing element update.
Our property is currently zoned General Industrial and the General Plan is Research Industrial.

We have been looking into this internally and you answers to the questions below will be helpful in our decision to support your request or not. I left you both a follow up voicemail today. The following are helpful questions:

1. If we agree to identify our property as a housing opportunity site will this in any way prevent us from:
    a. Continuing our current use in the future?
    No, including your property as a housing opportunity site does not impact the current use now or in the future
    b. Prevent us from redeveloping the property including rehabbing, future tenant improvements, expansion or modernizing the property consistent with its current land use and zoning?
    No, the property continues to be subject to the current General Plan and Zoning Ordinance.

2. If the property were to be added as a housing opportunity site:
    a. What density category would be considered?
    At this time, the City is compiling its opportunity sites list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

    In general, there are costs associated with processing the necessary discretionary development applications (e.g. General Plan Amendment, Zone Change, EIR) to change zoning requirements from office/industrial uses to allowing residential uses. Typically, these costs are the responsibility of the property owner or individual processing the application, but in this case, if a property is included in the final site inventory approved by the City Council, then the City will be laying the general ground work with the subsequent General Plan Update/Zoning Ordinance Amendment or residential overlay/Environmental Impact Report, to the extent necessary. However, the property owner (i.e., applicant) would still need to process the specific discretionary application(s) and appropriate CEQA documentation to develop the actual residential project.

    According to State housing law, the City has a maximum of three years after the adoption of the Housing Element (anticipated by October 15, 2021 which is the State deadline to submit the adopted Housing Element for certification) to "square up" the General Plan and Zoning Ordinance to be consistent with the adopted Housing Element.

    When the City commences the GPU/ZOA work in Fall 2021, we will design the updates to factor in the properties in the final site inventory. For reference. the State uses density as proxy for affordability. They consider 30 dwelling units per acre minimum as "affordable." Recent apartment projects at Los Olivos is about 50 du/ac.

    As part of the site inventory, the City must identify the actual site, realistic unit capacity, and associated income levels. So, if you have any recommendations for your site if you decide to participate as an opportunity site, we are open to any suggestions.

    b. Would there be an obligation to provide affordable housing on the site?

    Yes, Irvine has an inclusionary housing ordinance. It's 15% of the residential units developed split by income category: 5% very low, 5% low, and 5% moderate.
    For more information, please see Chapter 2-3, Affordable Housing Implementation Procedure:
    https://library.municode.com/ca/irvine/codes/zoning?nodeId=ZOOR_DIV2AD_CH2-3AFHOIMPR

    There is also by-right state density bonus.

    Charles is our affordable housing expert, so feel free to ask him additional questions.

c. Is the City considering an inclusionary housing ordinance?
See directly above.

d. In any way increase our property taxes, assessments or fees?
No, inclusion of a site on the opportunity sites list would not increase any property taxes, assessments, or fees.

3. Are you considering other sites surrounding our Rockfield site for housing opportunity sites and how would this impact our current use?
Any site that can safely accommodate residential uses will be considered. As previously noted as the HE process progresses, the City Council will ultimately decide on the final site inventory to be submitted to the State for certification.

4. If housing is eventually developed across the street or adjacent to our property, can the proximity of this future residential use impact our existing use?
No development applications have been submitted for District 2 of the Great Park Neighborhoods at this time. If you are within 500' of the project boundary, you will receive project notification letters by mail. If your property is where I think it is, Five Point will need to factor in adjacent land uses at the Planning Area boundary/edge when designing their projects.

5. How would the this site land use category be changed? Is it a change to the General Plan Use category? Or is it an overlay?
To be determined as part of the subsequent GPU/ZOA work effort.

Lastly, Can you please provide us with a brief summary of the housing element process, Schedule, and next steps?
Attached is a presentation slide deck on future housing sites for your reference. Please also check www.cityofirvine.org/housingelementupdate as the project webpage is periodically updated with new information. I will add you all to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Thank you,

**Erik Pfahler** / Senior Vice President
erik@borsteinenterprises.com
**Borstein Enterprises**
11766 Wilshire Boulevard., Suite 820, Los Angeles, CA 90025
Phone: 310-582-1991 x203 / Cell: 310-864-3330 Fax: 310-582-1999
www.borsteinenterprises.com

# Irvine Four, LLC

11766 Wilshire Boulevard, Suite 820 • Los Angeles, California 90025 • 310-582-1991


April 27, 2021

Charles Kovac
Housing Administrator,
City of Irvine
1 Civic Center Plaza
Irvine CA 92606

**Re: Irvine Housing Element Future Sites Request**
**Rockfield Business Center at 15500-15560 Rockfield Blvd., Irvine CA 92618**
**APN#s 938-370-01 through 938-370-32**

Mr. Kovac

We received the City's letter dated March 1, 2021 titled Irvine Housing Element Update – Future Housing Sites and want to thank Melissa Chao for her timely responses to our questions. Irvine Four, LLC is the leased fee owner at the above referenced property in Irvine. The property currently consists of 32 industrial condominium units in seven buildings on approximately 500,000 square feet of land. In the City's March 1st letter, we were asked about our interest in identifying our property as a housing opportunity site.

In response to your query, we would like to express limited and conditional interest in the idea. Our property is a well performing industrial park, and we have no plans of changing the land use. Furthermore, we have contemplated future redevelopment of the property (many years out) consistent with the current General Industrial zone and insist our current rights under the General Industrial zone are retained regardless of any housing opportunity rezoning.

Conditioned by the above, we would support and not be opposed to the City placing a housing overlay zone over our property allowing for a future application from the landowner to apply for higher density housing on the property consistent with the overlay. But we would oppose any City action that attempts to change the zone away from General Industrial or limits our rights under the General Industrial zone without a specific application requested by the landowner for such change.

We appreciate the need for housing and are supportive of the City's actions to help curb the housing shortage and look forward to seeing and exploring the possibility of participating in your future plans.

Very truly yours,

IRVINE FOUR, LLC
By: Borstein Properties, Inc., its Manager

By: _____
Craig Borstein, Vice President

## Melissa Chao

**From:** Brendan McCracken <McCracken@eqoffice.com>
**Sent:** Tuesday, May 4, 2021 11:17 AM
**To:** Melissa Chao
**Cc:** tj@starpointeventures.com
**Subject:** RE: Irvine Future Housing Site Submittal for the Housing Element Update

**Categories:** Yellow Category

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Melissa,
Thank you for your follow up and we'll look forward to future communications.

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Friday, April 30, 2021 8:37 AM
**To:** Brendan McCracken <McCracken@eqoffice.com>
**Cc:** tj@starpointeventures.com; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Future Housing Site Submittal for the Housing Element Update

[EXTERNAL EMAIL]

Hi Brendan:

Thank you for letting me know. I have added the four properties to the housing opportunities sites list.

I also added you to the project interest list, so you will receive notifications of public participation opportunities and important project milestones such as the release of the draft Housing Element/site inventory. Additionally, project information is constantly updated and available at www.cityofirvine.org/HEUpdate.

Please feel free to contact me with any questions. Charles is no longer with the City of Irvine.

Thanks again,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Brendan McCracken <McCracken@eqoffice.com>
**Sent:** Thursday, April 29, 2021 4:39 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; ckovac@cityofirivne.org
**Cc:** tj@starpointeventures.com
**Subject:** Irvine Future Housing Site Submittal for the Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Chao and Mr. Kovac,

On behalf of BRE CA Office Owner, LLC, we would like to submit the following four (4) parcels for consideration as potential sites for new housing in Irvine as part of the 6th Cycle Housing Element Plan.

- APN: 435-021-19
  - Address - 2121 Alton Parkway Irvine, CA 92606
  - Cross Streets – Alton Parkway / Von Karman Avenue
- APN: 435-021-20
  - Address - 16969 Von Karman Avenue Irvine, CA 92606
  - Cross Streets - Alton Parkway / Von Karman Avenue
- APN: 435-021-21
  - Addresses – 16845, 16775, 16815, 16795 Von Karman Avenue Irvine, CA 92606
  - Cross Streets - Alton Parkway / Von Karman Avenue
- APN: 435-021-38
  - Addresses – 16755, 16735, 16715 Von Karman Avenue Irvine, CA 92606
  - Cross Streets - Alton Parkway / Von Karman Avenue

Below is my full contact information if you have any questions. I am including Tim Strader, Jr as well who will be assisting us along the way.

**Brendan McCracken** SVP, Portfolio Director
CA DRE LIN -1231284
Office +1 (310) 664-3869 · Mobile +1 (213) 200-7789

**EQ Office** Los Angeles
Find Space for Greatness—eqoffice.com

Please note my new email address:
mccracken@eqoffice.com

This e-mail communication is intended only for the addressee(s) named above and any others who have been specifically authorized to receive it. This e-mail may contain information that is privileged, confidential or otherwise protected from disclosure. If you are not the intended recipient of this e-mail communication, please do not copy, use or disclose to others the contents of this communication. Please notify the sender that you have received this e-mail in error by replying to this e-mail. Please then delete the e-mail from your system and any copies of it. No confidentiality or privilege is waived or lost by any transmission errors.

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, March 23, 2021 11:10 AM
**To:** Mitch Bloom
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** RE: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Mitch:

I added 2900 McCabe Way to the opportunity sites list.

I also added your contact information to the project interest list for email notifications on opportunities to participate and when the draft Housing Element plan will be released for public review.

In the meantime, feel free to contact us with any further questions or comments.

Thank you very much,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Mitch Bloom <mitchb@crownassoc.com>
**Sent:** Tuesday, March 23, 2021 11:03 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa
Thank you for the call back message. We are interested in having 2900 McCabe Way be considered as a future potential redevelopment site for the 2021-29 planning period. Though we cannot be certain of the site's highest and best use, as the industrial supply base continues to shrink, we would definitely consider either conglomerating our property along with neighboring properties or simply converting our 4 acre site to a residential high rise concept.
Please let me know if there is anything else the City would need at this time other than this email?

Yours very truly,

Mitch
Mitchell S. Bloom

President
Crown Associates Realty, Inc.
433 N. Camden Dr. Suite 888
Beverly Hills, CA 90210
(323) 272-7777

On Mar 22, 2021, at 8:59 PM, Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Mitch:

I apologize for being unable to respond to your voice message sooner. I am only able to circle back now.

Attached is a slide deck for a recent presentation on Future Housing Sites for your reference.

Are you interested in including 2900 McCabe on the opportunity sites list for potential redevelopment into residential uses in the 2021-2029 planning period? As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

Please let me know how I can assist.

Sincerely,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Thursday, March 11, 2021 2:09 PM
**To:** mitchb@crownassoc.com
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

Hi Mitch:

We received your letter dated March 5, 2021 (attached).

I called your office about ten minutes ago, but your receptionist indicated you were out to lunch. I have several meetings this afternoon, but wanted to forward this invite to you in case you are available to participate.

I copied my colleague, Charles, and the City's HEU consultant, Hitta, for their information.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 5:10 PM

Sent:
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Jacob Daigneau (Contractor) <JDaigneau@cityofirvine.org>
**Subject:** Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

<image001.jpg>

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg

If you are having trouble with the link above, please copy and paste this link into your browser

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

<Irvine Future Housing Sites presentation 3.16.21.pdf>

(323) 272-7777 FAX: (310) 278-0109

CROWN ASSOCIATES REALTY, INC.
Real Property Investments

433 North Camden Drive, Suite 888
Beverly Hills, California 90210

VIA FIRST-CLASS MAIL

March 5, 2021

Mr. Charles Kovac
Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

Re: 2900 McCabe Way, Irvine
Parcel #'s: 435-132-13
435-132-14

Dear Mr. Kovac,

We are the Owners of a four-acre property wherein an 85,000 sq. ft. industrial building currently exists at the above address and parcel numbers. This property has 405 freeway frontage as well as two street access.

While the Ownership has no current plans to change the use of this industrial building, we would be interested in understanding how the City of Irvine would view this property for residential overlay. At one time, KB Homes had made application (with us) in this regard and found that height limitations made development unfeasible.

We would be interested in discussing the matter further.

Yours very truly,
CROWN ASSOCIATES REALTY, INC.

Mitchell S. Bloom
President

MSB/ls

Community Development cityofirvine.org

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 1, 2021

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under state mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest. If you would like to discuss this potential opportunity in further detail, please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to:
Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 25, 2021. If you are interested, please do not let this opportunity pass you by. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael (Feb 24, 2021 15:26 PST)

Pete Carmichael
Director of Community Development

**From:** Melissa Chao
**To:** Dave Barisic
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Housing Element Update
**Date:** Tuesday, March 23, 2021 12:24:16 PM
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf

---

Hi Dave:

Thank you for reaching out to us. Attached is a slide deck on future housing sites for your reference. Please also check www.cityofirvine.org/housingelementupdate as the project webpage is periodically updated with new information.

I added 16580 Aston to the opportunity sites list. The major constraint is that the building appears to be a part of a larger industrial condo development. You mentioned that you could arrange a meeting with the other owners. Do you feel like you can gain widespread concurrence to redevelop a meaningful portion of the development or the entire development?

Please note that as the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added you to our project interest list for notification purposes for community workshops, release of public draft of HEU for review, and HEU adoption hearings, etc.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Dave Barisic <dave@brandywine-homes.com>
**Sent:** Tuesday, March 23, 2021 11:58 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Charles,

I am one of the owners of 16580 Aston here in Irvine and recently received a letter from the city regarding future potential housing sites as part of the Housing Element Update. We have potential interest in a future re-zone of our property here for residential purposes. If you would like any

additional discussion with me or some of the other owners in this association, I would be happy to set it up.

Thank you,

Dave Barisic
714-448-5921










# 6th Cycle Housing Element Update

## Future Housing Sites Virtual Meeting

## March 16, 2021

# Overview

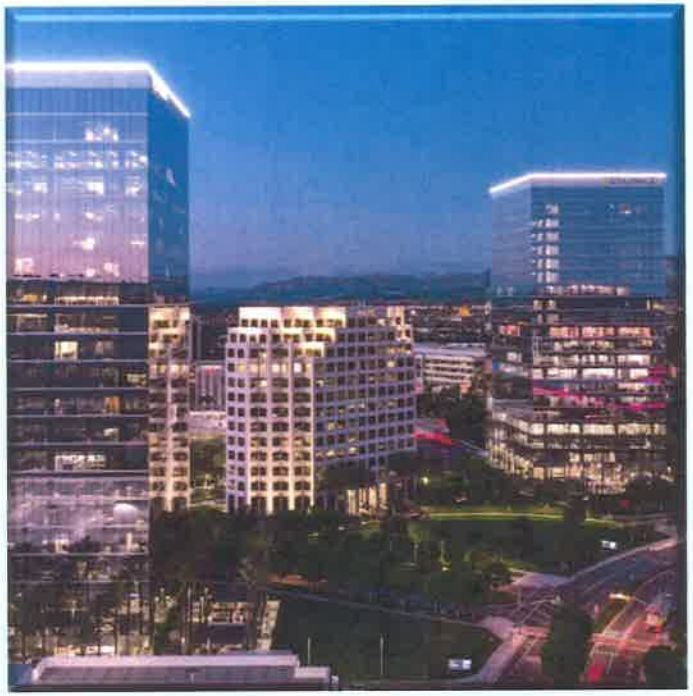
- ❖ Regional Housing Needs Assessment (RHNA)
- ❖ Housing Element Purpose and Basics
- ❖ Site Inventory
- ❖Next Steps
- ❖ Q & A

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE



# Regional Housing Needs Assessment

- RHNA: A minimum number of units by income category each community is required to provide through "adequate sites" and zoning – Mandated by the State
- RHNA for Southern California: 1,341,827
- SCAG responsible for developing methodology and assigning RHNA to Southern CA cities and counties





# Final RHNA Allocation

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,396 |
| Category 2 (51 – 80% AMI) | 4,235 |
| Category 3 (81 – 120% AMI) | 4,308 |
| Category 4 (120% AMI or above; considered "market rate") | 8,671 |
| **TOTAL** | **23,610** |

- Buffer for "no net loss"
- Actual number needed is anticipated to exceed allocation



# Housing Element Purpose

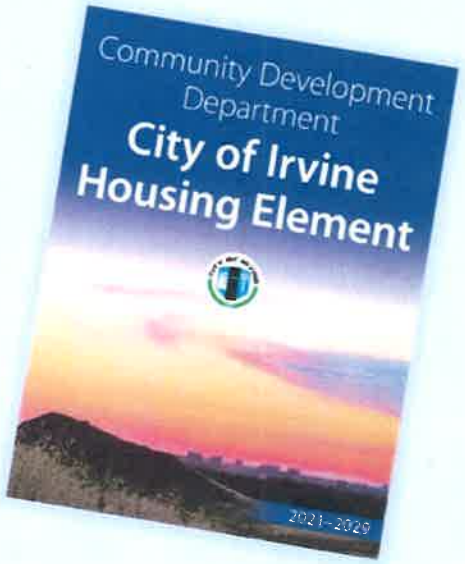
## State-mandated policy document that:

- Provides direction for implementation of various programs to meet existing and future housing needs for all income levels in the City
- Provides goals, policies, programs, and objectives for the preservation of existing housing and development of new housing
- Demonstrates how the City will accommodate its RHNA allocation



# Housing Element Basics

- 5 Major Components:
  - Review of accomplishments
  - Housing needs assessment
  - Evaluation of constraints to housing
  - Identification of housing sites
  - Program strategy to address needs for 2021-2029
- Required to be updated every eight years
- Reviewed by state for compliance with state law






# The Housing Element DOES NOT

- Require the City to build the units
- Provide funding
- Authorize construction
    - Projects still need to go through the development review process





# Site Inventory

- Analysis of adequate sites suitable to accommodate RHNA in list and map form
  - ➢ Show specific location where future housing can be built
  - ➢ Identify the potential numbers of homes that can be built at those locations
  - ➢ Meet the state's site selection criteria outlined in HCD's guidebook
    1. Site appropriately zoned?
    2. Site suitable for development?
    3. Realistic development capacity?



# Locations that are generally "off the table"

- Preserved open space areas
- With sensitive habitat or species
- Where the topography isn't conducive to building (e.g., steep slopes)
- Within flood zones or high-fire areas that aren't safe
- Within areas deemed off-limits by John Wayne Airport (e.g., flight path, airport noise contours)



## With little remaining vacant land, where can additional housing possibly go?

- Vacant sites not designated as open space or parks
- Property owners considering development of their properties
- Small contiguous sites suitable for assembly
- Underutilized parcels
- Religious institutions
- Locations where existing housing could become more dense
- Locations near public transit and essential services like retail
- Areas where housing could be added to commercial and light industrial/business parks
- Sites where infrastructure, such as water and sewer service, can support more housing
- Accessory Dwelling Units



# Affirmatively Furthering Fair Housing (AFFH)

- Fair and equitable distribution of housing throughout the community
- Protects against communities being overburdened
- Takes into consideration:
  - A variety of housing types
  - Mix of affordability levels
  - Access to transportation, employment, and community resources



# Next Steps

Winter 2020-21:

- ***City Council GPA Scoping Session for Housing Element Update (February 9, 2021)***
- ***Planning Commission Study Session (February 18, 2021)***
- Stakeholder outreach (development community)
- Develop site inventory
- Assess goals, policies, and objectives

Spring 2021:

- ***Community workshops***
  - ***Advertised on social media; information provided in multiple languages***
- Finalize site inventory
- Prepare draft Housing Element and supporting documentation



# Next Steps (continued)

Summer 2021:

- ***Public review of draft Housing Element***
- State preliminary review of the draft
- ***Project briefings with Planning Commission and City Council***
- Finalize Housing Element and supporting documentation

Early Fall 2021 – Adoption Hearings:

- ***Planning Commission***
- ***City Council***

**State Due Date – October 15, 2021 for certification**



# WE WANT YOUR INPUT!

- ✓ Potential sites for where new housing should be considered
- ✓ Any and all ideas are welcome and not a commitment

- ✓ Email ckovac@cityofirvine.org and mchao@cityofirvine.org
  - ➢ include contact information, parcel address and APN, nearest cross streets
  - ➢ additional comments/questions

## cityofirvine.org/housingelementupdate



Housing Element Update

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 29, 2021 12:05 PM
**To:** Doug Sterner
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Future Housing Sites in Irvine

**Categories:** Yellow Category

Hi Doug:

Thank you for your email. I added all the properties listed below to the housing opportunities site list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added you to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Doug Sterner <SternerDM@Pripd.com>
**Sent:** Thursday, March 25, 2021 10:55 AM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Future Housing Sites in Irvine

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa:

Without obligation or commitment, we also have other properties in Irvine that could possibly be considered for residential development:

18512 MacArthur Blvd.
18482 MacArthur Blvd.
2151 Michelson Drive
2021, 2041, 2061, 2081 Business Center Drive
15791 Rockfield Blvd.

Obviously, these have existing, non-residential uses on them now and some are in the IBC. But, we have lease expirations on these properties in both the near- and medium future.

Thanks for communicating with us and keeping us aware of the ongoing work to provide housing in the city.

**Doug Sterner, CCIM, CPM** | Asset Manager National Income Portfolio | **PROPERTY RESERVE, INC.**
51 S. Main Street, Suite 301 | Salt Lake City, UT 84111-7502 | Phone: 801-321-7548 | Cell: 801-309-5421 | E-mail: sternerdm@pripd.com

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 22, 2021 9:46 PM
**To:** Doug Sterner <SternerDM@Pripd.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Jeremy Dean Carver <CarverJ@Pripd.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Future Housing Sites in Irvine

Hi Doug:

I emailed Jeremy regarding a property on Jeffrey and Bryan and we have added it to the opportunity sites list.

Just to confirm do you have other properties you have in mind that you would like to include?

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Doug Sterner <SternerDM@Pripd.com>
**Sent:** Wednesday, March 10, 2021 7:30 AM
**To:** ckovak@cityofirvine.org
**Cc:** Melissa Chao <MChao@cityofirvine.org>; Jeremy Dean Carver <CarverJ@Pripd.com>
**Subject:** Future Housing Sites in Irvine

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Kovac:

I am writing in response to the Irvine Housing Element letter we received recently from Pete Carmichael and the City of Irvine. The company I work for, Property Reserve, Inc., owns various properties in the city. We are responding to indicate that we are potentially interested in opportunities to redevelop our sites for future residential use though we cannot firmly commit to such a re-use at this time. We understand this General Plan Housing Review will require further study and time with changes throughout the process. We would like to be kept aware of the city's efforts over the coming months and years. If you wish to discuss our properties further, you may contact me at the number below.

Thank you.

**Doug Sterner, CCIM, CPM** | Asset Manager National Income Portfolio | **PROPERTY RESERVE, INC.**
51 S. Main Street, Suite 301 | Salt Lake City, UT 84111-7502 | Phone: 801-321-7548 | Cell: 801-309-5421 | E-mail: sternerdm@pripd.com

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, March 17, 2021 2:13 PM
**To:** Emily Yau
**Cc:** Charles Kovac; Jennifer Amaya; Hitta Mosesman; Melissa Chao
**Subject:** RE: 6th Housing Element Update - Future Housing Sites meeting question

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hi Emily:

Thank you for joining us yesterday. I hope you found the meeting informative.

To confirm, 2152 Dupont Dr. is already on the opportunity sites list based on our previous email communications dated March 5, 2021. As the HEU process progresses, the City Council will ultimately decide on the final site inventory to be submitted to the State for HE certification.

You have been added to the project interest list and will be notified of project milestones and additional opportunities to participate.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Emily Yau <emilyyau2020@yahoo.com>
**Sent:** Wednesday, March 17, 2021 12:04 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Jennifer Amaya <jenniferawon@yahoo.com>
**Subject:** 6th Housing Element Update - Future Housing Sites meeting question

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank city of Irvine for hosting the meeting to share the housing updates.

To be properly considered, we would like to know if our site could be identified as the opportunity site that allow us to develop the multifamily later.
The property info is listed as below:

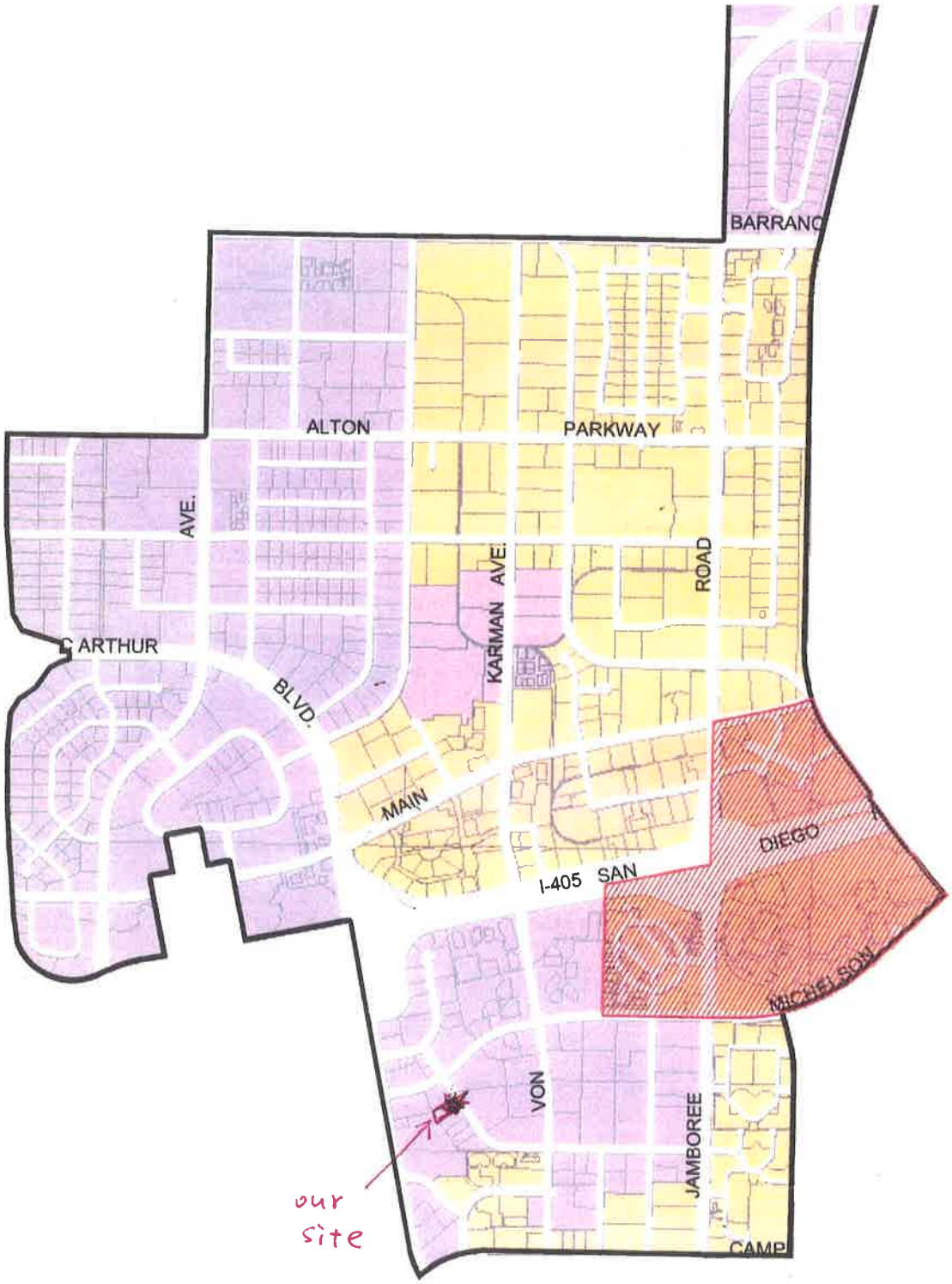
Address: 2152 Dupont Dr., Irvine, CA 92612
APN: 44511110
The nearest cross street is Michelson Dr.

I also attached the IBC overlay map to show where we are located.

We have great interest to develop our site into multifamily as city plan, so please support and assist us to reach the goal.

Thank you,

Emily Yau




**Overlay Districts**

- Business Complex
- Urban Neighborhood - Height limit 75 feet above ground level
- Urban Neighborhood - Height limit 20 stories or FAA height limits as determined by Part 77 of FAA regulations, whichever is less.

# IBC RESIDENTIAL MIXED USE OVERLAY ZONING CODE REGULATORY PLAN

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 8, 2021 3:21 PM
**To:** farhad@duramar.com
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** RE: Re; 6th cycle housing update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Farhad:

Thank you for expressing interest. I will add 2500 White Rd to the draft opportunity sites list.

City staff and our consultant will be hosting one HEU meeting based on the date/time polled with the highest confirmation level. If you are unable to make the final meeting time, we can schedule a separate call to discuss.

Thank you,
Melissa Chao

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Monday, March 8, 2021 3:05 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Re; 6th cycle housing update

FYI ...

Charles

**From:** Farhad Abdollahi <farhad@duramar.com>
**Sent:** Monday, March 8, 2021 2:05 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re; 6th cycle housing update

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Charles,

I recently received a letter from the city in regards to potential site for residential development.
I'm interested in learning more about the program. Our location at 2500 white rd. might just be the ideal location for such project. Feel free to reach out so we can perhaps discuss this matter.

Best regards,

Farhad Abdollahi.

## Melissa Chao

**From:** Melissa Chao
**Sent:** Thursday, March 18, 2021 6:09 PM
**To:** Matt Karam; Charles Kovac
**Cc:** Mom; Melissa Chao
**Subject:** RE: Response to Irvine Housing Element Update

**Categories:** Yellow Category

Hi Fred and Jennifer:

Thank you for letting us know.

We will make a note of your comment in our records.

Sincerely,

MELISSA CHAO | SENIOR PLANNER
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

-----Original Message-----
From: Matt Karam <karam.matt@gmail.com>
Sent: Thursday, March 18, 2021 2:33 PM
To: Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
Cc: Mom <jdepkaram@cox.net>
Subject: Response to Irvine Housing Element Update

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Charles Kovac and Melissa Chao,

Community Development Department in the City of Irvine:

The property in Irvine, CA was purchased as a commercial property as an investment. This investment is our livelihood. We are not interested in transforming our commercial site into residential.

Thank you for your time and attention to this matter.

Respectfully,

Fred Karam
Jennifer Deppe Karam

6 Goddard

Irvine, CA 92618

## Melissa Chao

**From:** Melissa Chao
**Sent:** Friday, March 19, 2021 5:15 PM
**To:** Gary Wang
**Cc:** Oliver Chee; Diane Clark; Charles Kovac; Melissa Chao
**Subject:** RE: 16680 Armstrong Ave., Irvine – Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Gary:

Thank you for letting us know. I added 16680 Armstrong Ave. to the opportunity sites list for the Housing Element Update.

Please feel free to contact us with any questions.

Have a nice weekend everyone,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Gary Wang <gwang@derbyholdings.com>
**Sent:** Friday, March 19, 2021 1:49 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Oliver Chee <ochee@derbyholdings.com>; Diane Clark <diane.clark@kidder.com>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: 16680 Armstrong Ave., Irvine – Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

It was a pleasure speaking with both of you yesterday.

Please be advised that Derby Holdings Ltd. wishes to have its property located at 16680 Armstrong Ave., Irvine added to the City's site inventory for the Regional Housing Needs Assessment allocation, as a site for future residential development.

Please kindly confirm receipt of this email.

Regards,

Gary Wang
Derby Holdings Ltd.

(778) 865-8468

**From:** Melissa Chao [mailto:MChao@cityofirvine.org]
**Sent:** Thursday, March 18, 2021 3:34 PM
**To:** Gary Wang
**Cc:** Oliver Chee; Diane Clark; Charles Kovac; Melissa Chao
**Subject:** RE: 16680 Armstrong Ave., Irvine – Housing Element Update

Hi Gary:

Thank you for meeting with Charles and me.

Below is the link to the IBC webpage that describes the evolution of the area to include 15,000+ residential units.

https://www.cityofirvine.org/community-development/irvine-business-complex

The IBC residential project list and unit count summarizes different developments. There is continued demand from developers wanting to do more residential in the IBC.

Please let us know if you have any additional questions.

Thanks again,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 17, 2021 5:05 PM
**To:** Gary Wang <gwang@derbyholdings.com>
**Cc:** Oliver Chee <ochee@derbyholdings.com>; Diane Clark <diane.clark@kidder.com>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: 16680 Armstrong Ave., Irvine – Housing Element Update

Hi Gary:

FYI, attached is a presentation from yesterday's meeting.

"See" you tomorrow,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Gary Wang <gwang@derbyholdings.com>
**Sent:** Wednesday, March 17, 2021 3:28 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Oliver Chee <ochee@derbyholdings.com>; Diane Clark <diane.clark@kidder.com>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: 16680 Armstrong Ave., Irvine – Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

I've received the invite. Talked to you tomorrow at 2 pm.

Regards,
Gary

---

**From:** Melissa Chao [mailto:MChao@cityofirvine.org]
**Sent:** Wednesday, March 17, 2021 3:24 PM
**To:** Gary Wang; Charles Kovac
**Cc:** Oliver Chee; Diane Clark; Melissa Chao
**Subject:** RE: 16680 Armstrong Ave., Irvine – Housing Element Update

Hi Gary:

Thank you for reaching out to us. I sent a meeting invite via MS Teams for 2 p.m. on this Thursday, but am unsure if it successfully reached you. Please let me know. I may need our administrative staff to assist after all.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Gary Wang <gwang@derbyholdings.com>
**Sent:** Wednesday, March 17, 2021 1:37 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Oliver Chee <ochee@derbyholdings.com>; Diane Clark <diane.clark@kidder.com>
**Subject:** 16680 Armstrong Ave., Irvine – Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Kovac and Ms. Chao:

I am writing in response to the attached letter that we received regarding the City's Housing Element Update. I represent Derby Holdings Ltd., the owner of the property located at 16680 Armstrong Ave, Irvine.

I would like to schedule a time to discuss this matter with you and to learn more about the process. Please kindly provide some times when you would be available this week for a zoom call or a phone call.

Thank you for your assistance and I look forward to speaking with you.

Regards,

Gary Wang
Derby Holdings Ltd.
(778) 865-8468

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 29, 2021 3:51 PM
**To:** George Joseph P (CFO); Charles Kovac
**Cc:** Subhranshu Tripathy; Michelle Le (HR & Finance Dept.); Matthew Toh; Melissa Chao
**Subject:** RE: letter from the City of Irvine; review of current zoning
**Attachments:** Irvine Future Housing Sites 3.16.21 Q&A FINAL.pdf

**Categories:** Yellow Category

Hi George:

For reference, attached is the Q&A from the Future Housing Sites meeting.

I recommend contacting the Airport Land Use Commission (ALUC) for John Wayne Airport to inquire about any building height limitations (i.e., determination of no hazard to air navigation) and/or building restrictions.
https://www.ocair.com/commissions/aluc/default

Lea Umnas Choum, Director
John Wayne Airport Facilities Division
949-252-5123
Fax: 949-252-6012
lchoum@ocair.com

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** George Joseph P (CFO) <georgejp@pacific-aa.com>
**Sent:** Monday, March 29, 2021 12:59 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Subhranshu Tripathy <subhran@pacificpharma.com>; Michelle Le (HR & Finance Dept.) <michelle.le@pacificpharma.com>; Matthew Toh <matthewtoh@pacificpharma.biz>
**Subject:** Re: letter from the City of Irvine; review of current zoning

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Melissa,

Thank you for the below. We are keen and will also attend the upcoming community workshops ( pls let us know it's a webinar).

You mention below a potential constraint is the proximity to the end of the airport runway (i.e., 4,127 feet). Let us know where we can get further details on this.

How You Can Get Involved

Upcoming Meetings and Notices

**Community Workshops (more details to come)**

- #1 Thursday, April 22, 2021 | 10 a.m.-12 p.m.
- #2 Thursday, April 29, 2021 | 5:30 - 7:30 p.m.

---

Thank you,

George

On Thu, Mar 25, 2021 at 6:36 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi George:

I added 1211 McGaw Ave to the housing opportunity sites list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the Housing Element (HE) plan. A potential constraint that will need to be considered and further researched is the proximity to the end of the airport runway (i.e., 4,127 feet).

To clarify, the City will not be developing or redeveloping sites into residential uses. Subsequent to the adoption of the HE, the City will be laying the general ground work with a subsequent and more detailed planning effort (i.e., General Plan Update, Zoning Ordinance Amendment, and Environmental Impact Report) to the extent necessary. However, the property owner or developer (i.e., applicant) would still need to process the specific discretionary application(s) and appropriate California Environmental Quality Act (CEQA) documentation to develop the actual residential project.

I added you to our project interest list for notification purposes for community workshops, release of public draft of HEU for review, and HEU adoption hearings, etc. Please also check www.cityofirvine.org/housingelementupdate as the project webpage is periodically updated with new information.

Feel free to contact us with any further questions.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** George Joseph P (CFO) <georgejp@pacific-aa.com>
**Sent:** Tuesday, March 23, 2021 2:01 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Matthew Toh <matthewtoh@pacificpharma.biz>; Subhranshu Tripathy <subhran@pacificpharma.com>; Michelle Le (HR & Finance Dept.) <michelle.le@pacificpharma.com>
**Subject:** Re: letter from the City of Irvine; review of current zoning

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank you for the reply. Yes, the particular site(s) is located at 1211 McGaw Avenue, Irvine, CA 92614.

Kindly note the property is owned by MMM International LLC, which one our group company.

We are interested in the City's planning in potentially developing or redeveloping the sites for residential uses.

Please let us know.

Regards,

George

On Wed, Mar 17, 2021 at 5:12 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi George:

The City is looking for property owners interested in potentially developing or redeveloping their sites for residential uses.

FYI, attached is a presentation from yesterday's 3 p.m. meeting.

Do you have a particular site(s) in mind that you can share with us?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** George Joseph P (CFO) <georgejp@pacific-aa.com>
**Sent:** Tuesday, March 16, 2021 4:18 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; CKovact@cityofirvine.org
**Cc:** Matthew Toh <matthewtoh@pacificpharma.biz>; Subhranshu Tripathy <subhran@pacificpharma.com>; Michelle Le (HR & Finance Dept.) <michelle.le@pacificpharma.com>
**Subject:** letter from the City of Irvine; review of current zoning

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Charles, Melissa,

This is in reference to the attached recent letter from the City of Irvine on review of current zoning.

We are interested in this potential opportunity and request if you can share any further details so we discuss internally and contact you further such that we finally reply by 25 March'21 as stated in the communication.

Thank you,

George

George Joseph P

CFO

Pacific Medical Industries Limited (a member of Pacific-AA Group)

Medical PACIFIC Group

Myanmar Office: Pacific-AA Tower, No. 81 Insein Road (Corner of Hledan Road) Kamayut Township, Yangon, Myanmar.

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Singapore office: Pacific Pharmaceuticals Pte. Ltd.

101 Cecil Street, #17-07 Tong Eng Building, Singapore 069533

Tel: +(65) 6227 6828, Fax: +(65) 6224 7405

USA Office : Pacific Pharmaceuticals USA Inc.

11380 7th St, Rancho Cucamonga, CA 91730, USA.

Tel: (909) 476 2300, (909) 476 2302, Fax: (909) 476 2303

Email : georgejp@pacific-aa.com

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 29, 2021 10:45 AM
**To:** Tim Strader Jr.; Charles Kovac
**Cc:** Sean Cao; Patrick Rios; Melissa Chao
**Subject:** RE: Landmark Opportunity Sites Letter

**Categories:** Yellow Category

Hi Tim:

Thank you for the letter. I have added the following APNs to the opportunity sites list:

| | | | |
|---|---|---|---|
| 18872 MacArthur Blvd | 8299 | 3 | 445-012-01 |
| 18912 MacArthur Blvd | 8299 | 4 | 445-012-02 |
| 18952 MacArthur Blvd | 8299 | 5 | 445-012-03 |
| ? | 80-617 | 20 | 445-012-06 |

As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added Sean and Patrick to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Tim Strader Jr. <tj@starpointeventures.com>
**Sent:** Thursday, March 25, 2021 9:38 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Sean Cao <sean.cao@camphorpartners.com>; Patrick Rios <patrick.rios@camphorpartners.com>
**Subject:** Landmark Opportunity Sites Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles and Melissa, please see the attached letter from the owner of The Landmark properties in Planning Area 36. Please confirm receipt and keep us posted on next steps.

Thanks,

Tim Strader Jr.
President
Starpointe Ventures
5030 Campus Drive, Suite B
Newport Beach, CA 92660
P)949-622-0420
tj@starpointeventures.com
www.starpointeventures.com

March 19, 2021

Mr. Charles Kovac
Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

RE: Opportunity Sites List

Dear Charles:

GFE MacArthur Investments, LLC is the owner of the 7-acre office and former restaurant project located at 18872, 18912 and 18952 MacArthur Boulevard in Planning Area 36. We are in the process of determining the highest and best future use for the property and would like to consider future residential use. We believe that residential uses would be compatible with the surrounding neighborhood and promote the successful live-work environment that exists within the Irvine Business Complex.

Please add the above-referenced addresses to your Opportunity Sites List for the upcoming 6th Cycle Housing Element Update. You can reach me at (949) 551-6688 or our consultant, Tim Strader Jr. of Starpointe Ventures at (949) 622-0420 if you have any questions or require any additional information.

Sincerely,

Sean S. Cao
Manager
GFE MacArthur Investments, LLC

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 29, 2021 4:32 PM
**To:** Hadi Assaf; Charles Kovac
**Cc:** Melissa Chao
**Subject:** RE: Irvine Housing Element Update
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf; Irvine Future Housing Sites 3.16.21 Q&A FINAL.pdf

**Categories:** Yellow Category

Hi Hadi:

I added 13805 Alton Pkwy, #D to the opportunity sites list. Based on our March 26 telephone conversation, this site may be challenging for redevelopment as there are multiple building owners. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

For your reference, attached is a Q&A for the March 16, 2021 Future Housing Sites meeting.

Lastly, I added you to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Hadi Assaf <hadioc@gmail.com>
**Sent:** Monday, March 29, 2021 12:31 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,
We received your letter regarding the Housing element for the 2021-2029 planning period and we would like to express our interest in being considered for this planning. Thank you
Hadi Assaf

13805 Alton Pkwy #D
Irvine CA 92618

**From:** Melissa Chao
**To:** Charles Kovac
**Cc:** Melissa Chao
**Subject:** RE: Housing Element - City of Irvine
**Date:** Wednesday, March 17, 2021 5:01:15 PM
**Attachments:** image001.png
Irvine Future Housing Sites presentation 3.16.21.pdf

---

Hi Issak:

I have added you to the project interest list.

FYI, attached is the slide deck for yesterday's meeting.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Wednesday, March 17, 2021 9:25 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Housing Element - City of Irvine

FYI ...

Charles

**From:** Izzak Mireles <IMireles@avcity.org>
**Sent:** Wednesday, March 17, 2021 8:54 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Housing Element - City of Irvine

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Charles,

My name is Izzak Mireles and I'm a constituent here in the City of Irvine and I'm interested in being a part of the Housing Element update. Unfortunately, I was unable to make yesterday's meeting; is there a way to get access to the webinar and/or mailing list to keep receiving updates?

Thank you so much for your time.

Best,

**Izzak Mireles | Assistant Planner**




City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656
T: 949-425-2547
F: 949-425-3899
avcity.org

Confidential Communications: This email and any files or attachments transmitted with it may contain privileged or otherwise confidential information. If you are not the intended recipient, or believe that you may have received this communication in error, please advise the sender via reply email and immediately delete the email you received.

## Melissa Chao

**From:** Jeanne Baran
**Sent:** Monday, March 15, 2021 2:52 PM
**To:** Melissa Chao
**Subject:** Re: Housing Element Meeting - March 16th

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hi Melissa,
All set. I came across the notice from a email from the People4housing.
Jeanne

---

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 15, 2021 2:32 PM
**To:** Jeanne Baran <JBaran@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Housing Element Meeting - March 16th

Hi Jeanne:

This stakeholder meeting is targeted towards non-residential property owners in the IBC and Spectrum for the purposes of identifying potential opportunity sites, so we did not place it on the general City Calendar.

We plan to host several general community workshops in April and will publicize those through the project webpage, social media, press releases, and email notifications.

If you are interested in attending tomorrow's meeting, I can provide you with a Zoom link.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Jeanne Baran <JBaran@cityofirvine.org>
**Sent:** Monday, March 15, 2021 2:19 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing Element Meeting - March 16th

*Hi, is this event scheduled for tomorrow? I didn't see it on the city calendar. Thank you. Jeanne*

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

**Jeanne Baran** | Senior Council Executive Asst | CITY OF IRVINE
949-724-6226| 1 Civic Center Plaza, Irvine, CA 92606

## Melissa Chao

**From:** Jeremy Dean Carver <CarverJ@Pripd.com>
**Sent:** Wednesday, March 17, 2021 8:55 PM
**To:** Melissa Chao; Charles Kovac
**Subject:** RE: Irvine Site

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa,

Thanks for your email. There is no dedication towards agricultural use that I know of.

Thanks for adding the property to the opportunity sites list.

Jeremy Carver | Director, Asia Region | Property Reserve, Inc.
51 S. Main St., Suite 301 | Salt Lake City, UT 84111-7512
Phone: 801-321-8769 | Cell: 801-386-6724 | Email: CarverJ@pripd.com

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 17, 2021 5:18 PM
**To:** Jeremy Dean Carver <CarverJ@Pripd.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Site

Hi Jeremy:

Sorry for the delay in responding. We sent out property owner outreach letters re: future housing sites and have received quite a few inquiries and inputs.

Staff identified 5481 Bryan Ave as an opportunity site as well. By chance, do you know if the site has any restrictions such as being dedicated towards agricultural uses? The City will need to identify any potential constraints to residential development.

I will add the property to the opportunity sites list.

Also, I will add you to the project interest list. As the Housing Element Update process progresses, you will be kept informed of any participation opportunities and project milestones such as the release of the draft HEU document for review. Note that the City Council will make the final determination on which sites will be included in the site inventory submitted to the State as part of the HE.

Please feel free to contact me with any further questions/concerns.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Jeremy Dean Carver <CarverJ@Pripd.com>
**Sent:** Tuesday, March 16, 2021 4:42 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Irvine Site

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Kovac,

We own a property at 5481 Bryan Avenue that is 8.1 acres. APN 55108111.

We think we could get 25-35 units per acre or approximately 202-284 units. Nearest cross streets are Bryan Avenue and Jeffrey Road.

Thanks,

Jeremy Carver | Director, Asia Region | Property Reserve, Inc.
51 S. Main St., Suite 301 | Salt Lake City, UT 84111-7512
Phone: 801-321-8769 | Cell: 801-386-6724 | Email: CarverJ@pripd.com

**Melissa Chao**

**From:** Melissa Chao
**Sent:** Tuesday, March 9, 2021 10:03 AM
**To:** john@telxpress.com
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** Future Housing Sites - Irvine

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi John:

It was nice speaking with you regarding 230 Goddard in the Pannatoni R&D/industrial condo development in Planning Area 34.

FYI, City staff and our HEU consultant will be hosting one meeting based on the date/time polled with the highest confirmation level. I believe our call covered what is planned for during the meeting, but if you know of any fellow Irvine property owners that might be interested, please feel free to forward this email.

Thank you,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Melissa Chao

**From:** Melissa Chao
**Sent:** Friday, April 2, 2021 5:48 PM
**To:** Sarah Escobedo
**Subject:** RE: Please mail out the attached documents and email to Mr. John Bercaw re: 1582 Browning in Irvine

Thank you Sarah!

Have a good weekend ☺

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Sarah Escobedo <SEscobedo@cityofirvine.org>
**Sent:** Friday, April 2, 2021 10:14 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Please mail out the attached documents and email to Mr. John Bercaw re: 1582 Browning in Irvine

Hi Melissa,

All good here, same for you hopefully. Yes I was in office on Monday and we mailed it out. I didn't send a confirmation then, apologies for that.

**SARAH ESCOBEDO** | SENIOR OFFICE SPECIALIST | 949-724-6466

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Friday, April 2, 2021 10:01 AM
**To:** Sarah Escobedo <SEscobedo@cityofirvine.org>
**Subject:** RE: Please mail out the attached documents and email to Mr. John Bercaw re: 1582 Browning in Irvine

Hi Sarah:

Happy Friday! Hope you are doing well.

By chance, did this mail item go out?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 29, 2021 2:37 PM
**To:** Sarah Escobedo <SEscobedo@cityofirvine.org>

**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Please mail out the attached documents and email to Mr. John Bercaw re: 1582 Browning in Irvine

Hi Sarah:

Please have duplicating print out full-size color copies of the three attachments (i.e., presentation, Q&A, and community workshops flier) and this email and mail to:

Mr. John Bercaw

Corona Del Mar, CA 92625

Please also include this email which provides the log-in directions for the two community workshops in April.

| | |
|---|---|
| **Subject:** | **HEU Community Workshop #1** |
| **Date:** | **April 22, 2021** |
| **Time:** | **10 am – 12 pm** |
| **Registration Link:** | **https://zoom.us/webinar/register/WN_ft1HqrH4QjKL_h0AeWCfRQ** |
| **Webinar ID** | **949 9100 4313** |
| **Webinar Passcode** | **City** |

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

| | |
|---|---|
| **US:** | **+1 669-900-6833 or +1 346-248-7799** |
| **Webinar ID:** | **949 9100 4313** |
| **Passcode:** | **572432** |

| | |
|---|---|
| **Subject:** | **HEU Community Workshop #2** |
| **Date:** | **April 29, 2021** |
| **Time:** | **5:30 – 7:30 pm** |
| **Registration Link:** | **https://zoom.us/webinar/register/WN_X7c0gcgNRhu46_sk33_KwA** |
| **Webinar ID** | **967 7085 9048** |
| **Webinar Passcode** | **City** |

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

| | |
|---|---|
| **US:** | **+1 669-900-6833 or +1 346-248-7799** |
| **Webinar ID:** | **949 9100 4313** |
| **Passcode:** | **652964** |

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Meaghan Peek
**To:** Sarah Escobedo
**Subject:** RE: Follow up to Submitted Duplicating Request
**Date:** Monday, March 29, 2021 4:21:08 PM
**Attachments:** image001.png
image003.png

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This went out today.

**MEAGHAN PEEK |** MAIL COORDINATOR | 949-724-6012

**From:** Sarah Escobedo <SEscobedo@cityofirvine.org>
**Sent:** Monday, March 29, 2021 2:48 PM
**To:** Duplicating <duplicating@cityofirvine.org>; >Mailcenter <mailcenter@cityofirvine.org>
**Subject:** Follow up to Submitted Duplicating Request

Hello,

Would you please print the attached in full color and mail to

Mr. John Bercaw

Corona Del Mar, CA 92625
Sen

SARAH ESCOBEDO | SENIOR OFFICE SPECIALIST | COMMUNITY DEVELOPMENT
949-724-6466 | 1 Civic Center Plaza, Irvine, CA 92606
sescobedo@cityofirvine.org | cityofirvine.org

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, March 24, 2021 6:16 PM
**To:** Tim Strader Jr.; jbrand@sentre.com
**Cc:** Melissa Chao; Charles Kovac
**Subject:** FW: Lakeshore Opportunity Sites Letter
**Attachments:** Lakeshore_RHNA Letter_03242021.pdf

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Purple Category

Hi Tim and John:

Thank you for the letter. I have added Lakeshore to the opportunity sites list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

To confirm, given the focus on the health club, stand-alone restaurant, and common areas would you feel comfortable including the three highlighted parcels on the list? The three parcels total to 8.61 acres.

| | | | | |
|---|---|---|---|---|
| Lakeshore Towers | 18007 Von Karman Ave | 98-220 | 2 | 44539 |
| Lakeshore Towers | | 38584-LL | A | 44544 |
| Lakeshore Towers | 18051 Van Karman Ave | 89-274 | 3 | 44534 |
| Lakeshore Towers | 18101 Von Karman Ave | 89-274 | 1 | 44533 |
| Lakeshore Towers | 18111 Von Karman Ave | 38584-LL | 1 | 44532 |
| Lakeshore Towers | 18191 Von Karman Ave | 98-220 | 1 | 44540 |
| Lakeshore Towers | 18155 Von Karman Ave | 89-274 | 6 | 44543 |
| Lakeshore Towers | 18155 Von Karman Ave | 89-274 | 5 | 44542 |

I will add John to the project interest list. You both will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Tim Strader Jr. <tj@starpointeventures.com>
**Sent:** Wednesday, March 24, 2021 9:59 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** John Brand <jbrand@sentre.com>
**Subject:** Lakeshore Opportunity Sites Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles and Melissa, please see the attached letter from the owner of Lakeshore in Planning Area 36. Please confirm receipt and keep us posted on next steps.

Thanks,

Tim Strader Jr.
President
Starpointe Ventures
5030 Campus Drive, Suite B
Newport Beach, CA 92660
P)949-622-0420
tj@starpointeventures.com
www.starpointeventures.com

# LAKESHORE

March 24, 2021

Mr. Charles Kovac
Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

**RE: Opportunity Sites List**

Dear Charles:

Lakeshore is an approximately 15 acre mixed-use business complex consisting of approximately 900,000 square feet of office, health club, retail, and restaurant uses. We are in the process of determining the highest and best replacement use for the health club facility site, the existing standalone restaurant site, and the adjacent common area and would like to consider future residential use. The uses collectively occupy approximately a 9 acre portion of the property. We believe that residential uses would be compatible with our existing uses and promote the successful live-work environment that exists within the Irvine Business Complex.

Please add Lakeshore to your Opportunity Sites List for the upcoming 6th Cycle Housing Element Update. You can reach me at (949) 955-5253 if you have any questions or require any additional information.

Sincerely,

John Brand
COO

## Melissa Chao

**From:** Josh Goldman <josh.goldman@gemdaleusa.com>
**Sent:** Sunday, April 4, 2021 7:21 AM
**To:** Melissa Chao; Tim Strader Jr.
**Cc:** James Steman; Matthew Macher
**Subject:** RE: 2400 Barranca Opportunity Sites Letter

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you Melissa!

Looking forward to working together.

Best,
Josh

JOSH GOLDMAN
MANAGING DIRECTOR, DEVELOPMENT
GEMDALE USA CORPORATION
*6027 Edgewood Bend Court, San Diego, CA 92130*
PHONE: 858.436.3471| MOBILE: 240.305.3019
EMAIL: JOSH.GOLDMAN@GEMDALEUSA.COM

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Friday, April 2, 2021 3:50 PM
**To:** Tim Strader Jr. <tj@starpointeventures.com>
**Cc:** Josh Goldman <josh.goldman@gemdaleusa.com>; James Steman <jim.steman@gemdaleusa.com>; Matthew Macher <matthew.macher@gemdaleusa.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: 2400 Barranca Opportunity Sites Letter

Hi Tim:

Thank you for the letter. I have added 2400 Barranca Pkwy to the housing opportunity sites list with a note that potential housing is a back-up plan pending the outcome of CEQA litigation.

As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added Josh, James, and Matthew to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Note today is Charles' last day with the City of Irvine, so please direct any questions/concerns to me. Have a nice weekend everyone.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Tim Strader Jr. <tj@starpointeventures.com>
**Sent:** Wednesday, March 31, 2021 9:41 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** josh.goldman@gemdaleusa.com; James Steman <jim.steman@gemdaleusa.com>; Matthew Macher <matthew.macher@GEMDALEUSA.COM>
**Subject:** 2400 Barranca Opportunity Sites Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles and Melissa, please see the attached letter from the owner of 2400 Barranca Parkway in Planning Area 36. Please confirm receipt and keep us posted on next steps.

Thanks,

Tim Strader Jr.
President
Starpointe Ventures
5030 Campus Drive, Suite B
Newport Beach, CA 92660
P)949-622-0420
tj@starpointeventures.com
www.starpointeventures.com

March 29, 2021

Mr. Charles Kovac
Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

RE: Opportunity Sites List

Dear Charles:

Gemdale 2400 Barranca Holdings, LLC is the owner of the 5-acre approximate 69,780 square foot office and industrial building located at 2400 Barranca Parkway in Planning Area 36. The property has been entitled for a 275,000 square foot office development and is currently subject to a CEQA challenge. We fully intend to develop the office project as proposed but given the legal challenge to the office entitlement, we would like to consider future residential use depending on the outcome of the CEQA challenge. We believe that residential uses would be compatible with the surrounding neighborhood and promote the successful live-work environment that exists within the Irvine Business Complex.

Please add the above-referenced addresses to your Opportunity Sites List for the upcoming 6th Cycle Housing Element Update. You can reach me at (240) 305-3019 or our consultant, Tim Strader Jr. of Starpointe Ventures at (949) 622-0420 if you have any questions or require any additional information.

Sincerely,

Josh Goldman

Managing Director, Development

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 8, 2021 6:26 PM
**To:** junghwan choi; Charles Kovac
**Cc:** Hitta Mosesman; Melissa Chao
**Subject:** RE: future housing sites letter from 3/1/2021

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Junghwan:

Thank you for your input. The 6th cycle Housing Element Update (HEU) is required by the State. The State assigned 1,341,827 units to the Southern California region. In turn, the Southern California Association of Governments (SCAG) allocated Irvine almost 24,000 new units because of our two regional job centers. The City vehemently argued against our unit allocation, but our appeal was recently denied by SCAG.

Unfortunately, if Irvine does not get our HEU certified/approved by the State, Irvine is subject to harsh penalties such as substantial fines, lawsuits, and ineligibility for grant funding for transportation improvement projects. To clarify, it is not the City or City Council that wants to develop more housing beyond the maximums in our adopted master plan, it is the State's initiative. Thus, we are tasked with planning to accommodate the required unit allocation by income level to maintain the Irvine's quality of life. However, the market will ultimately determine if and when units are built.

I will add you to the project email notification list. To learn more, please go to www.cityofirvine.org/housingelementupdate.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** junghwan choi <kubdoc@yahoo.com>
**Sent:** Saturday, March 6, 2021 2:17 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** future housing sites letter from 3/1/2021

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

As a long time resident of Irvine, i wanted to voice my opinion regarding the letter referenced above. I have lived in Irvine since 1998. This has been a great place to live, work and play. Unfortunately, due to continued development of available land for housing with increased density, the quality of life in the City has deteriorated. The problems and issues of urban over development has increased, yet the

City and the Council wants to develop some more. The Letter like this tells me that the City is moving in the wrong direction. It is time to stop further development of this City, and stop planning for construction of future housing units.

Sincerely,

Junghwan Choi.

## Melissa Chao

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Tuesday, May 11, 2021 3:27 PM
**To:** Melissa Chao
**Subject:** Re: Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Yes, thank you. I've let the property owner know that too and I think he was disappointed in the other attempts by developers and believes he has a more personal relationship with the neighborhood and doesn't want them upset so he's is working on different ideas. I'll let you know if I learn anything more.

On Tue, May 11, 2021 at 3:19 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Karen:
>
> The Racquet Club is on the draft opportunity sites list.
>
> As with all the proposed sites, the City Council will make the final determination for whether a site will be included in the final site inventory submitted for State certification.
>
> Something to note that in the past several years, Rancho San Joaquin residents had very strong objections to a development application proposing additional residential uses in their neighborhood.
>
> Thanks,
>
> **MELISSA CHAO | SENIOR PLANNER**
> P 949-724-6395 | F 949-724-6440
>
> mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Tuesday, May 11, 2021 2:49 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re: Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank you for sending the list, previously I had understood that you had also included the following property. Is that still the case?

The third is the Racket Club -5 Ethel Coplen Way **Irvine**, CA 92612, I'm working with Greg Michaels who is partners with the Owner.

On Tue, May 11, 2021 at 1:08 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Karen:

I've added 19742 MacArthur to the opportunity sites list for consideration.

Below is a summary of the properties along with their acreages in the IBC that I have from you:

Centerpointe:

| | | | | |
|---|---|---|---|---|
| 19762 MacArthur Blvd | 107/10-12 | 4 | 445-132-16 | 2.2 |
| 19712 MacArthur Blvd | 107/10-12 | 1 | 445-132-18 | 2.2 |

| | | | | |
|---|---|---|---|---|
| 19722 & 19732 MacArthur Blvd | 107/10-12 | 7 | 445-132-19 | 2.68 |
| 19752 MacArthur Blvd | 107/10-12 | 3 | 445-132-09 | 1.05 |
| 19742 MacArthur Blvd | 107/10-12 | 2 | 445-132-11 | 1.34 |
| 19722 MacArthur Blvd (19732 MacArthur is on same parcel) | 107/10-12 | 7 | 445-132-19 | 2.68 |
| 19782 MacArthur Blvd | 107/10-12 | 6 | 445-132-14 | 2.3 |

Other IBC properties:

| | | | | |
|---|---|---|---|---|
| 17832 & 17840 Gillette Ave | 99-213 | 2 | 435-111-30 | 1.56 |
| 17832 & 17840 Gillette Ave | 99-213 | 2 | 435-111-27 | 1.04 |
| ? | 99-213 | 3 | 435-111-28 | 2.3 |
| ? | 99-213 | 3 | 435-111-31 | 0.27 |

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Tuesday, May 11, 2021 12:10 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank you for your efforts, here is the final property in Centerpoint for inclusion in the Housing Element opportunity sites. Could you please confirm that you have received this request? And that is included with the other 7 parcels?

Thank you.

Please include the property in the list of properties

Thank you

1. The property address is 19742 MacArthur Blvd., Irvine, California 92612

2. Property ownership: Bates Johnson Building, Ltd., a California Limited Partnership

3. Orange County Assessor's Parcel Number: 445-132-11

Thank you

Please confirm we have been successfully added to the list of properties to be included in the planned amendment, and ask that we be added to any mailing list or other information transmittal relative to the City of Irvine's plans in this regard.

Thanks for your help!

Thank you

Dale T. Falasco, Trustee

Dale T. Falasco Living Trust, General Partner

Bates Johnson Building, Ltd., Landlord

--

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile

415.367.4286 x101 office

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Karen@pacificplanninggroup.com

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415.367.4286 x101 office

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, May 5, 2021 2:30 PM
**To:** Karen Martin
**Cc:** Marika Poynter; Hitta Mosesman; Melissa Chao
**Subject:** RE: Irvine Future Housing Sites for the Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Karen:

I've added 19752 MacArthur Blvd. to the opportunity sites list.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Tuesday, May 4, 2021 3:32 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

The owners of the bank building within Centerpointe also would like to participate as an opportunity site. Their parcel number is 445-132-09, 19752 MACARTHUR BLVD IRVINE, CA 92612. These owners are all part of the same association. We have one more owner to talk with - and expect to talk this afternoon or tomorrow.

Karen

On Mon, May 3, 2021 at 5:44 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Karen,

I added the three APNs in CenterPointe to the housing opportunities sites list.

Please let me know if you have more interested parties/properties.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Monday, May 3, 2021 5:06 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank you for checking in again with me regarding the corporate drive site. I haven't heard back from them yet.

However, for Centerpointe, another property owner asked to be included and he owns 3 different parcels encompassing 4 buildings.

The parcel numbers are:

- 445-132-16
- 445-132-18

- 445-132-19

These encompass 4 buildings and the ownership entity is Encore Centerpointe LLC.

Thank you,

Thank you,

Karen

On Thu, Apr 29, 2021 at 7:25 PM Karen Martin <karen@pacificplanninggroup.com> wrote:

Hi Melissa,

Thank you all for such an inclusive and transparent outreach session. It's an example I have been sharing with other communities, so well done.

For Corporate Park, I'll check in with their representative here and let you know.

Hi Melissa,

There is another property owner in Centerpointe that is very interested in participating, Billy and/or Doug who control a couple of parcels. I gave them your contact information but also offered to assist them as part of a larger vision should they choose to go in that direction.

The tennis club owner has some interesting thoughts on how to work with the community.

Also, have had discussions with another private owner on MacArthur for mixed use.

I will keep you posted. Have a very nice evening!

Karen

On Thu, Apr 29, 2021, 7:03 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Karen:

I wanted to circle back on 46 Corporate Park. Has the property owner reached a verdict on whether they would like to be included as a housing opportunity site?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Monday, March 29, 2021 3:16 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Great, thank you so much.

Karen

On Mon, Mar 29, 2021, 2:50 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Karen:

For the first one at 17832/17840 Gillette Ave (i.e., Ann's pending application), added to the housing opportunity sites list (i.e., APNs: 435-111-30, 435-111-27, and 435-111-28).

For the second one, I've recently communicated with NexGen Pharma representatives (i.e., Kyle & Steven Brown) re: 17802 Gillette and the adjacent vacant parcel and have come to the conclusion that the lease timing is not conducive to include the two parcels for the 6th cycle HEU.

For the third one, I've added the Racquet Club to the housing opportunity sites list.

For the fourth one, added 19722/19732 MacArthur and 19782 MacArthur in Centerpointe to the housing opportunity sites list.

For the fifth one, added 46 Corporate Park to the opportunity sites list with status as "pending" owner determination.

Including a property in the opportunity sites list does not preclude the owner from continuing their land uses under the existing General Plan and Zoning Ordinance regulations. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

For your reference, attached is a Q&A for the March 16, 2021 Future Housing Sites meeting.

Lastly, I added you to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Thursday, March 25, 2021 1:46 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Marika Poynter <mpoynter@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa and housing team. Your presentation was so well done, thank you for all the information you provided to the property owners.

I am working with several property owners that would like to be considered as housing opportunity sites.

The first one is on Gillette - we have 27 very low-income units include in our proposal that is currently sitting in planning commission continuance to a date uncertain because of the IBC cap. (Marika I sent you a separate email with the reference within my email to Ann Wuu in current planning)

The second one is property immediately adjacent to the above - 17802 Gillette Ave, Irvine, CA and the vacant property behind it. Note that this is with property owner not tenant so please keep confidential. (Please do not include until we discuss)

The third is the Racket Club -5 Ethel Coplen Way **Irvine**, CA 92612, I'm working with Greg Michaels who is partners with the Owner.

The fourth is two properties 19782 and 19722 MacArthur in Centerpointe.

The fifth is 46 Corporate Drive - (do not include until we discuss)

The third
May we sit down to discuss these sites for inclusion in the housing opportunity sites? Also, would you explain what the limitations may be of inclusion as an opportunity site? One of the owners is concerned that if they are included the feasibility doesn't make sense that the city would not allow them to request other land use entitlements.

Thank you,

Karen
The third

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile (use this one please)

415.367.4286 x101 office

Karen
The third

On Thu, Mar 18, 2021 at 4:58 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hello everyone:

Karen
Thank you for attending or expressing interest in Irvine's Future Housing Sites meeting. Attached is the slide deck for your reference.

Please contact me and/or Charles Kovac, Housing Administrator, at ckovac@cityofirivne.org with any questions, comments, or suggestions for opportunity sites.

We look forward to working with you on the 6th Cycle Housing Element Update.

Thanks,

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development

1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 | F 949-724-6440

mchao@cityofirvine.org

--
Melissa

--

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile

415.367.4286 x101 office

--

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile

415.367.4286 x101 office

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, May 3, 2021 5:44 PM
**To:** Karen Martin
**Cc:** Marika Poynter; Hitta Mosesman; Melissa Chao
**Subject:** RE: Irvine Future Housing Sites for the Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Purple Category, Yellow Category

Hi Karen,

I added the three APNs in CenterPointe to the housing opportunities sites list.

Please let me know if you have more interested parties/properties.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Monday, May 3, 2021 5:06 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

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Hi Melissa,

Thank you for checking in again with me regarding the corporate drive site. I haven't heard back from them yet.

However, for Centerpointe, another property owner asked to be included and he owns 3 different parcels encompassing 4 buildings.

The parcel numbers are:

- 445-132-16
- 445-132-18
- 445-132-19

These encompass 4 buildings and the ownership entity is Encore Centerpointe LLC.

Thank you,

Karen

On Thu, Apr 29, 2021 at 7:25 PM Karen Martin <karen@pacificplanninggroup.com> wrote:

Hi Melissa,

Thank you all for such an inclusive and transparent outreach session. It's an example I have been sharing with other communities, so well done.

For Corporate Park, I'll check in with their representative here and let you know.

There is another property owner in Centerpointe that is very interested in participating, Billy and/or Doug who control a couple of parcels. I gave them your contact information but also offered to assist them as part of a larger vision should they choose to go in that direction.

The tennis club owner has some interesting thoughts on how to work with the community.

Also, have had discussions with another private owner on MacArthur for mixed use.

I will keep you posted. Have a very nice evening!

Karen

On Thu, Apr 29, 2021, 7:03 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Karen:

I wanted to circle back on 46 Corporate Park. Has the property owner reached a verdict on whether they would like to be included as a housing opportunity site?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Monday, March 29, 2021 3:16 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

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Hi Melissa,

Great, thank you so much.

Karen

On Mon, Mar 29, 2021, 2:50 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Karen:

For the first one at 17832/17840 Gillette Ave (i.e., Ann's pending application), added to the housing opportunity sites list (i.e., APNs: 435-111-30, 435-111-27, and 435-111-28).

For the second one, I've recently communicated with NexGen Pharma representatives (i.e., Kyle & Steven Brown) re: 17802 Gillette and the adjacent vacant parcel and have come to the conclusion that the lease timing is not conducive to include the two parcels for the 6th cycle HEU.

For the third one, I've added the Racquet Club to the housing opportunity sites list.

For the fourth one, added 19722/19732 MacArthur and 19782 MacArthur in Centerpointe to the housing opportunity sites list.

For the fifth one, added 46 Corporate Park to the opportunity sites list with status as "pending" owner determination.

Including a property in the opportunity sites list does not preclude the owner from continuing their land uses under the existing General Plan and Zoning Ordinance regulations. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

For your reference, attached is a Q&A for the March 16, 2021 Future Housing Sites meeting.

Lastly, I added you to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Thursday, March 25, 2021 1:46 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Marika Poynter <mpoynter@cityofirvine.org>

**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

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Thank you,

Karen

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile (use this one please)

415.367.4286 x101 office

On Thu, Mar 18, 2021 at 4:58 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hello everyone:

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Please contact me and/or Charles Kovac, Housing Administrator, at ckovac@cityofirivne.org with any questions, comments, or suggestions for opportunity sites.

We look forward to working with you on the 6th Cycle Housing Element Update.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development

1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

--

--

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile

415.367.4286 x101 office

## Melissa Chao

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Monday, March 29, 2021 3:16 PM
**To:** Melissa Chao
**Cc:** Marika Poynter; Charles Kovac; Hitta Mosesman
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

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Lastly, I added you to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

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**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Thursday, March 25, 2021 1:46 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Marika Poynter <mpoynter@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Irvine Future Housing Sites for the Housing Element Update

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Thank you,

Karen

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile (use this one please)

415.367.4286 x101 office

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We look forward to working with you on the 6th Cycle Housing Element Update.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development

1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**Melissa Chao**

---

**From:** Melissa Chao
**Sent:** Friday, March 5, 2021 12:56 PM
**To:** Karsen Wang
**Cc:** Melissa Chao
**Subject:** RE: Irvine Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Karsen:

I will ensure you receive an email notification when we land on a meeting date/time.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Karsen Wang <karsen@actionsales.com>
**Sent:** Thursday, March 4, 2021 4:12 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon Melissa,

I've just signed up into the Tuesday session initially, but you can let me know when the final meeting session is confirmed and I'll attend.

Thanks for the information!

***Karsen Wang***
*Facilities/Fleet Manager*
*Action Sales Food Service Equipment & Supplies*
*829 Monterey Pass Road*
*Monterey Park, CA 91754*
*Office: 323-269-6928 x1324*
*Cell: 626-940-8450*

**From:** Melissa Chao [mailto:MChao@cityofirvine.org]
**Sent:** Thursday, March 4, 2021 4:07 PM
**To:** Karsen Wang <karsen@actionsales.com>; Ckovac@cityofoirvine.org
**Cc:** Terence Wong <terence@actionsales.com>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Jordan Perez <Jordan.Perez@weareharris.com>
**Subject:** RE: Irvine Housing Element Update

Hi Karsen and Terence:

I forwarded a separate email re: virtual meeting on future housing sites. Just in case, here is the link to confirm your availability by taking the poll here:
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

We will be hosting one meeting based on the date/time polled with the highest confirmation level. If you are unable to make the meeting time, we can schedule a separate call to discuss.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Karsen Wang <karsen@actionsales.com>
**Sent:** Thursday, March 4, 2021 3:07 PM
**To:** Ckovac@cityofoirvine.org; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Terence Wong <terence@actionsales.com>
**Subject:** Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon Charles and Melissa,

My name is Karsen and I'm the Facilities Manager for Action Sales, located in 2660 Barranca Pkwy in Irvine. We have recently gotten a letter in regards to the Irvine Housing Element Update for future housing sites, and we want to reach out and let you know that we may be interested on this project in the future.

Please feel free to contact me directly on the cell or email should you have more information about the project. Thank you very much for your time.

***Karsen Wang***
*Facilities/Fleet Manager*

*Action Sales Food Service Equipment & Supplies*
*829 Monterey Pass Road*
*Monterey Park, CA 91754*
*Office: 323-269-6928 x1324*
*Cell: 626-940-8450*

**From:** Melissa Chao
**To:** Kurt Cutler
**Cc:** Charles Kovac; Hitta Mosesman; Jordan Perez
**Subject:** RE: Irvine Housing Element Update
**Date:** Thursday, March 4, 2021 2:29:41 PM

---

Thank you, Kurt, for your suggestions.

Feel free to contact us if anything else comes to mind.

Sincerely,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Kurt Cutler <kurtc@socalgrading.com>
**Sent:** Thursday, March 4, 2021 1:26 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Re: Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the reply I appreciate it

Just FYI Irvine company owns all the land from the 91 freeway to back toward Irvine
You can fit a lot of units there just FYI
I think it is slated for development
Sincerely,
Kurt Cutler
Southern California Grading
Cell: (714) 904-4490

> On Mar 4, 2021, at 12:47 PM, Melissa Chao <MChao@cityofirvine.org> wrote:
>
> Hi Kurt:
>
> I apologize for the oversight if you received the Property Owner outreach letter. Unfortunately, there is not much vacant developable land in the City and the State is forcing all California jurisdictions to plan for additional housing beyond what is currently in our adopted planning documents. However, we are scouring the rest of the

Irvine Business Complex and Spectrum areas for potential housing sites first.

I think it is safe to say that Construction Circle (i.e., IBC Industrial zone) and dedicated open space/parks would be the last areas we would consider for residential uses. We recognize Construction Circle houses specialized land uses and is least ideal in terms of land use compatibility.

Thank you for your input and please feel free to reach out to us with any further questions/concerns,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

**From:** Kurt Cutler <kurtc@socalgrading.com>
**Sent:** Thursday, March 4, 2021 12:28 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom it may concern

We received a notice re Future housing sites.

This is concerning as we have been here since 1976 and was part of the Irvine Masterplan.

That plan seems to change every year.

Irvine was built for a certain amount of residents and businesses now it is being changed on a per project basis.

We would encourage you to look in undeveloped areas or some of the abandoned large tilt ups that have moved manufacturing elsewhere.

Construction circle services the community for various trades from landscaping, construction, recycling Auto large cell towers that feed smaller sites and various equipment storage that is not available any where else in the city.

Please feel free to call me if you have any questions . Thank you for reaching out.

Sincerely,

Kurt Cutler
President
Cell (714) 904-4490
<image001.jpg>
16291 Construction Circle East
Irvine, CA 92606
Direct Dial Office (949) 565-7123
Main Office (949) 551-6655
Fax (949) 551-4237
***Please consider the environment before printing this email***

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, March 23, 2021 10:52 AM
**To:** Kyle Brown; Charles Kovac
**Cc:** Steve Brown; Melissa Chao
**Subject:** RE: Future Housing Site - 17802 Gillette

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Kyle:

Given your response, we will not include either property on the opportunities site list.

I added you and Steve to the project email list so that you can follow along if you are interested to get a sense of the process for future reference.

Thank you very much,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Kyle Brown <kylebrown@ngwellness.com>
**Sent:** Tuesday, March 23, 2021 9:18 AM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Steve Brown <stevenbrown@ngwellness.com>
**Subject:** RE: Future Housing Site - 17802 Gillette

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Thanks for your response Melissa,
We believe that our best option will be to keep the two parcels tied together and redevelop them both for the same project. We suspect that our tenant will be trying to buy their way out of their lease before it is up in 10 years and will not likely be there in 15 years but we have no way of knowing that for sure. Not sure how that impacts your report.
Let me know if we can be of further help,
Kyle

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 22, 2021 6:47 PM
**To:** Kyle Brown <kylebrown@ngwellness.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Steve Brown <stevenbrown@ngwellness.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Future Housing Site - 17802 Gillette

Hi Kyle:

Sorry, I did not pick up on this earlier. What about the almost vacant site to the north of your 17802 Gillette building? Would you consider including that site on the opportunity sites list for this current Housing Element Update?

Thanks,
Melissa

Search for an Address

17802 GILLETTE AVE

-OR- Search for an APN

example: 44718101

-OR- Intersection

E.G. MAIN ST & HARVARD AVE

Clear Identify Results

## Parcel

| | |
|---|---|
| Feature | State Board od Equilization |
| APN | 43016309 |
| Tract | 28/23-24 |
| Lot | 02 |
| Planning Area | Irvine Business Complex |
| Area (sq ft) | 76280.24 |
| Acres | 1.75 |

**Owner APNs:**

43016309 - NEXGEN PHARMA INC (46 CORPORATE PARK STE 100, IRVINE, CA 92606)

## Zoning

| | |
|---|---|
| Planning Area | Irvine Business Complex |
| Planning Area No. | 36 |
| Zoning | 5.1 |
| Description | IBC Multi-Use |
| Details | Zoning Code |

Link to Zoning Map

## General Plan

| | |
|---|---|
| Planning Area | Irvine Business Complex |
| Planning Area No. | 36 |
| Description | URBAN/INDUSTRIAL |



**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 22, 2021 6:42 PM
**To:** Kyle Brown <kylebrown@ngwellness.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Steve Brown <stevenbrown@ngwellness.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Future Housing Site - 17802 Gillette

Hi Kyle:

Attached is a recent presentation slide deck regarding future housing sites for your reference.

The State requires the Housing Element be updated every eight years. Sites that are placed on the opportunity sites list for City Council consideration for inclusion in the final Housing Element site inventory are those that have a high interest level and potential for redevelopment in the next eight years. However, the market ultimately determines if the homes are built.

I would be reluctant to place your property on the opportunity sites list for this planning period (2021-2029) given your property is potentially tied up for 15 years. However, if you feel there is a high likelihood that the lease could be broken if the finances are favorable enough to do so, I can include the property in the sites inventory list. Otherwise, you can consider being included 8 or 16 years later during the next update cycles.

Please let me know and/or if you would like to discuss further via a phone call.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Kyle Brown <kylebrown@ngwellness.com>
**Sent:** Monday, March 22, 2021 5:55 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Steve Brown <stevenbrown@ngwellness.com>
**Subject:** Future Housing Site - 17802 Gillette

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To whom it may concern,
I am a member of Lebruns, LLC which owns 17802 Gillette. We recently received a notice that the city was investigating the possibility of that address being used for residential purposes in the future. We currently have the property tied up in a lease that could potentially last up to 15 years from now. We are open to any use in the future that maximizes the long-term value of the property. All options are on the table as far as we are concerned.
I hope that this helps you in your planning,

**Kyle R. Brown**
CEO

Vitamer and VitaCeutical Laboratories
Divisions of New Generation Wellness, Inc.
Direct: 949-399-4095
Email: kylebrown@ngwellness.com

**From:** Schuler, Larry W. @ Newport Beach
**To:** Melissa Chao
**Cc:** Charles Kovac; Hitta Mosesman
**Subject:** RE: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom
**Date:** Monday, March 15, 2021 11:33:55 AM

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa,

My recollection was I received an email giving me a choice for Tuesday, Wednesday or Thursday of this week for the Housing Element Meeting? I chose 10am on Thursday. Are there two different meetings that I am confused over? Can you call me to clarify? Please use my cellphone number. Thanks.

**Larry Schuler | First Vice President**
**Advisory & Transaction Services**
**CBRE**
**3501 Jamboree Road, Suite 100 | Newport Beach, CA 92660**
**T 949.725.8528 | F 949.725.8545 C 949 293 8528**
**larry.schuler@cbre.com | www.cbre.com/larry.schuler**

This email may contain information that is confidential or attorney-client privileged and may constitute inside information. The contents of this email are intended only for the recipient(s) listed above. If you are not the intended recipient, you are directed not to read, disclose, distribute or otherwise use this transmission. If you have received this email in error, please notify the sender immediately and delete the transmission. Delivery of this message is not intended to waive any applicable privileges.

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 15, 2021 11:21 AM
**To:** Schuler, Larry W. @ Newport Beach <Larry.Schuler@cbre.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

External

Hi Larry:

I received your voicemail from Friday. I was out of the office.

Below is the email you should have received regarding the future housing sites meeting via Zoom. It's on Tuesday at 3 p.m. because that was the most popular time slot from the poll.

Hope you can join us. Otherwise, City staff and our housing consultant, Hitta, are available via email or phone to assist.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 5:10 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Jacob Daigneau (Contractor) <JDaigneau@cityofirvine.org>
**Subject:** Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would

like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Melissa Chao

**From:** Susan Craft
**Sent:** Wednesday, March 10, 2021 1:03 PM
**To:** huxieally@hotmail.com
**Cc:** Melissa Chao; Charles Kovac; Sari Akahi; Susan Craft
**Subject:** CPW Hudson Noise Concerns

**Categories:** Yellow Category

Hello Lele,

Thank you for your email. Complaints regarding homeowner's associations should be directed to the California Department of Real Estate.

With regard to interior noise within the residence, builders are required to meet standards within the California Building Code. As, Ms. Chao indicated those standards are met prior to the project approval.

The subject site is located within the Irvine Business Complex ("IBC"). When a buyer purchases a home or tenant rents within the IBC areas, disclosures are provided from either the builder or community manager to the residents advising of the noise impacts from the adjacent airport, freeways and industrial businesses. This being said, the freeway noise would be considered ambient and not a violation of the noise ordinance. You may consider reaching out to the builder/developer to see if they can offer you further assistance with your concerns.

Sent from my iPad
Sincerely,
**Susan Craft | Sr. Code Enforcement Inspector**
949-724-6427 | 1 Civic Center Plaza, Irvine, CA 92606
scraft@cityofirvine.org | cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 10:59 AM
**To:** Lele Y <huxieally@hotmail.com>; Charles Kovac <CKovac@cityofirvine.org>; Sari Akahi <SAkahi@cityofirvine.org>
**Cc:** Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Thanks for your concern

Hi Lele:

Please report any noise issues to the City's Code Enforcement team at 949-724-6326.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Lele Y <huxieally@hotmail.com>
**Sent:** Wednesday, March 10, 2021 10:19 AM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Thanks for your concern

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Right now the noise level 45 inside/65 outside is not enough, it should go down 5 decibels more on each requirement.

---

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, March 9, 2021 16:23
**To:** Lele Y <huxieally@hotmail.com>; Charles Kovac <CKovac@cityofirvine.org>
**Cc:** Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Thanks for your concern

Hi Lele:

Thank you for your input.

The CPW Hudson buildings would need to meet all applicable noise requirements in order for the project to be approved.

The City does not regulate HOAs and does not have the jurisdiction or resources to do so. Please visit the City's HOA webpage for more information here: https://www.cityofirvine.org/community-development/irvine-homeowners-associations

Thanks again,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Lele Y <huxieally@hotmail.com>
**Sent:** Tuesday, March 9, 2021 1:31 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Thanks for your concern

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Charles and Melissa,

Hope this email finds you well.

I do not have any suggestion for new places, but I feel the plan for Central Park West Hudson buildings was very bad, it is too close to the freeway it should have not passed the city plan. And Lennar did not even built a sound abatement wall for it. I am very disappointed to the location regarding the noise issue.

Also I would like to bring your attention to the quality of HOA services that homeowners get. A community should not just be threw to HOA company, and there is no law and no department supervises HOA. HOA company especially First Service Residential, they only collect money, and do no jobs. They lie and cheat to homeowners and no consequences to them. The HOA is a failure of the whole housing system.

No homebuilder should get involved in HOA set up, Lennar has their employee sits on 12 boards at the same time, you think she cares any one of the communities? You think she would know anything is going on in the community? Why there is no rule to regulate when she needs to leave? She does not want to leave even a long time after the units are all sold. She left when she is ready, not when the homeowners are ready. There is no rule to regulate them, they are the rule! And on the other hand HOA company wants and loves Lennar representatives sitting on our board, because both parties do not care about the community.

If you are going to plan any new community, I hope you can think and plan something about HOA. Or do something, forward this email to the correct people, to do something to change the current issue.

Now the outside houses are looking good; but how about the inside of a community?

leave

Best regards,

Lele Kyles

leave

leave

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, March 17, 2021 5:37 PM
**To:** calsources@msn.com
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Irvine Housing Element Upate - Future Housing Sites
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Lilia:

The City is looking for property owners interested in potentially developing or redeveloping their sites for residential uses.

FYI, attached is a presentation from yesterday's 3 p.m. meeting.

Do you have a potential candidate site(s) for future residential development in mind that you can share with us?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Tuesday, March 16, 2021 3:58 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Irvine Housing Element Upate - Future Housing Sites

FYI ...

Charles

**From:** LILIA LUO <calsources@msn.com>
**Sent:** Tuesday, March 16, 2021 3:28 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Irvine Housing Element Upate - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Kovac,

I have received the letter in regards to Irvine Housing Element Update. I would like to find out what this is about.

Best,
Lilia Luo

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, March 9, 2021 6:12 PM
**To:** Mark Dershem; rapidfire1@cox.net
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** RE: Property
**Attachments:** Sites_inventory_memo_final 06102020 highlighted.pdf

**Categories:** Yellow Category

Hi Mark:

Thank you for discussing your property with me. I have added it to the draft opportunity sites list.

Attached is the State's HCD housing element site inventory guidebook. In terms of examples of "substantial evidence" for non-vacant sites, please refer to page 27. Frankly, given our sizeable RHNA unit allocation from the State/SCAG, we will be fortunate to successfully call/email with all interested property owners.

We'll be sending out a meeting invite with Zoom link for the stakeholder (virtual) meeting later this week. Also, I will add you to the project interest/email notification list.

Have a great evening and thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao
**Sent:** Tuesday, March 9, 2021 9:16 AM
**To:** 'Mark Dershem' <markdershem@gmail.com>; 'rapidfire1@cox.net' <rapidfire1@cox.net>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** RE: Property

Hi Mark:

Thank you for the information. I will call you later today to discuss.

In the meantime, City staff and our HEU consultant will be hosting one meeting based on the date/time polled with the highest confirmation level. If you can make the final meeting time (TBD) that might be beneficial.

Thanks,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Mark Dershem <markdershem@gmail.com>
**Sent:** Monday, March 8, 2021 7:17 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Property

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Sorry we've had trouble connecting by phone.

As you are aware, I am responding to your letter dated March 1, 2021 regarding potential sites that may accommodate residential development. Please note the following:

- My interest is high and I have certain time constraints.
- Current tenant has an option to purchase, effective February 2022.
- I've been speaking with CBRE, waiting to review their marketing plans and anticipate beginning in April.
- Does the City have relationships with developers that you may want to refer me to?
- We will have to overcome the Auto Center CC&R's.

My contact information and the property address is listed below. Please feel free to contact me and I will be more diligent about keeping my phone with me.

Sincerely,

Mark Dershem

My contact info:

Mark Dershem

San Juan Capistrano, CA 92675

markdershem@gmail.com
rapidfire1@cox.net

(949) 678-4319, cell

Property Address:

21 Auto Center Drive
Irvine, CA 92718

(8.03 acres)

**DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT**
**DIVISION OF HOUSING POLICY DEVELOPMENT**
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

**June 10, 2020**

**MEMORANDUM FOR:** Planning Directors and Interested Parties

**FROM:** Megan Kirkeby, Acting Deputy Director
Division of Housing Policy Development

**SUBJECT:** **Housing Element Site Inventory Guidebook**
**Government Code Section 65583.2**

The housing element of the general plan must include an inventory of land suitable and available for residential development to meet the locality's regional housing need by income level. The purpose of this Guidebook is to assist jurisdictions and interested parties with the development of the site inventory analysis for the 6th Housing Element Planning Cycle and identify changes to the law as a result of Chapter 375, Statutes of 2017 (AB 1397), Chapter 958, Statutes of 2018 (AB 686), Chapter 664, Statutes of 2019 (AB 1486), and Chapter 667, Statutes of 2019 (SB 6). The Guidebook should be used in conjunction with the site inventory form developed by the California Department of Housing and Community Development (HCD). These laws introduced changes to the following components of the site inventory:

- Design and development of the site inventory (SB 6, 2019)
- Requirements in the site inventory table (AB 1397, 2017 AB 1486, 2019)
- Capacity calculation (AB 1397, 2017)
- Infrastructure requirements (AB 1397, 2017)
- Suitability of nonvacant sites (AB 1397, 2017)
- Size of site requirements (AB 1397, 2017)
- Locational requirements of identified sites (AB 686, 2018)
- Sites identified in previous housing elements (AB 1397, 2017)
- Nonvacant site replacement unit requirements (AB 1397, 2017)
- Rezone program requirements (AB 1397, 2017)

The workbook is divided into five components: (Part A) identification of sites; (Part B) sites to accommodate the lower income RHNA; (Part C) capacity analysis; (Part D) non-vacant sites; and (Part E) determination of adequate sites.

If you have any questions, or would like additional information or technical assistance, please contact the Division of Housing Policy Development at (916) 263-2911.

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## Melissa Chao

**From:** Melissa Chao
**Sent:** Thursday, March 18, 2021 7:40 PM
**To:** fly@villatravel.com
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf

**Categories:** Yellow Category

Hi Mark:

Attached is the slide deck from the meeting presentation.

Please let me know if you have any questions or a site you would like considered for future housing.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 6:31 PM
**To:** fly@villatravel.com
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

Hi Mark:

I wanted to forward this to you in case you are available to participate.

Is there a particular address you are considering for future residential?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 5:10 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Jacob Daigneau (Contractor) <JDaigneau@cityofirvine.org>
**Subject:** Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Melissa Chao

**From:** Massis Chahbazian <massis@theprintery.com>
**Sent:** Tuesday, March 23, 2021 10:41 AM
**To:** Melissa Chao
**Cc:** Charles Kovac
**Subject:** Re: Irvine Housing Element

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Melissa!

--
**Massis Chahbazian**
*President/CEO*
**The Printery, Inc.**
**O: 949.757.1930**

www.ThePrintery.com
**PRINT • PROMOTE • PRESENT**

**From:** Melissa Chao <MChao@cityofirvine.org>
**Date:** Tuesday, March 23, 2021 at 10:39 AM
**To:** Massis Chahbazian <massis@theprintery.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>, Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element

Hi Massis:

I added your contact information to our project interest list. You will receive notifications of opportunities to participate via email.

Please feel free to contact us with any further questions.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Massis Chahbazian <massis@theprintery.com>
**Sent:** Tuesday, March 23, 2021 10:03 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Irvine Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning, I'd like to be involved in the communications about this topic as I received the letter inviting my participation.

Thank you!

--
**Massis Chahbazian**
*President/CEO*
**The Printery, Inc.**
**O: 949.757.1930**

www.ThePrintery.com
**PRINT • PROMOTE • PRESENT**

## Melissa Chao

**From:** Mia Stele <mstele@pacificwest.cc>
**Sent:** Friday, March 26, 2021 2:28 PM
**To:** Melissa Chao
**Cc:** Charles Kovac
**Subject:** RE: Irvine Housing Element- 12 Mauchly, Irvine

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Great, thank you.

Mia Stele

PacificWest
Asset Management Corporation
(714) 433-7300 x 206

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Friday, March 26, 2021 2:16 PM
**To:** Mia Stele <mstele@pacificwest.cc>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element- 12 Mauchly, Irvine

Hi Mia:

Thank you for letting us know. Given your Board is not in favor, I will remove 12 Mauchly from the housing opportunity sites list.

Sincerely,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Mia Stele <mstele@pacificwest.cc>
**Sent:** Thursday, March 25, 2021 8:18 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Irvine Housing Element- 12 Mauchly, Irvine
**Importance:** High

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Charles and Melissa,

I work for the property managers of the Southpointe Business Park located at 12 Mauchly, Irvine. We received your letter regarding the Irvine Housing Element Update. As this business park is an Owners Association, I have consulted with the Board of Directors, and they unanimously voted that they are NOT IN FAVOR of this plan to convert into residential housing.

If the City determines that this site is required to be converted in the future, can you please share some more details about what that would look like and how that would affect the property value?

Thank you.

Mia Stele
All Team Administrative Assistant

PacificWest
Asset Management Corporation

www.pacificwest.cc

(714) 433-7300 x 206
(714) 433-7330 Fax
mstele@pacificwest.cc
3191-D Airport Loop Drive
Costa Mesa, California 92626

**CONFIDENTIALITY NOTICE: This message is intended only for the use of individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone at the above mentioned number and return the original message to us at the above address via the US Postal Service. Thank you.**

Community Development cityofirvine.org
City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 9, 2021

LAGUNA CANYON INVESTMENT
10 SYCAMORE CANYON DR
DOVE CANYON, CA 92679

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under State mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

Your property at 12 Mauchley has been initially identified as a potential opportunity site for residential development. The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest.

The City respectfully requests your consideration for potential future residential development on your property. We would like to discuss this opportunity in further detail. Please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 31, 2021. If you are interested, please do not let this opportunity pass you by. If you are not interested, we would like to hear from you to remove your property from the list. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael
Director of Community Development
主旨：爾灣市住宅要素更新 - 未來住宅用地

**From:** Melissa Chao
**To:** brewer647@gmail.com
**Cc:** Charles Kovac
**Subject:** RE: Irvine Housing Element update
**Date:** Monday, March 22, 2021 6:17:00 PM
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf

---

Hi Michael:

Attached is a presentation slide deck on future housing sites for your reference. Please also check www.cityofirvine.org/housingelementupdate as it is periodically updated with new information.

I added 16661 Jamboree to the opportunity sites list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HEU.

Your site is within the existing IBC mixed-use/residential overlay that was approved in 2010 for 15,000+ residential units. The maximum unit cap has since been depleted. For more information on residential development in the IBC, please see https://www.cityofirvine.org/community-development/irvine-business-complex.

I will add you to our project interest list for notification purposes for community workshops, release of public draft of HEU for review, and HEU adoption hearings, etc.

Please feel free to contact us with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Monday, March 22, 2021 12:01 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Irvine Housing Element update

FYI …

Charles

**From:** Michael Brewer <brewer647@gmail.com>
**Sent:** Monday, March 22, 2021 11:54 AM

**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Irvine Housing Element update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles,

We are the property owners of 16661 Jamboree Road in Irvine. We are VERY interested in the prospect of our property zoning of residential use. Not sure what additional information or action is required, if any.

Look forward to hearing from you.

Regards,

Michael Brewer

**Melissa Chao**

**From:** Melissa Chao
**Sent:** Monday, March 15, 2021 10:30 AM
**To:** Mildred Perez
**Cc:** Daisy Cruz; Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** RE: Irvine Housing Element Update Mailing List

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hi Mildred:

Thank you for reaching out. You and Cesar are on the HEU interest list based on your August 2021 letter. I will add Daisy to the list as well.

City staff and our housing consultant, Hitta, who I have copied on this email, are hosting a virtual meeting on "future housing sites" tomorrow. Please feel free to join us if you are interested and happen to be available at 3 p.m. This meeting is geared towards property owners for developing the draft site inventory.

We are also planning on hosting general community workshops and a meeting focused on affordable housing in April.

Best regards,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser.

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Mildred Perez <mildredp@kennedycommission.org>
**Sent:** Friday, March 12, 2021 4:09 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Daisy Cruz <daisyc@kennedycommission.org>
**Subject:** Irvine Housing Element Update Mailing List

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

I would like to be added to the mailing list.

Have a great weekend!
--
**Mildred Perez**
Senior Project Manager
The Kennedy Commission

## Melissa Chao

**From:** Nasir Javed <NJaved@princetonusa.com>
**Sent:** Thursday, March 11, 2021 9:49 PM
**To:** Melissa Chao
**Cc:** Charles Kovac; Hitta Mosesman
**Subject:** RE: 1691 Browning Ave - future housing site

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you! Noted, Will attend the upcoming meeting.

Kind Regards

Nasir Javed
President and CEO.
Princeton Technology, Inc.

*27 years of Excellence in Memory & Storage Business!*

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**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Thursday, March 11, 2021 10:25 AM
**To:** Nasir Javed <NJaved@princetonusa.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: 1691 Browning Ave - future housing site

Hi Nasir:

At this point, 1691 Browning is on the opportunity sites list. As the HEU moves through the process and up to the City Council, the Council will make a decision on whether to keep a property on the site inventory list that is ultimately submitted to the State as part of the HEU.

Once the HEU is adopted by the City Council, the City has three years to rezone (e.g., increase allowed density or maximum unit intensity caps), create/amend residential overlays, and update other related policies in the General Plan to accommodate the demands created by the additional housing units. Even at that point, the market will dictate whether homes are actually built. The City's obligation is to reach out to owners to develop a realistic site inventory list/map and create a favorable framework to support housing production to the extent we can.

Feel free to contact us with any questions/concerns. Hope you are able to join us for the Tuesday's virtual meeting.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Nasir Javed <NJaved@princetonusa.com>
**Sent:** Wednesday, March 10, 2021 4:55 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** RE: 1691 Browning Ave - future housing site

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thanks for the call, I look forward to zoom call and additional information.
So far my understanding is that it is a list of possible zoning change allowing building of residential apartments.
As long as it makes economic sense and doesn't unnecessarily restrict us in any way, it sounds fine.

Kind Regards

Nasir Javed
President and CEO.
Princeton Technology, Inc.

*27 years of Excellence in Memory & Storage Business!*

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**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 2:41 PM
**To:** Nasir Javed <NJaved@princetonusa.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** 1691 Browning Ave - future housing site

Hi Nasir:

Thank you for reaching out to me re: future housing sites related to Irvine's Housing Element Update. Per our discussion, I will add 1691 Browning Ave to the opportunity sites list.

Once the Zoom details are ready, I will send the virtual meeting invite for next Tuesday under separate cover.

I copied my colleague, Charles, and the City's housing consultant, Hitta, on this email as an FYI.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, March 30, 2021 2:29 PM
**To:** Isaac Jang
**Cc:** Cindy Wong; Megan Chen; Jason Chen; Melissa Chao
**Subject:** RE: Irvine Housing Element update -Future Housing Site
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf; Irvine Future Housing Sites 3.16.21 Q&A FINAL.pdf

**Categories:** Yellow Category

Hi Pastor Jang:

For reference, attached is the Future Housing Sites presentation and Q&A.

As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

Lastly, I added you all to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Please feel free to reach out to us with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Isaac Jang <isaacjang645@yahoo.com>
**Sent:** Tuesday, March 30, 2021 10:13 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Cindy Wong <cindiawong@hotmail.com>; Megan Chen <megannchen@yahoo.com>; Jason Chen <jason_chen@kingston.com>; Isaac Jang <isaacjang645@yahoo.com>
**Subject:** Irvine Housing Element update -Future Housing Site

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Melissa,
Greetings!
This is Pastor Isaac Jang of Full Blessing Church in Irvine.
We are the owner of office buildings of 15520 Rockfield Blvd. #C and #D. Our ground Lease with Irvine Four LLC will be expired in June 2025.
Definitely, we are concerned with the Future Housing Sites you mentioned in your letter.
Please keep us updated for any decision City of Irvine will make regarding the usage of the office buildings.

Blessings,

**Melissa Chao**

---

**From:** Tim Gehrich
**Sent:** Friday, April 2, 2021 1:56 PM
**To:** Kerwin Lau; Marika Poynter; Hitta Mosesman; Melissa Chao; Pete Carmichael
**Subject:** Fwd: Letter
**Attachments:** Letter to Mr. Gehrich.pdf

**Categories:** Purple Category, Yellow Category

FYI

Sent from my iPhone

Begin forwarded message:

> **From:** Scott Spearman <sms@spearmanclubs.com>
> **Date:** April 2, 2021 at 10:16:15 AM PDT
> **To:** Tim Gehrich <tgehrich@cityofirvine.org>
> **Subject: Letter**
>
> **CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
> Tim,
>
> Here is a copy of the letter being sent to you in the mail.
>
> Have a great Easter weekend-
>
> Scott Spearman

Spearman Clubs, Inc.
CECIL E. SPEARMAN
CHIEF EXECUTIVE OFFICER

April 1, 2021

Mr. Timothy Gehrich, Deputy Director
1 Civic Center Plaza
Irvine CA 92606

Hello Tim,

I would like to express my interest in making my land available for the Housing challenge facing Irvine. We own 9.79 acres in the heart of Irvine located on the corner of Culver and Ethel Coplen way. Currently we operate Racquet Club of Irvine on this property.

We are in escrow to sell 2 ½ acres to Hines Company subject to a change of entitlements that will allow the property to be used as an extended care facility. This Morningstar facility might qualify as part of the homes Irvine will need to meet State orders as a little more than 200 rooms will become housing for senior citizens.

The remaining 7 4/5 of an acres will be operated as a private tennis club. I will be pleased to make this property available to the city of Irvine to be zoned as housing.

Irvine has opened so many tennis courts at the Great Park, and other city locations, that it is very hard for a private club to generate a profit competing with so many free tennis courts. I am a lifelong tennis fan and I am pleased that the city is making these courts available to the citizens.

I will be pleased to have my property listed as property that can be zoned for homes needed to meet the number of homes the City of Irvine must provide to meet the need the number of homes the State must provide.

Sincerely
Cecil Spearman

General Partner
Spearman Relatives Limited Partners

23500 Clubhouse Drive, Laguna Niguel, CA 92677 • (949) 496-2070, ext. 11 • Fax (949) 240-9203
Club Website: www.spearmanclubs.com • email: CES@spearmanclubs.com • Home Phone (949) 493-3631

## Melissa Chao

**From:** Ray Daitch <r_daitch@yahoo.com>
**Sent:** Tuesday, March 16, 2021 11:01 AM
**To:** Melissa Chao
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** Re: Letter of March 1, 2021-Housing

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thanks for clarifying however my time is valuable and cannot work for free.

Ray

On Tuesday, March 16, 2021, 05:14:35 PM GMT+1, Melissa Chao <mchao@cityofirvine.org> wrote:

Hi Ray,

Unfortunately, the City is unable to purchase the property or provide a finder's fee. I believe your fee could come from being the listing agent for the property if it is sold to perhaps a residential developer in the future.

At this point, the City is focused on developing an opportunity sites list. As the Housing Element Update (HEU) moves through the process and up to the City Council, the Council will make a decision on whether to keep a property on the site inventory list that is ultimately submitted to the State as part of the HEU.

Once the HEU is adopted by the City Council, the City has three years to rezone (e.g., increase allowed density and/or maximum unit intensity caps), create/amend residential overlays, and update other related policies in the General Plan to accommodate the demands created by the additional housing units. Typically that development entitlement/environmental documentation process to change allowable land uses on a property is borne by property owner and/or developer. Being able to develop residential on an office/industrial property can greatly increase its value in general. If you are able to share the property address, I believe it is beneficial for it to be included in the opportunity sites list as part of the HEU process.

The City's obligation is to reach out to owners to develop a realistic site inventory list/map and create a favorable framework to support housing production to the extent we can. Even at that point, the market will dictate whether homes are actually built.

Hope this helps,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Ray Daitch <r_daitch@yahoo.com>
**Sent:** Tuesday, March 16, 2021 1:18 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: Letter of March 1, 2021-Housing

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I reached out to a prospect that has land acreage available. As you know, I'm a licensed broker, DRE: 01359363, so looking for a fee if the County or an affiliate purchases this property.

Please advise.

Thanks

Ray Daitch, Broker

DRE: 01359363

On Monday, March 15, 2021, 06:15:18 PM GMT+1, Melissa Chao <mchao@cityofirvine.org> wrote:

Hi Ray:

Thank you for reaching out.

City staff and our housing consultant, Hitta, who I have copied on this email, are hosting a virtual meeting on "future housing sites" tomorrow. Please feel free to join us if you happen to be available at 3 p.m. The City is looking for property owners that may be interested in developing or redeveloping their site(s) for future residential uses. Do you have a particular address(es) in mind that you could share with us?

We are also planning to host general community workshops in April.

I have added you to the HEU project interest list as well.

Sincerely,

Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. Feel free to send this to others who may be interested.

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

Join Us for a Virtual Meeting

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on Tuesday, March 16, 2021 at 3 – 4:30 p.m. The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

Meeting Link:

Register in advance for this webinar:

https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg

If you are having trouble with the link above, please copy and paste this link into your browser.

Webinar ID:

958 7121 5807

Webinar Passcode:

City

If you would like to join by phone, dial one of the following numbers and use the Webinar ID and Passcode

US: +1 669-900-6833 or +1 346-248-7799

Webinar ID: 958 7121 5807

Passcode: 400813

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Ray Daitch <r_daitch@yahoo.com>
**Sent:** Saturday, March 13, 2021 6:41 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Letter of March 1, 2021-Housing

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Charles and Melissa,

I'm responding to your letter dated March 1st, please give me more information on what opportunities exist.

Yes, I'm a property owner in the City of Irvine.

Thanks

Ray Daitch, Broker

DRE: 01359363

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, May 5, 2021 8:42 AM
**To:** Steinberg_David
**Cc:** Messina_Darin J; Kerwin Lau; Marika Poynter; Garich_Russell; Dellert_Daniel J; Attar_Mayssa; Melissa Chao
**Subject:** RE: City of Irvine - interest in future housing units on-site?

Hi David:

Thank you for discussing and letting me know your team's decision. I really appreciate it.

Please feel free to reach out with any questions/concerns or if Abbvie's business needs should change in the future.

Thanks again,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Steinberg_David <David.Steinberg@allergan.com>
**Sent:** Wednesday, May 5, 2021 5:01 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Messina_Darin J <darin.messina@abbvie.com>; Kerwin Lau <klau@cityofirvine.org>; Marika Poynter <mpoynter@cityofirvine.org>; Garich_Russell <Russell.Garich@abbvie.com>; Dellert_Daniel J <Dan.Dellert@abbvie.com>; Attar_Mayssa <mayssa.attar@abbvie.com>
**Subject:** RE: City of Irvine - interest in future housing units on-site?

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa,
We have discussed this internally. Due to growing business needs we have no intention to convert any open space at the Irvine campus to residential development or to change zoning. We also expect our residential buffer agreed to with the city to remain intact per our agreement.

Thank you for reaching out, and I look forward to meeting you once the pandemic is behind us, and things return to more normalcy.

Please feel free to reach out to me directly if you would like to discuss further, or have any questions.

**Thanks,**

**David Steinberg**
Director Facilities

abbvie

2525 Dupont Dr.
Irvine, CA 92612
**OFFICE** +1 714 246 2524
**CELL** +1 805 409 6370
**EMAIL** David.Steinberg@allergan.com




**abbvie.com**



**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, May 4, 2021 9:58 AM
**To:** Attar_Mayssa <mayssa.attar@abbvie.com>; Steinberg_David <David.Steinberg@allergan.com>; Dellert_Daniel J <Dan.Dellert@abbvie.com>; Garich_Russell <Russell.Garich@abbvie.com>
**Cc:** Messina_Darin J <darin.messina@abbvie.com>; Kerwin Lau <klau@cityofirvine.org>; Marika Poynter <mpoynter@cityofirvine.org>
**Subject:** RE: City of Irvine - interest in future housing units on-site?

Hi David, Dan, Russell, and Darin:

I wanted to circle back to see if you had any questions and/or interest in having a portion of the Abbvie's campus to be identified as a future housing opportunity site for the site inventory.

Please respond by Thursday, May 6, 2021. I greatly appreciate your time and consideration.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Friday, April 16, 2021 3:24 PM
**To:** Attar, Mayssa <mayssa.attar@abbvie.com>; Steinberg, David <David.Steinberg@ALLERGAN.com>; Dellert, Daniel J <Dan.Dellert@abbvie.com>; Garich, Russell <Russell.Garich@abbvie.com>
**Cc:** Messina, Darin J <darin.messina@abbvie.com>
**Subject:** RE: City of Irvine - interest in future housing units on-site?

Hi Mayssa:

Thank you for connecting me with your colleagues!

Hi David, Dan, Russell and Darin:

FYI, attached is the property owner outreach letter, a recent presentation, and Q&A handout that provides more in depth information on why the City is reaching out to Abbvie to inquire about future campus plans to the extent it can be shared and whether Abbvie would consider being on the site inventory. Being listed on the site inventory is not a commitment to build residential units as the market will ultimately dictate what happens. However, the City is required to plan for the State mandated units (i.e., demonstrate capacity through the site inventory and create a regulatory

framework to facilitate future residential development), so we are reaching out to key property owners to gauge interest.

Would you be available for a brief call next week? I can have Sarah in my office set something up. Please let me know.

Have a nice weekend!

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Attar, Mayssa <mayssa.attar@abbvie.com>
**Sent:** Friday, April 16, 2021 2:29 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; Steinberg, David <David.Steinberg@ALLERGAN.com>; Dellert, Daniel J <Dan.Dellert@abbvie.com>; Garich, Russell <Russell.Garich@abbvie.com>
**Cc:** Messina, Darin J <darin.messina@abbvie.com>
**Subject:** RE: City of Irvine - interest in future housing units on-site?

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa –

I am connecting you with several of my colleagues at Allergan/AbbVie who are most appropriate to help address your questions below.

Kind regards,
Mayssa

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Thursday, April 15, 2021 3:18 PM
**To:** Attar, Mayssa <Attar_Mayssa@Allergan.com>
**Cc:** IR-ePRO Admin <IR-ePROAdmin@Allergan.com>
**Subject:** City of Irvine - interest in future housing units on-site?

Hi Mayssa,

Bryan Starr at the Greater Irvine Chamber provided your contact information. I also called the main number and the receptionist gave me a general email which I've copied.

The City of Irvine is in the process of updating our State-mandated housing plan to accommodate residential units (by various income levels) allocated by the State to Irvine. Please refer to the attached letter which was sent to all property owners in the Irvine Business Complex, where your office is located.

I heard from news reports that Allergan was recently acquired by AbbVie, so we are curious if any changes to the Irvine campus are anticipated that might lead to Allergan disposing of a portion or all of its property in Irvine within the next eight years (2021-2029).

Please direct me to the appropriate person at Allergan to discuss this potential opportunity.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440

This e-mail, including any attachments, is meant only for the intended recipient of the transmission, and may be a confidential or privileged communication. If you received this e-mail in error, any review, use, dissemination, distribution, or copying of this e-mail is strictly prohibited. Please notify us immediately of the error by return e-mail and please delete this message from your system. Thank you in advance for your cooperation.

Community Development cityofirvine.org
City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

RECEIVED
APR 13 2021
COMMUNITY DEVELOPMENT
CITY OF IRVINE

March 9, 2021

KALWANI, RAMESH U TR
12 MAUCHLY, STE J
IRVINE, CA 92618

Please see note below

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under State mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

Your property at 12 Mauchley has been initially identified as a potential opportunity site for residential development. The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest.

The City respectfully requests your consideration for potential future residential development on your property. We would like to discuss this opportunity in further detail. Please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to: Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 31, 2021. If you are interested, please do not let this opportunity pass you by. If you are not interested, we would like to hear from you to remove your property from the list. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael
Director of Community Development
主旨： 爾灣市住宅要素更新 - 未來住宅用地

3/31/2021
Please remove our property from the list.

Thank you,
RAMESH U. KALWANI

Ramesh Kalwani
12 J Mauchly
Irvine, CA 92618

SANTA ANA CA 926
7 APR 2021 PM 6 L

Charles Kovac
Housing Administrator
1 Civic Center Plaza
Irvine, CA 92606

92606-52070:

**Melissa Chao**

**From:** Melissa Chao
**Sent:** Tuesday, March 9, 2021 9:19 AM
**To:** Fluter Properties
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** RE: Housing Element Update: 18542 MacArthur IHOP

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Russel:

Thank you for reaching out. I will add your property to the draft opportunity sites list as indicated in my voicemail last week.

In the meantime, City staff and our HEU consultant will be hosting one meeting based on the date/time polled with the highest confirmation level. If you can make the final meeting time (TBD) that might be beneficial.

Thanks,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Fluter Properties <fluterproperties@gmail.com>
**Sent:** Tuesday, March 9, 2021 9:14 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing Element Update: 18542 MacArthur IHOP

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning,

Thank you for your call and I received your letter regarding future housing sites for the Irvine Housing Element Update. Please include my property to be considered as a future housing site, address listed below:

18542 MacArthur Blvd
Irvine, CA 92912
(Currently IHOP)

Thank you,

Russell Fluter
2025 W. Balboa Blvd.
Newport Beach, CA 92663
Cell: (949)466-2037
fluterproperties@gmail.com

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, March 3, 2021 7:41 PM
**To:** Ryan Aeh
**Cc:** Charles Kovac
**Subject:** RE: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Ryan:

Please click on the blue bar entitled "Planning Area Maps" on this page: https://www.cityofirvine.org/community-development/zoning

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Ryan Aeh <ryan@cityventures.com>
**Sent:** Wednesday, March 3, 2021 4:19 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Sarah Escobedo <SEscobedo@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Melissa – Thanks for the response. Do you have a map that shows the Planning Area so I can see where Planning Areas 32 – 36 are located? Thanks!

Ryan Aeh
Senior Vice President, Land Acquisition
City Ventures
Cell: 949-500-1573
ryan@cityventures.com

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 3, 2021 12:15 PM
**To:** Ryan Aeh <ryan@cityventures.com>

**Cc:** Sarah Escobedo <SEscobedo@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

Hi Ryan:

The outreach letter was sent to all unique property owners (approximately 2,278 mail pieces) in Planning Areas 32 – 36.

In terms of the this future housing sites meeting invite, the email notification list was focused more on the PA 36 area, but anyone who is interested is welcome to attend so please feel free to pass along to others. We are trying to cast the widest net possible.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Ryan Aeh <ryan@cityventures.com>
**Sent:** Wednesday, March 3, 2021 10:54 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Charles,

I hope all is well on your end. I haven't seen you at a Land Trust meeting in 2021. Our next meeting is 3/15.

I'm curious on your outreach strategy for the attached letter. How many property owners did you send it out to? How did you select the recipient list? Is it Citywide or focused on certain areas/corridors?

Thanks for your help!

Ryan Aeh
Senior Vice President, Land Acquisition
City Ventures
Cell: 949-500-1573
ryan@cityventures.com

**From:** Sarah Escobedo <SEscobedo@cityofirvine.org>
**Sent:** Wednesday, March 3, 2021 10:17 AM
**To:** Sarah Escobedo <SEscobedo@cityofirvine.org>
**Subject:** Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 22, 2021 9:06 PM
**To:** sam 4optima.com
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Irvine Housing Element

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Sam:

Understood. I will remove 2111 Business Center Drive from the opportunity sites list.

When the draft housing plan is released, you will be able to review the draft site inventory list. Sites included in the list are probably good acquisition candidates especially if they are for sale or lease because the owner or owner's representative has expressed high interest to be included. Please note that the City has three years after adoption of the housing plan (anticipated October 2021) to amend the City's General Plan, rezone, and/or create/amend residential overlays to facilitate the adopted housing element plan. So it may take several years before you can proceed with actual residential development, which is still subject to its own development application(s).

Please let me know if you need further assistance and/or have any questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** sam 4optima.com <sam@4optima.com>
**Sent:** Monday, March 22, 2021 8:53 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Irvine Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi,

I do not want to add 2111 Business center Drive to the list, but please keep me on the list to acquire a property to develop.

Thanks

Sam Kabab
Optima Capital Corp.

2111 Business Center Drive suite 200
Irvine CA 92612
Cell : (949) 400-1007
Phone: (949) 833-8826
Fax: (949) 734-5167
email : sam@4optima.com
DRE : 01217291
NMLS : 362060

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 22, 2021 8:41 PM
**To:** sam 4optima.com <sam@4optima.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element

Hi Sam:

I added 2111 Business Center Drive to the opportunity sites list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added you to our project interest list for notification purposes for community workshops, release of public draft of HEU for review, and HEU adoption hearings, etc. Please also check www.cityofirvine.org/housingelementupdate as the project webpage is periodically updated with new information.

Feel free to contact us with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** sam 4optima.com <sam@4optima.com>
**Sent:** Friday, March 19, 2021 1:33 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** RE: Irvine Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi,

Yes, I am the property owner of 2111 Business center Drive Irvine.

Thanks

Sam Kabab
Optima Capital Corp.
2111 Business Center Drive suite 200
Irvine CA 92612
Cell : (949) 400-1007
Phone: (949) 833-8826
Fax: (949) 734-5167
email : sam@4optima.com
DRE : 01217291
NMLS : 362060

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Thursday, March 18, 2021 6:47 PM
**To:** sam 4optima.com <sam@4optima.com>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Irvine Housing Element

Hi Sam:

How can I help you?

Are you the property owner of the building at 2111 Business Center Drive?

FYI, attached is the presentation from staff's recent presentation on future housing sites.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Thursday, March 18, 2021 11:27 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Irvine Housing Element

FYI ...

Charles

**From:** sam 4optima.com <sam@4optima.com>
**Sent:** Thursday, March 18, 2021 11:25 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Irvine Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Charles,

I would like to participate in the Irvine Housing future site, please send me more information on how to start.

Thanks

Sam Kabab
Optima Capital Corp.
2111 Business Center Drive suite 200
Irvine CA 92612
Cell : (949) 400-1007
Phone: (949) 833-8826
Fax: (949) 734-5167
email : sam@4optima.com
DRE : 01217291
NMLS : 362060

**Melissa Chao**

**From:** Melissa Chao
**Sent:** Friday, March 12, 2021 9:47 AM
**To:** sam@4optima.com
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** Future Housing Sites for Irvine Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hi Sam:

Thank you for reaching out to us. City staff and our housing consultant, Hitta, who I have copied on this email are hosting a virtual meeting next Tuesday. Please join us if you happen to be available at 3 p.m.

I'm officially off work today, but need to some "quiet time" to finish another HEU-related work task that is time sensitive. I will call you early next week to touch base.

In the meantime, is there specific property address(es) you have in mind that you could share with us?

Sincerely,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser.

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Charles Kovac <CKovac@cityofirvine.org>
**Sent:** Friday, March 12, 2021 9:40 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Fw: Irvine Housing Element

FYI ...

Charles

---

**From:** sam 4optima.com <sam@4optima.com>
**Sent:** Friday, March 12, 2021 8:41 AM
**To:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Irvine Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Charles,

I received a letter regarding Irvine Housing Element, please send me more info and let me know how I can participate in the program.

Sincerely,

Sam Kabab
Optima Capital Corp.
2111 Business Center Drive suite 200
Irvine CA 92612
Cell : (949) 400-1007
Phone: (949) 833-8826
Fax: (949) 734-5167
email : sam@4optima.com
DRE : 01217291
NMLS : 362060

## Melissa Chao

**From:** Scott Peotter <speotter@aslanco.com>
**Sent:** Thursday, March 25, 2021 8:30 PM
**To:** Melissa Chao
**Subject:** Re: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Melissa



SCOTT PEOTTER



ASLAN COMPANIES, INC.
Direct: 949-250-7118
14252 Culver Drive, Suite A-305
Irvine, CA 92604

I like to share a verse that I was reading. I hope it blesses you like it did me.
2Chronicles 7:13-14

13 If I shut up the heavens so that there is no rain, or if I command the locust to devour the land, or if I send pestilence among My people, 14 and My people [d]who are called by My name humble themselves and pray and seek My face and turn from their wicked ways, then I will hear from heaven, will forgive their sin and will heal their land.

On Thu, Mar 25, 2021 at 7:00 PM Melissa Chao <MChao@cityofirvine.org> wrote:

For question 1, the GPU/ZC is on hold while staff concentrates on the HEU work effort. We anticipate the GPU/ZC will be a 2.5-3 year process.

For question 2, we'll have to see how the HEU process unfolds. We anticipate the subsequent GPA/ZOA/EIR will include increases in intensity caps and/or overlays to the extent needed to update the policies and regulatory framework to support the adopted HE.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Scott Peotter <speotter@aslanco.com>
**Sent:** Wednesday, March 24, 2021 7:50 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

What is the status of the GPA update? Can it incorporate the mod to the cap?

On Wed, Mar 24, 2021, 6:26 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Unfortunately, you will still have to process your own GPA/ZC + CEQA to increase the intensity cap then MP modification (or whatever the applicable application is) + CEQA.

Hopefully, the HOA accepts your home into the association.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Scott Peotter <speotter@aslanco.com>
**Sent:** Wednesday, March 24, 2021 6:20 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

So if I wanted to develop the project after 10/15/2021 but before the GP and Zoning are updated, would I have to process a GPA and ZC? Or simply the Master Plan for the project as required by the current zoning?



SCOTT PEOTTER



ASLAN COMPANIES, INC.
Direct: 949-250-7118

14252 Culver Drive, Suite A-305

Irvine, CA 92604

I like to share a verse that I was reading. I hope it blesses you like it did me.

2Chronicles 7:13-14

13 If I shut up the heavens so that there is no rain, or if I command the locust to devour the land, or if I send pestilence among My people, 14 and My people [d]who are called by My name humble themselves and pray and seek My face and turn from their wicked ways, then I will hear from heaven, will forgive their sin and will heal their land.

On Wed, Mar 24, 2021 at 5:07 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Scott:

As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

Aside from any unforeseen political issues if a property is included in the final site inventory approved by the City Council, then the City will be laying the general ground work with the subsequent General Plan Update/Zoning Ordinance Amendment/residential overlay/Environmental Impact Report, to the extent necessary. However, the property owner would still need to process any required discretionary application(s) and appropriate CEQA documentation to develop the actual residential project.

According to State housing law, the City has a maximum of three years after the adoption of the Housing Element (anticipated by October 15, 2021 which is the State deadline to submit the Council adopted Housing Element for certification purposes) to "square up" the General Plan and Zoning Ordinance to be consistent with the adopted Housing Element.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Scott Peotter <speotter@aslanco.com>
**Sent:** Tuesday, March 23, 2021 9:24 AM
**To:** Melissa Chao <MChao@cityofirvine.org>

**Subject:** Re: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks, I am looking at a SFR with an ADU.

What is preventing me from developing this site into my personal residence is that, even though the GP and zoning allows it, there are no more DUs in the tables of the GP or Zoning for PA15. Does this mean that the General Plan Amendment that has been ongoing for several years will propose to change those tables and assign a DU to this property?

If not, could it?

BTW, Tim Gehrich is familiar with this property.

Thanks for your help.



SCOTT PEOTTER



ASLAN COMPANIES, INC.
Direct: 949-250-7118

14252 Culver Drive, Suite A-305

Irvine, CA 92604

I like to share a verse that I was reading. I hope it blesses you like it did me.

2Chronicles 7:13-14

13 If I shut up the heavens so that there is no rain, or if I command the locust to devour the land, or if I send pestilence among My people, 14 and My people [d]who are called by My name humble themselves and pray and seek My face and turn from their wicked ways, then I will hear from heaven, will forgive their sin and will heal their land.

On Tue, Mar 23, 2021 at 8:43 AM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Scott:

APN:452-111-48 in Planning Area 15 is included as an opportunity site of 0.09 acre.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Scott Peotter <speotter@aslanco.com>
**Sent:** Monday, March 22, 2021 10:57 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Fwd: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am interested in my property being designated for residential development.

Thanks Melissa.

APN:452-111-48



SCOTT PEOTTER



ASLAN COMPANIES, INC.
Direct: 949-250-7118

14252 Culver Drive, Suite A-305

Irvine, CA 92604

I like to share a verse that I was reading. I hope it blesses you like it did me.

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---------- Forwarded message ---------
From: **Sarah Escobedo** <SEscobedo@cityofirvine.org>
Date: Wed, Mar 3, 2021 at 10:17 AM
Subject: Confirm your availability by March 9 for Future Housing Sites Meeting – City of Irvine Housing Element Update
To: Sarah Escobedo <SEscobedo@cityofirvine.org>

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

## Melissa Chao

**From:** Melissa Chao
**Sent:** Tuesday, March 23, 2021 8:58 AM
**To:** Sidika Kilic
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Housing Element

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Sidika:

Thank you for your input.

Unfortunately, the cost of land is at minimum several millions of dollars per acre, so the City does not have the funds to purchase a meaningfully sized site.

More importantly, UCI wants to retain control as they are a State entity not typically subject to local regulations. For faculty and staff housing on the main campus, UCI leases land to their non-profit housing authority who developed the homes. Homeowners purchase the structure on leased land. The resale of homes are price restricted to remain affordable. Prospective homebuyers are subject to an application and screening process limited to UCI faculty and staff for the main campus or medical center; there is a waiting list.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

**From:** Sidika Kilic <kilicsidika@gmail.com>
**Sent:** Tuesday, March 23, 2021 8:40 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Re: Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Melissa,
Thank you for your reply. UCI can sell the land to The City of Irvine. They don't have to build the housing themselves. UCI has more than enough for a University. I have witnessed zone changes many times when I lived in Long Beach. i.e. Post Office on 2300 Redondo Ave. Long Beach was sold to a business complex and the zoning was changed as such. If the state is mandating to build more residential housing, then that State can sell the land to The City. This is my straight logic.
Thank you,

On Mon, Mar 22, 2021 at 8:09 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Sidika:

I apologize for you receiving a property outreach letter and creating any confusion. We are targeting non-residential properties to gauge interest in future residential development for meeting the State mandated housing plan requirements.

I happened to be the planner that reviewed the UCI Hospital project. As you may know, the City filed a lawsuit and eventually came to an agreement with UCI. It was surprising in the sense that UCI is a State entity and typically not subject to local regulations.

Unfortunately, if UCI choses to build homes near the hospital, those homes will not count towards the City's residential unit allocation from the State because it's again on State lands.

I will add your email to the project interest list so that you may follow any developments to the draft housing plan.

Sincerely,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Sidika Kilic <kilicsidika@gmail.com>
**Sent:** Sunday, March 21, 2021 2:22 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for your letter of March1, 2021.

I live on the corner of Campus&Jamboree in a large complex of 535 units called "Watermarke Condos" . Right next to us are high rise buildings of the Plaza and otherside it Toscana Apartments.

I must admit I am not happy about the UCI Hospital approval across the street due to obvious traffic increase and noise from ambulances, but it is not just up to me whether a future acquisition decision would be taken by the HOA. I should not think so.

UCI has vast land between Jambore & University along Campus outside of the area where they plan on building the hospital. If I think of other areas I will contact you.

Thank you,

--

Sidika Kilic

Cell: 1-724-771-1230

--

Sidika Kilic
Cell: 1-724-771-1230

## Melissa Chao

**From:** Steve Espinosa <espo@lightingcompany.net>
**Sent:** Friday, April 30, 2021 8:23 AM
**To:** Melissa Chao
**Cc:** cdmhunytea@roadrunner.com; Hitta Mosesman
**Subject:** Re: 1621 Browning/Irvine Housing Element Update - Future Housing Sites

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Melissa, Thanks for the update.

Regards,

Steve

Sent from my iPhone

On Apr 30, 2021, at 8:16 AM, Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Steve:

Based on our prior email communications and other interested neighbors on Browning, I'm going to place your property on the opportunity sites list for consideration by the City Council. If accepted by the Council, City staff would most likely create a residential and/or mixed-use overlay for the area. It would not impact your ability to continue to use your property as you currently do (in accordance with existing General Plan and Zoning Ordinance requirements), but would potentially provide an option to redevelop into residential use at your discretion.

Please feel free to contact me with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Steve Espinosa <espo@lightingcompany.net>
**Sent:** Wednesday, March 17, 2021 8:50 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** cdmhunytea@roadrunner.com; Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
**Subject:** Re: 1621 Browning/Irvine Housing Element Update - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Melissa

Thank you for responding to my email. Our property is too small to be developed into housing it would have to be assembled with other lots.

We are always open to ways to increase our return on our property.

Best regards,

Steve Espinosa

Sent from my iPhone

On Mar 17, 2021, at 6:52 PM, Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Steve and Kim:

FYI, attached is the presentation from yesterday's meeting.

I wanted to circle back to address your initial questions.

The City is looking for property owners interested in potentially developing future residential on their site to accommodate the State mandated unit allocation by income level. Because of the State mandated deadline of October 15, 2021, the City's focus is on completing the Housing Element Update (HEU).

The completion of the HE site inventory analysis will allow assessment of the extent of the changes needed to the other General Plan elements/chapters (such as land use, circulation, and safety). Once the 6th Cycle HEU is adopted by the Council and submitted to the State for certification review, Irvine will embark on Phase 2 of the General Plan Update (GPU) and associated Zoning Ordinance Amendment (ZOA) to "balance" or "square up" the policies and regulatory framework to support the adopted HEU/RHNA.

Unlike the traditional residential core, the IBC was not master planned. In the last decade or so, the market created the demand for homes to be closer to the jobs thus the City adopted a mixed-use overlay that allowed residential use in 2010. New residential development is subject to park dedication requirements per the Quimby Act. Private park dedication requirements are typically met on-site within the residential development. However, public park dedication requirements are typically met via in-lieu park fees. The on-going challenge for the City is securing property for public park development purposes given the escalating costs

of IBC properties and previously being outbid. The City's Public Works/Transportation Department is studying opportunities for trail networks and always pushing for increased sidewalk connectivity.

If you are interested in future residential development at 1621 Browning, please let us know ASAP.

Please feel free to call/email us with any further questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, March 15, 2021 10:48 AM
**To:** Steve Espinosa <espo@lightingcompany.net>; cdmhunytea@roadrunner.com
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: 1621 Browning/Irvine Housing Element Update - Future Housing Sites

Hi Steve and Kim:

Thank you for reaching out.

City staff and our housing consultant, Hitta, who I have copied on this email, are hosting a virtual meeting on "future housing sites" tomorrow. Please feel free to join us if you happen to be available at 3 p.m. The City is looking for property owners that may be interested in developing or redeveloping their site(s) for future residential uses. Do you have interest in potentially redeveloping 1621 Browning?

We are also planning to host general community workshops in April, which will be announced later. I will add you to the project interest list.

Thanks,
Melissa

<image001.jpg>

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a

significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. Feel free to send this to others who may be interested.

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

Join Us for a Virtual Meeting

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on Tuesday, March 16, 2021 at 3 – 4:30 p.m. The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

Meeting Link:

Register in advance for this webinar:
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser.

Webinar ID:
958 7121 5807
Webinar Passcode:
City

If you would like to join by phone, dial one of the following numbers and use the Webinar ID and Passcode

US: +1 669-900-6833 or +1 346-248-7799
Webinar ID: 958 7121 5807

Passcode: 400813

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Steve Espinosa <espo@lightingcompany.net>
**Sent:** Friday, March 12, 2021 12:08 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** cdmhunytea@roadrunner.com
**Subject:** 1621 Browning/Irvine Housing Element Update - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mr. Kovac

I was following up on the letter we received in the mail. My wife and I own the building at 1621 Browning. We are aware of the large number of housing units that have been added into our business community over the past few years.

What is the potential opportunity in the new housing plan?

Irvine has always done a great job planning their residential communities in the past, however, in the most recent residential buildout in our area, there are no open spaces or parks. Is there a plan to address this?

Best regards,

**Steve & Kim Espinosa**

1621 Browning
Irvine, CA 92606
949-668-0893 Direct
949-296-0764 Office
714-936-5923 Cell
www.lightingcompany.net

<Irvine Future Housing Sites presentation 3.16.21.pdf>

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 22, 2021 7:59 PM
**To:** Terry Lee
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: Irvine Housing Element Update - Future Housing Sites
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Terry:

Attached is a presentation slide deck on future housing sites for your reference. Please also check www.cityofirvine.org/housingelementupdate as the project webpage is periodically updated with new information.

I added 18800 MacArthur Blvd to the opportunity sites list. As the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the HE plan.

I added you to our project interest list for notification purposes for community workshops, release of public draft of HEU for review, and HEU adoption hearings, etc.

Please feel free to contact us with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Terry Lee <terry@apccusa.com>
**Sent:** Monday, March 22, 2021 11:59 AM
**To:** Melissa Chao <MChao@cityofirvine.org>; Charles Kovac <CKovac@cityofirvine.org>
**Subject:** Irvine Housing Element Update - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Ms. Chao and Mr. Kovac, we are the asset manager for Irvine Hilton Hotel on 18800 MacArthur Blvd., Irvine. This particular real property site is 6.63 acres and current zoning is IBC-5.1 – IBC Multi-Use.

We received your letter of March 1, 2021 on the above mentioned subject. We want to inform you that ownership does have the interest in future redevelopment, and at this

location we think ideally with a mixed use development project. Therefore please consider to include this site in your future Housing Element Plan. Below is my contact information, please continue to send us any update or related information. Thanks for your helps and looking forward to hearing from you.

***Regards,***

**Terry Lee**, Director
Asia Pacific Capital Company
515 S. Figueroa St., Suite 1850
Los Angeles, CA 90071
Work: (213) 680-8811
Cell: (626) 622-0800

Email: terry@apccusa.com

www.apccusa.com

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, March 15, 2021 9:22 AM
**To:** TIM SHAW
**Cc:** Charles Kovac; Melissa Chao
**Subject:** RE: HEU Interest List

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hi Tim:

Thank you for reaching out. I have added you to the HEU project interest list.

City staff and our housing consultant are hosting a virtual meeting tomorrow. Please feel free to join us if you are interested and happen to be available at 3 p.m. There will be general community workshops in throughout April as well.

Thanks,
Melissa

Follow Up Flag
Flag Status:

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

Follow Up Flag
Flag Status:

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. Feel free to send this to others who may be interested.

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

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If you are having trouble with the link above, please copy and paste this link into your browser.

Webinar ID:
958 7121 5807
Webinar Passcode:
City

If you would like to join by phone, dial one of the following numbers and use the Webinar ID and Passcode

US: +1 669-900-6833 or +1 346-248-7799
Webinar ID: 958 7121 5807
Passcode: 400813

MELISSA CHAO | SENIOR PLANNER
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

-----Original Message-----
From: TIM SHAW <tshaw265@gmail.com>
Sent: Saturday, March 13, 2021 9:21 AM
To: Melissa Chao <MChao@cityofirvine.org>
Subject: HEU Interest List

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please add me to the HEU interest list. Thanks Tim Shaw

11 Misty Run
Irvine CA 92614
(949) 300-9154

## Melissa Chao

**From:** Tim Strader Jr. <tj@starpointeventures.com>
**Sent:** Monday, March 15, 2021 10:46 AM
**To:** Melissa Chao
**Subject:** RE: Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa, can you please call me at 949-887-0971? Thanks, Tim

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, March 10, 2021 5:10 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Jacob Daigneau (Contractor) <JDaigneau@cityofirvine.org>
**Subject:** Join Us for Irvine Future Housing Sites - Virtual Meeting on Tuesday, March 16, 2021 at 3 p.m. via Zoom

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a

## Melissa Chao

**From:** Melissa Chao
**Sent:** Wednesday, March 3, 2021 1:38 PM
**To:** Tim Strader Jr.; Charles Kovac
**Subject:** RE: Housing Element Update

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Tim:

As part of the HEU, the State requires the City to submit a site inventory that demonstrates the capacity to accommodate the State mandated RHNA numbers by income level. The City is required to identify specific sites and the realistic number of units for each site. For non-vacant sites, the State requires "substantial evidence" that the existing use will likely be discontinued in 2021-2029 (i.e., HEU planning period). The "gold standard" is a letter from the property owner stating their intention to develop the property with residences during the planning period.

Subsequent to the HEU, the City will embark on phase 2 of the General Plan Update and an associated Zoning Ordinance Amendment to support the HEU/RHNA. We have three years after the adoption of the HEU to balance the applicable policies (e.g., land use and circulation) in the GP as well as upzone/rezone/raise caps and/or create or amend zoning overlays, etc. The City must plan for and maintain the capacity to accommodate the RHNA units whereas the market dictates whether the units are built.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

**From:** Tim Strader Jr. <tj@starpointeventures.com>
**Sent:** Wednesday, March 3, 2021 1:12 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing Element Update

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles and Melissa, regarding the letter to property owners asking if they want to be considered for future residential development, if they are already located in the IBC Residential Overlay Zone but currently a commercial use, do they need to submit that request or will the city likely just raise the 15,000 unit cap for PA 36 rather than identify specific sites?

Thanks,

Tim Strader Jr.
President
Starpointe Ventures

5030 Campus Drive, Suite B
Newport Beach, CA 92660
P)949-622-0420
tj@starpointeventures.com
www.starpointeventures.com

## Melissa Chao

**From:** Tom Nemat <tnemat@nematlaw.com>
**Sent:** Thursday, April 15, 2021 9:50 AM
**To:** Melissa Chao
**Cc:** Lora Taleb
**Subject:** Re: Irvine Housing Element Update - Future Housing Sites

**Categories:** Yellow Category

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you Melissa.

Tom

On Thu, Apr 15, 2021 at 9:46 AM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Tom:

Sorry I was unable to respond sooner. Attached is the Community Workshops flier. Please join us if you are available and interested.

I added 1701 Reynolds to the housing opportunity sites list. A potential constraint is the proximity (i.e., approximately 4,600' based on an aerial) of the building from the end of the airport runway. Note as the Housing Element Update (HEU) progresses, the City Council will decide which sites will ultimately be included in the final site inventory that is submitted to the State for the Housing Element plan.

I added you and Lora to the project interest list. You will be notified of opportunities to participate and key project milestones such as the release of the public review draft of the HE.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Tom Nemat <tnemat@nematlaw.com>
**Sent:** Tuesday, April 13, 2021 9:47 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Lora Taleb <lora@connectecco.com>
**Subject:** Re: Irvine Housing Element Update - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Per our call last week, my clients who own the 1701 Reynolds property in Irvine, are interested in including their property as a future Irvine homesite, as long as it does not conflict with their ability to use the property under its current use which is a manufacturing facility. Please let us know if you need any further info.

Tom

On Mon, Apr 5, 2021 at 11:22 AM Melissa, Chao <MChao@cityofirvine.org> wrote:

Hi Tom:

Thanks, I will call your office number at 2:30 pm today.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Tom Nemat <tnemat@nematlaw.com>
**Sent:** Monday, April 5, 2021 10:48 AM
**To:** Melissa Chao <MChao@cityofirvine.org>

**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Lora Taleb <lora@connectecco.com>
**Subject:** Re: Irvine Housing Element Update - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa, I'll be on the call today.

Tom

On Fri, Apr 2, 2021 at 4:37 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Tom:

2:30 pm on Monday works. Is it just you or will Lora be joining us? If so, I can set-up a Microsoft Teams meeting.

Today is Charles' last day with the City of Irvine, so he will not be able to join us.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Tom Nemat <tnemat@nematlaw.com>
**Sent:** Friday, April 2, 2021 4:28 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Lora Taleb <lora@connectecco.com>
**Subject:** Re: Irvine Housing Element Update - Future Housing Sites

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Monday afternoon works. How about 2:30?

Tom

On Fri, Apr 2, 2021 at 2:59 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Tom:

I just tried calling your office number, but could not leave a message because your mail box is full.

Perhaps we can set-up a call next week. Please let me know your availability.

Have a nice weekend.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Tom Nemat <tnemat@nematlaw.com>
**Sent:** Wednesday, March 31, 2021 1:57 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Charles Kovac <CKovac@cityofirvine.org>; Lora Taleb <lora@connectecco.com>
**Subject:** Re: Irvine Housing Element Update - Future Housing Sites

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Ok, thank you. Looking forward to hearing from you soon.

Tom

On Wed, Mar 31, 2021 at 1:36 PM Melissa Chao <MChao@cityofirvine.org> wrote:

Hi Tom and Lora:

I have several meetings this afternoon, so I will circle back with you later this week.

In the meantime, attached is a recent PowerPoint presentation and Q&A handout on housing opportunity sites for your reference.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Tom Nemat <tnemat@nematlaw.com>
**Sent:** Wednesday, March 31, 2021 1:21 PM
**To:** Charles Kovac <CKovac@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>; Lora Taleb <lora@connectecco.com>
**Subject:** Irvine Housing Element Update - Future Housing Sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Kovac and Ms. Chao,

My client received a letter from the City of Irvine dated March 1, 2021 with the subject line: Irvine Housing Element Update - Future Housing Sites. Said letter mentioned that the city is attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning.

My client's real property is located at 1701 Reynolds Avenue, Irvine, CA 92614, and my client is interested in the possibility and potential for future residential development at said property, and is interested in further conversations with you to discuss this potential opportunity.

I've ccd Lora Taleb, one of the owners of the property, and we would like to set up a follow up call or receive more information from you via email.

Best,

--

Tom Nemat, Esq.

Law Firm of Tom Nemat

2030 Main Street, Suite 1300

Irvine, CA 92614

Tel: (949) 375-5541

tnemat@nematlaw.com

www.nematlaw.com

**Legal Disclaimer:** The material above, including attachments, is not a complete explanation of the law regarding the discussed subject matter. It is intended to explain only certain legal concepts in simple terms in order to help the reader understand the subject matter. Also, the above information is not legal advice. It is general legal information that merely states the law. If you need legal advice about your own particular situation, you must hire an attorney that can listen and apply the law to your specific facts.

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**Circular 230 Notice**: To ensure compliance with Treasury regulations regarding practice before the IRS, we inform you that, unless expressly stated otherwise, any federal tax advice contained in this communication was not intended or written to be used, and cannot be used, by any taxpayer for the purpose of (i) avoiding penalties that may be imposed on the taxpayer under United States federal tax law, or (ii) promoting, marketing or recommending to another party any tax-related matters addressed herein.

--

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## Melissa Chao

**From:** Melissa Chao
**Sent:** Friday, March 5, 2021 5:05 PM
**To:** ygal@sonenshineenterprises.com
**Cc:** Charles Kovac; Hitta Mosesman; Melissa Chao
**Subject:** 2698 White Road

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

**Categories:** Yellow Category

Hi Ygal:

Thank you for reaching out to us. I will add you to the project interest list.

As discussed, I will add 2698 White Rd to the opportunity sites list.

We will be hosting one meeting based on the date/time polled with the highest confirmation level below. If you are unable to make the final meeting time, we can schedule a separate call to discuss further at your request.

Have a nice weekend and thank you,
Melissa

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE

# *What is Your Availability?*

## Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development.

All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

**Please confirm your availability by taking the poll here:**
https://irvineca.seamlessdocs.com/f/futurehousingsitesmeeting

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.

For more information, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Public Engagement

## Appendix A-L: Focused Community Workshop #1 on March 16, 2021

## Table of Contents


1. Future Housing Sites Outreach
2. Initial Invitee List
3. Workshop Attendee List
4. Presentation
5. Question & Answer Handout

## 1. Future Housing Sites Outreach

# *What is Your Availability?*

### 6th Cycle Housing Element Update -
### Virtual Meeting on Future Housing Sites

***Please respond by Tuesday, March 9, 2021***

The City of Irvine is updating its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

Staff is in the process of scheduling a meeting on the Housing Element Update (HEU) that primarily focuses on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. ***Feel free to send this to others who may be interested.***

Please confirm your availability for the following meeting times by clicking on the button(s) below:

- Tuesday, March 16, 2021 at 3 – 4:30 p.m.
- Wednesday, March 17, 2021 at 1:30 – 3 p.m.
- Thursday, March 18, 2021 at 10 – 11:30 a.m.

Enter email address (required): _____

VOTE BUTTON

For more information and/or if you would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update by visiting www.cityofirvine.org/housingelementupdate.




# *You're Invited*

## 6th Cycle Housing Element Update -
## Virtual Meeting on Future Housing Sites
## March 16, 2021 at 3 p.m.

The City of Irvine is preparing an update to its Housing Element for the 2021-2029 planning period. Under State mandate, Irvine must plan for a significant number of future housing units, including affordable housing. We must identify potential sites that may accommodate future residential development. All California cities and counties are required to update their Housing Element every eight years for State certification. The State deadline for Irvine is October 15, 2021.

This meeting will provide an overview of the Housing Element Update (HEU) and primarily focus on the process of identifying opportunity sites for developing the draft housing element site inventory as detailed in the attached property owner outreach letter. Additionally, the meeting will offer the opportunity for participants to ask questions and offer input. Any and all ideas are welcome and not a commitment. This event is open to the public. ***Feel free to send this to others who may be interested.***

For more information and/or if you are unable to attend the virtual meeting and would like to discuss this opportunity, please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org or 949-724-7452 and/or Melissa Chao, Senior Planner, at mchao@cityofirvine.org or 949-724-6395.

To be added to the HEU interest list, please email mchao@cityofirvine.org.

Learn more about the Housing Element Update
by visiting www.cityofirvine.org/housingelementupdate.

**Join Us for a Virtual Meeting**

An overview of the Housing Element Update and related site inventory work effort will be presented during a virtual public meeting on **Tuesday, March 16, 2021 at 3 – 4:30 p.m.** The meeting will be conducted via Zoom.

The Zoom meeting information is below, and the virtual meeting will open approximately 30 minutes prior to the start time at 3 p.m.

**Meeting Link:**

**Register in advance for this webinar:**
https://zoom.us/webinar/register/WN_hes31vcBSUGUurkmA-Dwmg
If you are having trouble with the link above, please copy and paste this link into your browser

**Webinar ID:**
958 7121 5807
**Webinar Passcode:**
City

**If you would like to join by phone**, dial one of the following numbers and use the Webinar ID and Passcode (for higher quality, dial a number based on your current location):

**US: +1 669-900-6833 or +1 346-248-7799**
**Webinar ID:** 958 7121 5807
**Passcode:** 400813

## 2. Initial Invitee List (82 emails)

| Name | Title | Organization | email |
|---|---|---|---|
| Adam Wood | | BIA | awood@biaoc.com |
| Alan Carmichael | | Alere Property Group | acarmichael@alerellc.com |
| Alex Gill | Vice President, Development | Intracorp SW, LLC | agill@intracorphomes.com |
| Alison Rawlins | Vice President | Land Advisors Organization | arawlins@landadvisors.com |
| Brent Stoll | | Rose Investments | brent@roseinvestments.biz |
| Brett Hamara | Project Manager | Lennar | brett.hamara@lennar.com |
| Brian Cole | Associate | CB Richard Ellis | Brian.Cole@cbre.com |
| Brittany Irvin | | Province Group/Newport Equities LLC | birvin@provincegroup.com |
| Bryan Starr | President & CEO | Greater Irvine Chamber | bstarr@irvinechamber.com |
| Byron Foss | Executive VP | JLL Orange County | byron.foss@am.jll.com |
| Chris Bates | First Vice President | CB Richard Ellis | Chris.Bates@cbre.com |
| Clark Neuhoff | | Alere Property Group | cneuhoff@alerellc.com |
| Craig Swanson | | Irvine Asset Group | cswanson@irvineassetgroup.com |
| Dale Camera | Vice President | Lee & Associates | dcamera@lee-associates.com |
| Danelle Sandell | Property Manager | LBA Realty/LBA Logistics | Dsandell@lbarealty.com |
| Dave Bueche | Senior Vice President | Sperry Commercial | Dave.Bueche@sperrycre.com |
| David Bourguigon | | Main Street Plaza - landlord | dbourguignon@cox.net |
| Dean Maners | | Province Group/Newport Equities LLC | dmaners@provincegroup.com |
| Debra Pember | | Developers Edge | Debra@developersedge.com |
| Dominic Mazza | Acquisitions & Development Associate | Intracorp SW, LLC | dmazza@intracorphomes.com |
| Dr Alethea Hsu | | Diamond Jamboree - owner | aletheahsu@aol.com |
| Drew Huffman | Associate | Hines | drew.huffman@hines.com |
| Eric A Nelson | Vice President - Community Development | Trumark Homes | enelson@trumarkco.com |
| Eric Brown | Director of Leasing & Development | LBA Realty | Ebrown@lbarealty.com |
| Eric Martin | | Bosa Development | |
| Erik Steiner | | Kelvin and Jamboree Properties, LLC. | esteiner@udr.com |
| Garrett Macklin | | LBA Realty | Gmacklin@lbarealty.com |
| Gary Allen | Senior Managing Director | Newmark Grubb Kinght Frank | |
| Gavin Denniston | Executive VP/Principal | DAUM Commercial Real Estate Services | gavin.denniston@daumcommercial.com |
| George M Prince | President | Prince Commercial Real Estate Services, Inc. | gprince@princecommercial.com |
| Heidi Hare | President | J.L. Hare | heidi@jlhare.com |
| James Armistead | Development Manager | Pacific Urban Residential | |
| Jeff D Warshaw | 360 Fusion condos | 360 Irvine, LLC | jwarshaw@360res.com |
| Jeff Davis | | Irvine Company | JSDavis@irvinecompany.com |
| Jim Fitzpatrick | Senior Vice President, Development | Public Storage, Real Estate Division | |
| Jim Ivory | VP | Sares Regis | |
| Joanne Ho | Project Manager | C&C Development Co, LLC | JHo@c-cdev.com |
| Joe Winkelmann | | VOIT | |
| John Carpenter | Principal | Legacy Captial Investment Group | john@legacycig.com |
| Jose Cornejo | Senior Director of Government Relations | NAIOP So Cal (Commercial Real Estate Development Association) | jose@cornejost.com |
| Karen Martin | 17832 Gillette apartments | Pacific Planning Group | Karen@pacificplanninggroup.com |
| Kathy Sato | | Metlife Real Estate investments | ksato@metlife.com |
| Kendra Chandler | Executive Director | ULI OC/IE | kendra.chandler@uli.org |
| Kenny Emson | Chief Operating Officer | National Multifamily Housing Council (NMHC) | kemson@nmhc.org |
| Kevin Hayes | Senior VP | Lincoln Property Company | khayes@lpc.com |
| Kim Duty | Public Affairs | National Multifamily Housing Council (NMHC) | kduty@nmhc.org |
| Larry Schuler | | CBRE | Larry.Schuler@cbre.com |
| Leonard G. Glickman | | Rose Equities | Leonard@RoseEquities.com |
| Mark Janda | Senior Vice President - Development | AvalonBay Communities, Inc. | Mark_Janda@avalonbay.com |
| Martin McIntosh | | Building Owners and Managers Association International (BOMA) | director@bomaoc.org |
| Matt Montgomery | Director of Real Estate Development | Opus West Corportation | |
| Mike Barreiro | Executive VP/Principal | DAUM Commercial Real Estate Services | mike.barreiro@daumcommercial.com |
| Mike Hartel | Executive VP | Colliers International | michael.hartel@colliers.com |
| Morgan Zhang | 2525 Main apartments | J&R Main Street, LLC. | morgan@jnrg.com |
| Neil Naran | | Marcus & Millichap | neil.naran@marcusmillichap.com |
| Nick Carey | Executive VP | JLL Orange County | Nick.Carey@am.jll.com |
| Pamela Sapetto | | Sapetto Group | psapetto@sapettorealestate.com |
| Peter Zak | Senior Director, Development | Lyon Capital Ventures | peterzak@lyon1.com |
| Ray Lawler | | Hlnes | Ray.Lawler@hines.com |
| Richard Horn | VP | NAI Capital | |
| Ryan Aeh | | | ryan@cityventures.com |
| Scott Carlberg | | The Koll Company | carlbergs@koll.com |
| Scott M Meserve | | The Koll Company | meserves@koll.com |
| Scott Peotter | | Aslan Companies | speotter@aslanco.com |
| Sean Ahern | Senior Vice President/Principal | Lee & Associates/Newport Beach | sahern@lee-associates.com |
| Steve Kane | | Charles, Kane & Dye, LLP | skane@ckdcounsel.com |
| Steve LaMotte | | BIA | slamotte@biasc.org |
| Stuart Posnock | | Garden Communities | stuartp@gardencommunitiesca.com |
| Sunti Kumjim | VP Development and Forward Planning | MBK Homes (for rent) | SuntiKumjim@mbk.com |
| Tim Strader Jr | | Starpointe Ventures | tj@starpointeventures.com |
| Timothy Jemal | Chief Executive Officer | NAIOP So Cal (Commercial Real Estate Development Association) | tjemal@naiopsocal.org |
| Todd Cottle | 16103 Derian Affordable Apartments | | todd@c-cdev.com |
| Todd Cottle | | C&C Development Co, LLC | todd@c-cdev.com |
| Tom Porter | VP, Corporate Services | Edwards Lifesciences | Tom_Porter@edwards.com |
| Tony Arnest | Carlyle @ Colton Plaza / 18880 Douglas | KB Home Coastal, Inc. | tarnest@kbhome.com |
| Troy Wooton | Senior Managing Director | Newmark | Troy.Wooton@ngkf.com |
| Wade Tift | Executive VP | JLL Orange County | wade.tift@am.jll.com |
| Walkie Ray (James Ray) | President | Sanderson J. Ray Development | walkieray@sjrd.com |
| | | Commercial Real Estate Women (CREW) Orange County | info@CREWOrange County.org |

# 3. Workshop Attendee List (29 persons)

Registration Report

| Report Generated: | 3/17/2021 9:47 | | | | | | |
|---|---|---|---|---|---|---|---|
| Topic | Webinar ID | Scheduled Time | Duration (minutes) | # Register | # Cancelle | # Approve | # Denied |
| City of Irvine's 6th Cycle Housing Element Update | 958 7121 5807 | 3/16/2021 15:00 | 90 | 31 | 0 | 31 | 0 |

Attendee Details

| First Name | Last Name | Email | Registration Time | Approval Status |
|---|---|---|---|---|
| Test | Registration | jdaigneau@cityofirvine.org | 3/10/2021 13:22 | approved |
| Christopher | Pierson | cpierson@intracorphomes.com | 3/10/2021 17:20 | approved |
| Andrea | Maloney | amaloney@sapettorealestate.com | 3/10/2021 18:06 | approved |
| Mark | Asturias | mark@irvineclt.org | 3/10/2021 20:05 | approved |
| Brent | Stoll | brent@roseequities.com | 3/10/2021 21:49 | approved |
| Rick | Puffer | rpuffer@intracorphomes.com | 3/10/2021 22:45 | approved |
| John | Gharineh | john@telxpress.com | 3/11/2021 8:42 | approved |
| Julie | Treinen | jtreinen@griffincapital.com | 3/11/2021 9:16 | approved |
| Daniel | Gehman | dgehman@danielian.com | 3/11/2021 11:09 | approved |
| Karsen | Wang | karsen@actionsales.com | 3/11/2021 13:08 | approved |
| Jeremy | Carver | carverj@pripd.com | 3/11/2021 16:55 | approved |
| Elizabeth | Hansburg | elizabeth@peopleforhousing.org | 3/12/2021 16:00 | approved |
| Huixin | Zheng | huixinz2@uci.edu | 3/12/2021 16:48 | approved |
| Sam | Kabab | sam@4optima.com | 3/12/2021 19:22 | approved |
| Felicity | Figueroa | felicitynf@aol.com | 3/12/2021 22:48 | approved |
| Tim | Shaw | tshaw265@gmail.com | 3/13/2021 9:21 | approved |
| PAT | Davis | pat7oaks@gmail.com | 3/13/2021 20:36 | approved |
| Alejandra | Reyes | lreyesru@uci.edu | 3/14/2021 6:42 | approved |
| Lizzie | Cootsona | Lizzie.Cootsona@asm.ca.gov | 3/15/2021 8:59 | approved |
| Emily | Yau | emilyyau2020@yahoo.com | 3/15/2021 12:04 | approved |
| Nasir | Javed | njaved@princetonusa.com | 3/16/2021 12:15 | approved |
| Karen | Martin | karen@pacificplanninggroup.com | 3/16/2021 12:51 | approved |
| Cesar | Covarrubias | cesarc@kennedycommission.org | 3/16/2021 14:02 | approved |
| Larry | Schuler | larry.schuler@cbre.com | 3/16/2021 14:57 | approved |
| Alex | Portney | sbl.alex@gmail.com | 3/16/2021 14:58 | approved |
| Phil | Andoniu | andoniudevelopment@gmail.com | 3/16/2021 15:00 | approved |
| Matthew | Macher | matthew.macher@gemdaleusa.com | 3/16/2021 15:00 | approved |
| Josh | Goldman | josh.goldman@gemdaleusa.com | 3/16/2021 15:01 | approved |
| Pamela | Sapetto | psapetto@sapettorealestate.com | 3/16/2021 15:01 | approved |
| Dominic | Mazza | dmazza@intracorphomes.com | 3/16/2021 15:02 | approved |
| Mark | Dershem | markdershem@gmail.com | 3/16/2021 15:08 | approved |

## 4. Presentation




### Overview

- Regional Housing Needs Assessment (RHNA)
- Housing Element Purpose and Basics
- Site Inventory
- Next Steps
- Q & A

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE



## Regional Housing Needs Assessment

- RHNA: A minimum number of units by income category each community is required to provide through "adequate sites" and zoning – Mandated by the State
- RHNA for Southern California: 1,341,827
- SCAG responsible for developing methodology and assigning RHNA to Southern CA cities and counties







## Final RHNA Allocation

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,396 |
| Category 2 (51 – 80% AMI) | 4,235 |
| Category 3 (81 – 120% AMI) | 4,308 |
| Category 4 (120% AMI or above; considered "market rate") | 8,671 |
| **TOTAL** | **23,610** |

- Buffer for "no net loss"
- Actual number needed is anticipated to exceed allocation



## Housing Element Purpose

**State-mandated policy document that:**

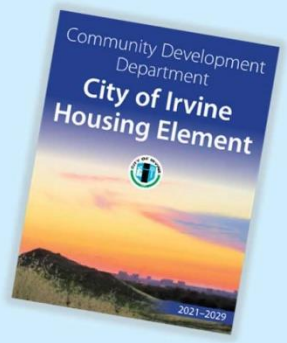
- Provides direction for implementation of various programs to meet existing and future housing needs for all income levels in the City
- Provides goals, policies, programs, and objectives for the preservation of existing housing and development of new housing
- Demonstrates how the City will accommodate its RHNA allocation





## Housing Element Basics

- 5 Major Components:
  - Review of accomplishments
  - Housing needs assessment
  - Evaluation of constraints to housing
  - Identification of housing sites
  - Program strategy to address needs for 2021-2029
- Required to be updated every eight years
- Reviewed by state for compliance with state law






## The Housing Element DOES NOT

- Require the City to build the units
- Provide funding
- Authorize construction
  - Projects still need to go through the development review process







## Site Inventory

- Analysis of adequate sites suitable to accommodate RHNA in list and map form
  - ➢ Show specific location where future housing can be built
  - ➢ Identify the potential numbers of homes that can be built at those locations
  - ➢ Meet the state's site selection criteria outlined in HCD's guidebook
    1. Site appropriately zoned?
    2. Site suitable for development?
    3. Realistic development capacity?



## Locations that are generally "off the table"

- Preserved open space areas
- With sensitive habitat or species
- Where the topography isn't conducive to building (e.g., steep slopes)
- Within flood zones or high-fire areas that aren't safe
- Within areas deemed off-limits by John Wayne Airport (e.g., flight path, airport noise contours)





## With little remaining vacant land, where can additional housing possibly go?

- Vacant sites not designated as open space or parks
- Property owners considering development of their properties
- Small contiguous sites suitable for assembly
- Underutilized parcels
- Religious institutions
- Locations where existing housing could become more dense
- Locations near public transit and essential services like retail
- Areas where housing could be added to commercial and light industrial/business parks
- Sites where infrastructure, such as water and sewer service, can support more housing
- Accessory Dwelling Units



## Affirmatively Furthering Fair Housing (AFFH)

- Fair and equitable distribution of housing throughout the community
- Protects against communities being overburdened
- Takes into consideration:
  - A variety of housing types
  - Mix of affordability levels
  - Access to transportation, employment, and community resources





## Next Steps

Winter 2020-21:

- ***City Council GPA Scoping Session for Housing Element Update (February 9, 2021)***
- ***Planning Commission Study Session (February 18, 2021)***
- Stakeholder outreach (development community)
- Develop site inventory
- Assess goals, policies, and objectives

Spring 2021:

- ***Community workshops***
  - ***Advertised on social media; information provided in multiple languages***
- Finalize site inventory
- Prepare draft Housing Element and supporting documentation



## Next Steps (continued)

Summer 2021:

- ***Public review of draft Housing Element***
- State preliminary review of the draft
- ***Project briefings with Planning Commission and City Council***
- Finalize Housing Element and supporting documentation

Early Fall 2021 – Adoption Hearings:

- ***Planning Commission***
- ***City Council***

**State Due Date – October 15, 2021 for certification**





## WE WANT YOUR INPUT!

- ✓ **Potential sites for where new housing should be considered**
- ✓ **Any and all ideas are welcome and not a commitment**

- ✓ **Email ckovac@cityofirvine.org and mchao@cityofirvine.org**
  - ➢ **include contact information, parcel address and APN, nearest cross streets**
  - ➢ **additional comments/questions**

**cityofirvine.org/housingelementupdate**



**From:** Melissa Chao
**To:** Melissa Chao
**Cc:** Melissa Chao; Charles Kovac; Hitta Mosesman
**Subject:** Irvine Future Housing Sites for the Housing Element Update
**Date:** Thursday, March 18, 2021 4:57:53 PM
**Attachments:** Irvine Future Housing Sites presentation 3.16.21.pdf

---

Hello everyone:

Thank you for attending or expressing interest in Irvine's Future Housing Sites meeting. Attached is the slide deck for your reference.

Please contact me and/or Charles Kovac, Housing Administrator, at ckovac@cityofirivne.org with any questions, comments, or suggestions for opportunity sites.

We look forward to working with you on the 6th Cycle Housing Element Update.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

# 5. Question and Answer Handout

**From:** Melissa Chao
**To:** Melissa Chao
**Cc:** Jordan Perez; Hitta Mosesman; Melissa Chao
**Subject:** Irvine Future Housing Sites Q & A handout
**Date:** Wednesday, March 31, 2021 12:13:29 PM
**Attachments:** Irvine Future Housing Sites 3.16.21 Q&A FINAL.pdf

---

Hello everyone:

As a follow-up to the Future Housing Sites meeting, attached is a Q&A hand out for your reference. Both the presentation and Q&A are posted at www.cityofirvine.org/housignelementupdate. Please check the project website periodically as it is updated when new information becomes available.

Charles Kovac's last day with the City of Irvine is Friday, April 2. Therefore, please direct any questions/comments re: HEU or suggestions for opportunity sites to me.

Our HEU consultants, Hitta and Jordan, and I look forward to working with you on the 6th Cycle Housing Element Update.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

Email distribution list for Presentation and Q&A handout:

awood@bildfoundation.org; agill@intracorpcompanies.com; larry.schuler@cbre.com; debra@developersedge.com; leonard@roseequities.com; brent@roseequities.com; ryan@cityventures.com; rpuffer@intracorphomes.com; psapetto@sapettorealestate.com; karen@pacificplanninggroup.com; JSDavis@irvinecompany.com; ps@starpointeventures.com; dmazza@intracorphomes.com; carverj@pripd.com; todd@c-cdev.com; karsen@actionsales.com; josh.goldman@gemdaleusa.com; emilyyau2020@yahoo.com; andoniudevelopment@gmail.com; tj@starpointeventures.com; mark@irvineclt.org; dgehman@danielian.com; joel.lc@uci.edu; sylvia_walker@hotmail.com; izzakmireles@yahoo.com; stevengeier412@gmail.com; chuongv@gmail.com; jorden@sms-arch.com; cesarc@kennedycommission.org; cody.mendoza@mail.house.gov; farhad@duramar.com; sbl.alex@gmail.com; markdershem@gmail.com; josh.goldman@gemdaleusa.com; fluterproperties@gmail.com; terence@actionsales.com; judithjelinek@icloud.com; ygal@sonenshineenterprises.com; john@telxpress.com; agill@intracorphomes.com; SternerDM@Pripd.com; CarverJ@Pripd.com; Nasir Javed <NJaved@princetonusa.com>; aslater@griffincapital.com; cpierson@intracorphomes.com; amaloney@sapettorealestate.com; mark@irvineclt.org; brent@roseequities.com; rpuffer@intracorphomes.com; john@telxpress.com; jtreinen@griffincapital.com; dgehman@danielian.com; karsen@actionsales.com; carverj@pripd.com; elizabeth@peopleforhousing.org; huixinz2@uci.edu; sam@4optima.com; felicitynf@aol.com; tshaw265@gmail.com; pat7oaks@gmail.com; lreyesru@uci.edu; Lizzie.Cootsona@asm.ca.gov; emilyyau2020@yahoo.com; Nasir Javed <NJaved@princetonusa.com>; karen@pacificplanninggroup.com; cesarc@kennedycommission.org; larry.schuler@cbre.com; sbl.alex@gmail.com; andoniudevelopment@gmail.com; matthew.macher@gemdaleusa.com; josh.goldman@gemdaleusa.com; psapetto@sapettorealestate.com; dmazza@intracorphomes.com; markdershem@gmail.com; NJaved@princetonusa.com

**City of Irvine Future Housing Sites**
**Virtual Meeting on March 16, 2021 from 3 – 4 p.m.**
**Q & A and Comments Received**

| Question or Comment | Answer or Response |
|---|---|
| How can we ask question later? | By raising hand, inputting question or comment in the Q & A box, or by contacting Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org and Melissa Chao, Senior Planner, at mchao@cityofirvine.org for assistance. |
| If ADUs built as affordable units, particularly low/very low, how will that affordability be protected? For what period of time? | There is no requirement for affordability or period of affordability. Staff will follow any guidance on Accessory Dwelling Unit or ADU affordability provided by HCD.<br><br>In terms of meeting the City's RHNA allocation, HCD indicated that jurisdictions could only base their ADU projections on historical data. For Irvine, we average five (5) ADUs per year, so HCD guidance is to allow for a maximum of five times (5x) the historical amount per year. In other words, Irvine can get credit for approximately 25 ADUs per year. |
| Does the Housing Element require CEQA review? | Yes, the Housing Element Update (HE) requires CEQA (environmental) review. The completion of the HE will follow with an assessment of the changes needed to the other General Plan elements/chapters (such as land use, circulation, and safety). Once the 6th Cycle HE is adopted by the Council |



| | |
|---|---|
| | and submitted to HCD for certification review, staff will embark on the General Plan Update (GPU), and associated Zoning Ordinance Amendment, to the extent needed, to update the policies and regulatory framework to support the adopted HE. It is anticipated that an Environmental Impact Report (EIR), if required, will be completed with this subsequent GPU/ZOA effort with an estimate of three (3) years to complete. |
| UCI Faculty member, housing scholar, and renter, are renters also stakeholder? Or only property owners? | Everyone is considered a "stakeholder" in the HE process, including but not limited to homeowners, renters, persons of all ages, persons with disabilities, veterans, homeless and persons are risk, businesses, and property owners.<br><br>This particular "future housing sites" meeting is targeted towards non-residential property owners in the Irvine Business Complex (Planning Area 36, IBC) and Spectrum for the purposes of identifying potential opportunity sites.<br><br>The City will host several general community workshops and more focused subject matter meeting(s) starting in April and will publicize those through the project webpage, social media, press releases, and email notifications. |
| How many sites is the City hoping to identify? Is there a number of sites the state want each city to offer as potential development sites? | Irvine needs to identify enough sites to cover our RHNA allocation by income level plus a buffer for "no net loss" which is a new requirement for 2021. Each city has a different RHNA allocation from the Southern California Council of Governments (SCAG). Irvine's RHNA allocation is the highest in Orange County, and the fifth highest in the SCAG region (i.e., after City of LA, unincorporated LA County, unincorporated Riverside County, and City of Long Beach). SCAG represents six counties, 191 cities and more than 19 million residents. |
| Will housing units under construction now but not ready for occupancy until 2022 be counted to the current cycle or the 6th cycle? | Any residential building permit issued on or after July 1, 2021 will count towards the 6th cycle RHNA allocation. |

| | |
|---|---|
| It seems like the only way to identify sufficient sites to produce the required number of opportunities is to suggest or imply upzoning or rezoning. What is the City's response to this? | Even though the City is still working on compiling opportunity sites and developing the site inventory, it is likely that eventual rezoning may be required for areas such as the IBC to accommodate the RHNA allocation by income level. |
| Irvine Homeowners Associations are particularly opposed to ADUs, so that might be a mute point. Although according to recent state bills, the state should be able to overrule such practices | Assembly Bill 670 (2019) prohibits a HOA from prohibiting the construction or use of an ADU for a lot zoned for single-family use. However, a HOA can still impose "reasonable" standards regarding the design and development of ADUs, where feasible. |
| One of the constraints to more residential development in the IBC is the requirement to transfer DIV's from another site. Will the City be considering adding a provision to allocate additional intensity to a site as determined by the City and not through a DIV transfer from another site. | This would be evaluated as part of a subsequent GPU/ZOA process. |
| Have you given any thought of the time frame of adopting the subsequent GPAs and zoning amendments to implement the Housing Element? | We anticipate the subsequent GPU/ZOA/EIR will be completed in 2.5 to 3 years. |
| How do the housing caps in IBC and other area work with the HE update? | It is likely that the maximum unit caps and/or allowed densities may need to be revisited as part of a subsequent GPU/ZOA process. |
| I'm just a resident of Irvine, but I'd like to nominate the 100+ acres of County owned land at the Great Park. I think our City sued to block building 2,000+ units there. What if we used our leverage instead to increase units here and pressure OC to build more affordable units?<br><br>Also, I have a proposal for a Boring Company Loop tunnel serving Irvine Station and Spectrum district. Las Vegas and Ontario Calif are moving forward with tunnels in their communities. My twitter handle is @alexportney or search #irvine #rhna if you want to check it out. | Comment noted.<br><br>Any site that can accommodate residential uses will be considered. |



| | |
|---|---|
| Your answer is really concerning. Coming from a city government (public sector supposed to serve public, not private interests) | Although not certain what this statement is in reference to, the City is not prioritizing private interests over public interests or vice versa. HThe City is specifically reaching out to property owners in this meeting for assistance in identifying their property as a potential opportunity sites. |
| If we own property that is commercially zoned but are considering the possibility of converting it to residential, what conversations and when should we have with the City about changes to zoning? | Now is the best time to have any conversations with City staff about potential opportunity sites for the site inventory so that staff and our HE consultant can plan accordingly. |
| What could happen if HCD doesn't certify the Housing Element the City submits? | Without a HCD-certified HE, Irvine will face substantial fines and penalties and be subject to a 4-year RHNA/HE cycle (instead of the customary 8-year cycle). Additionally, Irvine will be ineligible for critical state and federal grants.<br><br>Lastly, without a certified HE, the State may disallow the issuance of building permits resulting in a potential loss of local land use control and a jurisdiction may be open to litigation based on a legally inadequate General Plan (where the HE is one required topical chapter). |
| With other 10K housing units at lower income, how will the City ensure affordable housing for this population is addressed on the sites that are proposed to increase capacity or intensity for developments? (Aside from inclusionary) We see many of these sites being developed as market rate now. | In 2012, the State ceased operating local redevelopment agencies, which served as an important component of the affordable housing development landscape. Staff recognizes that funding is a constraint as no City has enough revenues to fund affordable housing development completely.<br><br>As part of the HE process, the City will consider a multi-pronged strategy to support/encourage affordable housing development such as: (1) converting existing units to affordable units; (2) extending expiring affordability covenants; (3) updating Irvine's inclusionary housing ordinance; (4) layering affordable housing funding from the State such as tax credits and grants; and (5) state density bonus laws. |
| Is there a cost involved in changing zoning from office to residential? | In general, there are costs associated with processing the necessary discretionary development applications (e.g. General Plan Amendment, Zone |

| | |
|---|---|
| | Change, EIR) to change zoning requirements from office to allowing residential uses. Typically, these costs are the responsibility of the property owner or applicant, but in this case the City will be laying the general ground work with a subsequent GPU/ZOA/EIR, to the extent necessary. However, the property owner (i.e., applicant) would still need to process the specific discretionary application(s) and appropriate CEQA documentation to develop the actual residential project. |
| Will this meeting be available as a recorded meeting? Is the slide deck available. | This meeting was not recorded to facilitate a free flow conversation.<br><br>City staff will distribute the slide deck to all meeting attendees and post relevant information on the project webpage at www.cityofirvine.org/housingelementupdate. |
| Just wanted to clarify that the subsequent GPA/Zoning updates could also include individual requests for GPA/Zone Changes to approve residential. | Yes, the City would consider individual GPA/ZC applications for residential to be incorporated to the extent there is no conflict with the City-initiated GPA/ZOA/EIR. However, this would be determined as part of a subsequent GPU on a case-by-case basis and not the HE. |
| Can you give a quick overview of when you will publish the housing opportunities sites? | Staff anticipates finalizing the site inventory in Spring 2021. A public review of the draft HE (with site inventory) and CEQA documentation is anticipated to be available in Summer 2021. |
| Is the City open to considering sites/properties outside the IBC and near the Irvine train station? | Any site that can safely accommodate residential uses will be considered. As the HE process progresses, the City Council will ultimately decide on the final site inventory to be submitted to the State for certification.<br><br>Please contact Charles Kovac, Housing Administrator, at ckovac@cityofirvine.org and Melissa Chao, Senior Planner, at mchao@cityofirvine.org to discuss opportunities for assistance. |
| What is the position of the City Council regarding the RHNA numbers? Eager? Enthusiastic? | Throughout the RHNA process (i.e., methodology and allocation), the City has voiced our concerns over the sizeable RHNA allocation and our ability to realistically accommodate the units. |



| | |
|---|---|
| | As directed by the City Council on October 26, 2020, the City filed an appeal of its Draft RHNA allocation to reduce our allocation. SCAG rejected the City's appeal. The City received its final allocation of 23,610 units on March 4, 2021. |
| Since Irvine failed to meet its very low and low income RHNA allocations for the 5th cycle HE, Irvine is subject to SB 35. Very low and low income is systemically left behind so we know the outcome. | Comment noted. |
| Very low and low income is generally taken care of by affordable housing developers. How does the City participate in the "capital stack?" | Irvine encourages non-profit developers like Jamboree Housing. We recognize that affordable housing development often requires subsidies from the City.<br><br>In 2011, the State's budget crisis greatly reduced available funding.<br><br>To be viable, affordable housing developments need to tap into multiple strategies and layered funding sources such as State funding and grants, and by-right automatic density bonus. |
| How to incentivize at lower affordability levels? Requires a variety of strategies. Think of land use as a subsidy or incentive. Apply more rigorous inclusionary requirements in industrial areas. Want to provide deeper affordability levels and comprehensive services to support the residents. | Comment noted. |
| How long to complete the rezone? | A rezoning effort could take 2.5 to 3 years and would occur after the adoption of the HE in October 2021. |
| What percentage of units are required to be low income? | The City's adopted inclusionary housing requirement is 15 percent. For example, if 100 units are developed then 15 units (or 15 percent) are required to be affordable where 5 units are very low income, 5 units are low income, and 5 units are moderate income. |

# Public Engagement

# Appendix A-M: Stakeholder Meetings with Irvine Unified School District

## Table of Contents


1. Meeting Agenda
2. RHNA/HEU Slides for IUSD Board Meeting on May 18, 2021
3. Email Correspondence

# 1. Meeting Agenda

**Agenda**
**IUSD Stakeholder Meeting**
**6th Cycle Housing Element Update**
April 1, 2021
1 – 2 p.m. MS Teams meeting

Attendees:

***City of Irvine***
- Pete Carmichael, Director of CD
- Tim Gehrich, Deputy Director of CD
- Amy Mullay, Senior Planner
- Kerwin Lau, Planning Services Manager
- Marika Poynter, Principal Planner
- Melissa Chao, Senior Planner

***IUSD***
- Kelvin Okino, Executive Director of Facilities Planning & Construction
- Jesse Barron, Assistant Director of Facilities Planning

I. 6th Cycle Housing Element Update
   a. State mandated RHNA allocation
   b. Overview of work effort
   c. Potential implications for the District

II. Other?

*Attachment*:
1. City of Irvine 6th Cycle Final RHNA Numbers (from SCAG)

**Attachment 1**

**Final 6th Cycle RHNA Numbers from SCAG**

| Income Category<br>(% of County Area Median Income (AMI)) | Units |
|---|---|
| Extremely Low / Very Low<br>(0% - 50% AMI) | 6,396 |
| Low (51% - 80% AMI) | 4,235 |
| Moderate (81% - 120% AMI) | 4,308 |
| Above Moderate<br>(120% AMI or above, which is considered market rate) | 8,671 |
| **TOTAL** | **23,610** |

## 2. RHNA/HEU Slides for IUSD Board Meeting on May 18, 2021

IRVINE UNIFIED SCHOOL DISTRICT

# FACILITIES STUDY SESSION

**May 18, 2021**



**Board of Education**

Paul Bokota, President
Lauren Brooks
Ira Glasky
Sharon Wallin
Cyril Yu

# RHNA/IRVINE HOUSING ELEMENT UPDATE

## What is the Irvine Housing Element Update?

The upcoming October 2021 through October 2029 Housing Element is the sixth update to the City of Irvine Housing Element and is referred to as the 6th Cycle Housing Element. In the update, the City must identify enough potentially developable land suitable for residential use (i.e., site inventory) to meet Irvine's new Regional Housing Needs Assessment (RHNA) allocation.

## How many dwelling units are in the allocation for the City of Irvine?

23,610 units are in the allocation. Any residential building permits pulled after July 2021 will count towards the RHNA allocation. All currently planned TIC and FivePoint entitled future units (6,000-7,000) are in IUSD's projections.



# RHNA/IRVINE HOUSING ELEMENT UPDATE

## Where could the remaining allocated units be developed?

The City of Irvine has preliminarily identified the following areas: Irvine Business Complex (IBC), Great Park Neighborhoods, Irvine Spectrum particularly Planning Area 32 (Train Station south of the Great Park) in addition to smaller infill areas and underutilized sites throughout the City. A more detailed draft plan is expected later in the Summer.

## What is the timeline for the Housing Element Update?

- Now: City of Irvine staff prepare draft Housing Element
- Summer 2021: Public review of draft Housing Element
- Fall 2021: Adoption of Housing Element (General Plan Update to follow)

Facilities staff anticipates providing a more detailed update at the Fall 2021 Facilities Study Session

## Where can I go for more information?

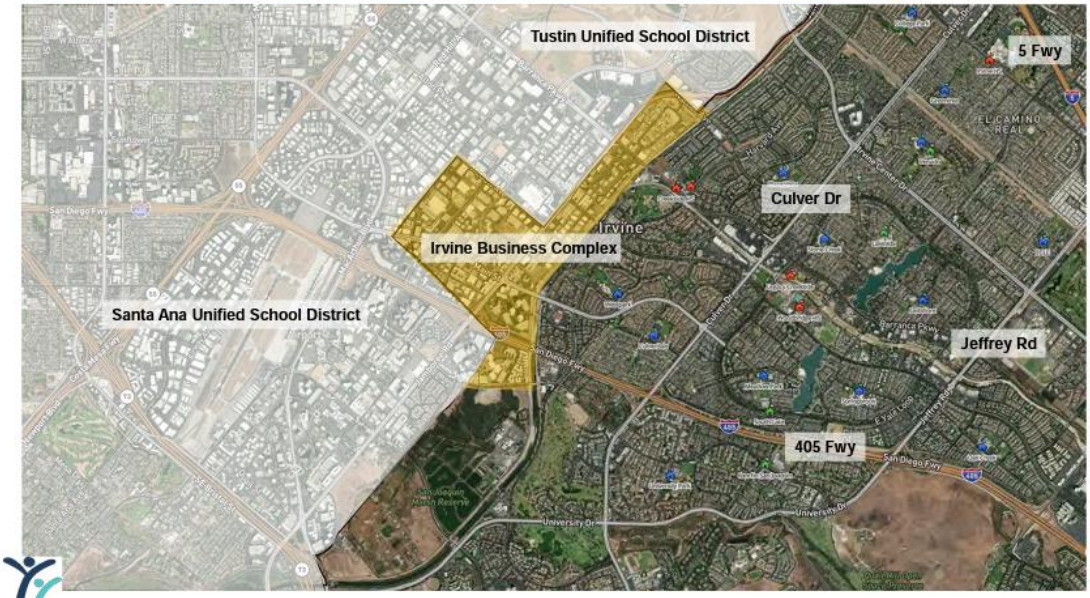
www.cityofirvine.org/HEUpdate

# POTENTIAL DEVELOPMENT AREAS (SPECTRUM/PA 32)






# POTENTIAL DEVELOPMENT AREAS (IBC)



# 3. Email Correspondence

**From:** Melissa Chao
**To:** Jesse Barron
**Subject:** RE: Housing Element Presentation
**Date:** Thursday, May 6, 2021 9:17:00 AM
**Attachments:** HEU Opportunity Areas.pptx, image001.png

Hi Jesse:

I think the maps are good. Attached are the ones we used for the workshop presentation. Please feel free to use them if you prefer.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

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**From:** Jesse Barron <JesseBarron@iusd.org>
**Sent:** Thursday, May 6, 2021 9:06 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element Presentation

Hi Melissa,
Thank you for your notes. I will implement them as appropriate. Are you ok with the maps provided?

Jesse Barron
Assistant Director, Facilities Planning | Irvine Unified School District
949-936-5316 | 2015 Roosevelt | Irvine, CA 92620 | iusd.org

IRVINE UNIFIED SCHOOL DISTRICT

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**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Thursday, May 6, 2021 8:41 AM
**To:** Jesse Barron <JesseBarron@iusd.org>
**Subject:** RE: Housing Element Presentation

Hi Jesse:

Kerwin and I reviewed the slides and our notes are contained on the attachment. Please use as you see fit.

If Marika has additional comments, I will forward under separate cover later today. Wanted to

provide you with what we have so far case you are under a time constraint.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

---

**From:** Jesse Barron <JesseBarron@iusd.org>
**Sent:** Wednesday, May 5, 2021 7:54 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element Presentation

Hi Melissa,
See attached PPT of the 5 slides.

Jesse Barron
Assistant Director, Facilities Planning | Irvine Unified School District
949-936-5316 | 2015 Roosevelt | Irvine, CA 92620 | iusd.org

IRVINE UNIFIED SCHOOL DISTRICT

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**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, May 4, 2021 6:15 PM
**To:** Jesse Barron <JesseBarron@iusd.org>
**Subject:** RE: Housing Element Presentation

Hi Jesse:

Is it possible to send the actual slides for editing/commenting?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 | F 949-724-6440
mchao@cityofirvine.org

---

**From:** Jesse Barron <JesseBarron@iusd.org>
**Sent:** Tuesday, May 4, 2021 3:41 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element Presentation

Hi Melissa,

See draft slides. Again, our presentation to our Board isn't until May 18th so there is plenty of time for us to add/change/remove/clarify items. If you could provide me your comments in the next few days I would appreciate it. I anticipate making the maps more readable. Those are just placeholders as I refine the presentation. If it is easier to discuss over the phone let me know.

Jesse Barron
Assistant Director, Facilities Planning | Irvine Unified School District
949-936-5316 | 2015 Roosevelt | Irvine, CA 92620 | iusd.org




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**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Tuesday, May 4, 2021 2:17 PM
**To:** Jesse Barron <JesseBarron@iusd.org>
**Subject:** RE: Housing Element Presentation

Sounds good. Happy to review your slides and provide any suggestions.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

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**From:** Jesse Barron <JesseBarron@iusd.org>
**Sent:** Tuesday, May 4, 2021 1:27 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element Presentation

Hi Melissa,
We are providing a robust presentation/update to our Board of Education on all things related to

Facilities Planning in IUSD on May 18 . A small portion of the presentation/update will be an update to the City of Irvine Housing Element Update so our Board can be made aware of our preliminary planning activities and the communication we have had thus far with your team. Can I send you my draft slides to verify that I am appropriately describing where the city is in the process and how the process will play out? For context, the update will be 5 slides in a presentation of 92 slides. To the extent possible, I have tried to copy verbiage used by City of Irvine staff in their presentations.

Thank you,

Jesse Barron
Assistant Director, Facilities Planning | Irvine Unified School District
949-936-5316 | 2015 Roosevelt | Irvine, CA 92620 | iusd.org

IRVINE UNIFIED SCHOOL DISTRICT

---

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Monday, April 26, 2021 10:09 AM
**To:** Jesse Barron <JesseBarron@iusd.org>
**Subject:** RE: Housing Element Presentation

Hi Jesse:

A PDF of the presentation and video recording of the community workshop 1 is available at www.cityofirvine.org/HEUpdate

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Jesse Barron <JesseBarron@iusd.org>
**Sent:** Wednesday, April 21, 2021 9:47 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Housing Element Presentation

Thank you very much Melissa!

---

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Wednesday, April 21, 2021 9:09 AM
**To:** Jesse Barron <JesseBarron@iusd.org>

**Subject:** RE: Housing Element Presentation

Hi Jesse:

Below are the final RHNA numbers for Irvine.

We are finalizing the workshop presentation (hopefully) today. When is your board meeting?

Thanks,

**Final 6th Cycle RHNA Numbers from SCAG**

| Income Category (% of County Area Median Income (AMI)) | Units |
|---|---|
| Extremely Low / Very Low (0% - 50% AMI) | 6,396 |
| Low (51% - 80% AMI) | 4,235 |
| Moderate (81% - 120% AMI) | 4,308 |
| Above Moderate (120% AMI or above, which is considered market rate) | 8,671 |
| **TOTAL** | **23,610** |

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Jesse Barron <JesseBarron@iusd.org>
**Sent:** Wednesday, April 21, 2021 8:27 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Housing Element Presentation

Hi Melissa,
Can you give me the latest and greatest RHNA allocation table? We are preparing an update for our Board of Education and I would like to give them the most up to date figure. Also, I plan to attend the virtual meeting tomorrow. If I could get the presentation to augment for our Board I would greatly appreciate it.

Thank you,

Jesse Barron
Assistant Director, Facilities Planning | Irvine Unified School District

**From:** Kelvin Okino
**To:** Kerwin Lau
**Cc:** Marika Poynter; Melissa Chao; Jesse Barron
**Subject:** RE: Housing Element Presentation
**Date:** Wednesday, April 7, 2021 12:39:49 PM
**Attachments:** image003.png

Good Afternoon Kerwin:

It was a pleasure meeting all of you. We appreciate the City looping us in and keeping us informed.

Thank you.

Kelvin Okino
Executive Director, Facilities Planning and Construction | Irvine Unified School District
949-936-5305 | kelvinokino@iusd.org | 2015 Roosevelt | Irvine, CA 92620 | iusd.org

IRVINE UNIFIED SCHOOL DISTRICT

**From:** Kerwin Lau <klau@cityofirvine.org>
**Sent:** Monday, April 5, 2021 9:33 AM
**To:** Kelvin Okino <KelvinOkino@iusd.org>; Jesse Barron <JesseBarron@iusd.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Subject:** Housing Element Presentation

Hi Kelvin and Jesse,

Thanks for taking the time to meet with us last week regarding the Housing Element update. Attached for your reference is the City Council scoping session presentation.

Thanks
Kerwin

## Public Engagement

## Appendix A-N: Stakeholder Meetings for Affordable Housing

## Table of Contents

1. Meetings Participant List
2. Meeting Discussion Guide
3. Aggregated Summary and Analysis

## Meetings Participant List

- **Related California:** For-profit housing developer that has built several 100% affordable housing properties in Irvine. Related focuses on affordable family andseni housing with on-site supportiveresident services.
- **Bridge Housing:** Non-profit developer specializing in developments that support the community with a range of expertise in affordable family and senior housing using transit-oriented, infill, and sustainable development, as well as mixed-use/mixed-income, supportive housing,assisted living and affordable ownership housing.
- **Impact Housing:** Specializes in modular construction and workforce housing at low and moderate income levels.
- **C&C Development:** Non-profit affordable housing developer specializing in new construction, acquisiton and rehabilitation, adaptive reuse and sustainable development, including senior and other special needs housing with on-site supportive resident services.
- **Orange County Community Housing Corporation (OCCHC):** Non-profit affordable housing developer focusing on extremely low income levels via small scattered sites. OCCHC created its signature program, SteppingUp, to build upon the contiuum of care for at-risk families focusing on affordable housing, college awareness as well as economic empowerment and preparing for homeownership.
- **Innovative Housing Opportunities (IHO):** Non-profit affordable housing developer for low-to moderate-income individuals and families with over four decades of experience in Southern California. IHO is committed to creating comprehensive mixed-income, mixed-use, and mixed population communities and economic empowerment opportunties.
- **Jamboree Housing Corporation:** Non-profit affordable housing developer providing a full range of high-quality housing affordable to lower income households with on-site supportive resident services.
- **Irvine Community Land Trust (ICLT):** According to the Adaptation Clearinghouse case study, ICLT is an initially city-established CLT designed to support infill development of sustainable, permanently affordable housing. ICLT offers homes on a shared-equity model where buyers purchase the improvement and get rights to the land through a 99-year ground lease that includes resale restrictions to ensure permanent affordablity (e.g. Sage Park). ICLT also has two 100% affordable rental housing properties as well as affordable scattered condominium units in Irvine.

  Developments incorporate green housing design and offer extensive community amenties and provide services to residents including those with special needs or at-risk groups (e.g., Doria, Alegre, Salerno, and Parc Derian). In 2017, the ICLT incorporated as an independent non profit separate from the City transitioning to

a more classic community-controlled governing board. ICLT continues to produce and preserve affordable properties through direct transfer of property from the Irvine's Inclusionary Zoning requirements and/or Development Agreements to the ICLT's portfolio.

## Meeting Discussion Guide

a) What are some challenges and opportunities you face as a developer while trying to develop affordable housing in Irvine?

b) Are there any constraints with obtaining loans (construction and/or permanent) for a project in Irvine?

c) Have you encountered any programs, procedures, or incentives in other cities that have significantly facilitated housing development?

d) As funding for affordable housing is severely limited and not sufficient for the need, what types of things can the City do to incentivize affordable housing projects (e.g., zoning, fee deferrals, streamlining, etc.)?

e) Have you considered a project in Irvine within the last three years? Why or why not?

f) In your opinion, what are some creative housing solutions that would help a city like Irvine develop more affordable housing? Would implementing a by-right affordable housing development overlay help?

g) Are you interested in potentially partnering with a church or religious institution for a project (per recently passed AB 1851)? What could the City do to assist?

# Aggregated Summary and Analysis

The summary is aggregated to maintain anonymity as requested by some participants.

| Comments Received | How Comment was Address in HE |
|---|---|
| High land costs and finding sites (for sale or ground lease) is challenging bearing in mind location considerations, the local political climate, and availability of gap financing | Addressed under Program PP-A.3 in the HE to establish zoning overlays to allow for multi-family residential in non-residential areas, including religious institutions and schools. This facilitates and expands land opportunities and may encourage on-site workforce housing as an employer.<br><br>Additionally, Program PP-A.4 encourages the Subdivision of Sites that are 10 or more acres, consistent with HCD's residential development feasibility size range of 0.5 to 10 acres in size.<br><br>Addressed under Program PP-C.1 in the HE to update the City's Zoning Ordinance to allow for higher densities in areas with underdeveloped/underutilized property, including overlays allowing residential uses in commercial areas. In conjunction with programs such as Homekey and Roomkey, this could facilitate hotel conversions for permanent housing.<br><br>Lastly, Programs under Objective F of Goal 4 are related to leveraging City owned land for development of 100 percent affordable housing projects and pursuing land acquisition opportunities with complementary partners. As part of the subsequent General Plan Update/Zoning Ordinance Amendment work effort, City staff will explore ways to reduce or eliminate assessments on land.. |
| Supportive of inclusionary ordinance | Addressed under Goal 4 the Housing Plan section of the HE is to update the City's existing inclusionary ordinance as part of the subsequent General Plan Update and Zoning Ordinance Amendment work effort. The work effort will include a potential increase to mandate 20 percent of new housing projects at affordable price points, rather than the current 15 percent. |
| Need gap financing and more financing sources because the cost of project exceeds revenue | Goal 4 of the Housing Plan section includes policies, programs, and actions for securing and assisting with affordable housing funding. In |

| | |
|---|---|
| | particular, Policy HE-E.3 to increase the affordable in-lieu fee to reflect current costs and the various programs under Objective E of Goal 4 related to funding sources for affordable projects.<br><br>Additionally, Program PP-I.3 aims to leverage all funding options such as joining the Orange County Finance Trust (OCHFT), a joint power authority comprised of many Orange County cities. OCHFT can provide additional funding options for affordable housing developers. |
| Financing is increasingly competitive, especially 9 percent tax credit projects (i.e., California Tax Credit Allocation Committee or "TCAC") where project sites need to score the full 15 points in the site amenities (e.g., transit, public park/community center, public library, full-scale grocery store, schools, senior center if senior development, medical clinic, pharmacy, and high speed internet service) to be competitive | Addressed under Program PP-C.1 in the HE to update the City's Zoning Ordinance to allow for higher densities in areas with underdeveloped/underutilized property, including overlays allowing residential uses in commercial areas. The program may facilitated the conversion of retail centers into mixed-use.<br><br>Additionally, addressed under Program PP-G.3 to make appropriate zoning changes as part of the subsequent General Plan Update and Zoning Ordinance Amendment to encourage the development of affordable housing in resource-rich areas.<br><br>Encouraging mixed-use and adding affordable housing at retails centers is conducive to the 9 percent TCAC scoring criteria. |
| Entitlement process is lengthy and risky (e.g., interest rates fluctuate/different tax regulations) | Addressed under the policies and programs listed under Objective B of Goal 1 of the HE to streamline the development process. Specifically, Policy HE-B.1 to expedite the entitlement process for affordable housing developments. |
| Consider objective design standards for affordable by right for sites to the degree possible | Under the residential and mixed-use overlays in Programs PP-A.3 and PP-C.1, the City will explore design standards and evaluate other cost/time savings mechanisms in conjunction with the development of the residential and mixed-use overlays during the subsequent General Plan Update/Zoning Ordinance Amendment work effort. |
| Expedited permit processing | Addressed by Program PP-B.5 to explore dedicated staff for affordable housing entitlement, permit, and fee processes. |

| | |
|---|---|
| | Additionally, addressed under Program PP-H.2 to monitor and adjust City fees, development standards, incentives, and development review processes, where legally and financially feasible, to ensure such requirements do not unduly constrain housing development. |
| Defer development fees until Certificates of Occupancy | Addressed by Policy HE-B.2 to evaluate the costs and benefits of restructuring the development fee collection process and identify opportunities to do so for affordable housing projects. |
| Increased density because of high land values and where appropriate; potentially with reduced parking | As indicated under Goals 1 and 2 of the Housing Plan section, it is anticipated that the subsequent General Plan Update and Zoning Ordinance Amendment work effort will maximize density where appropriate with proposed residential overlays.<br><br>Under Program PP-H.2, the City will adjust development standards in conjunction with creating residential and mixed-use overlays during the subsequent General Plan Update/Zoning Ordinance Amendment work effort.<br><br>Several affordable housing developers active in the region indicated that providing parking spaces on-site is expensive; however, demand for spaces is high regardless of income level. |
| Consider smaller units and requiring less minimum features (e.g., elevators, washer/dryer in every unit, free Wi-Fi, PV) | Addressed by Program PP-G.2 in HE to adopt ordinances and policies that encourage a diverse housing stock, including innovative design prototypes and/or construction.<br><br>As an on-going existing practice, encourage all housing builders to participate in the Universal Design Program and educate contractors/remodelers on these design features for residential rehabilitation projects to allow for aging in place and enhancing usability for children and persons with disabilities. |
| Consider a Request of Qualifications (RFQ) instead of a Request for Proposals (RFP) to create program and funding through a public process. The existing RFP process to bid on a specific affordable housing/inclusionary project is lengthy and expensive and it is hard to achieve the stated RFP objectives because of cost constraints and ability to secure funding. | Addressed by Policy PP-H.2 in HE to monitor and adjust City fees, development standards, incentives and development review processes, where legally and financially feasible, to ensure such requirements do not unduly constrain housing development. This consideration could be further explored during the General Plan |

| | |
|---|---|
| | Update/Zoning Ordinance Amendment work effort, |
| Consider partnerships between market-rate and affordable developers where the market-rate developer pays inclusionary fees to the affordable housing developer to gain housing faster because it can be entitled as one project | Addressed by Policy HE-E.3 to update the inclusionary housing policies and in-lieu fees. Staff will explore this concept during the subsequent General Plan Update/Zoning Ordinance Amendment work effort.<br><br>Addressed by Policy HE-G.4 in HE to promote and facilitate new partnerships with various organizations with different housing needs and between various entities with complementary housing objectives. |

# Public Engagement

# Appendix A-O: Community Workshops on April 22, 2021 and April 29, 2021

## Table of Contents


1. Presentation
2. Live Polling Results
    A. April 22, 2021
    B. April 29, 2021
3. Workshop Attendee Lists
4. Social Media Posts
5. Press Release
6. Email Newsletter
7. Workshop Announcements (Oral)
8. Community Workshop Fliers (see Appendix Section A-D, Print Media)

# 1. Presentation



# Agenda

- Welcome & Introductions
- Housing Element Background – State Requirements
- Community Profile – Irvine Today
- Regional Housing Needs Assessment (RHNA)
- Site Inventory
- Next Steps
- Q & A






# Welcome & Introductions

## City Staff

- Kerwin Lau
  *Planning Services Manager*
- Marika Poynter
  *Principal Planner*

Harris & Associates.

- Hitta Mosesman
- Jordan Perez



## How to Participate – Share Your Ideas

- **During the presentation:**
  - Audience will be muted
  - If you have a question, type it into Q & A



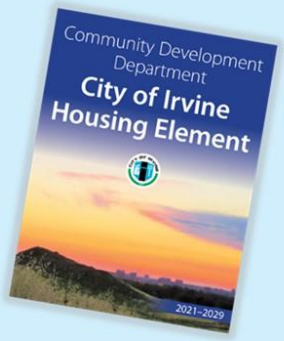
- **After the presentation:**
  - Questions in Q & A answered first
  - After Q & A questions answered, click the Raised Hand
  - Raised Hand comments limited to three minutes per person per round
  - Please be mindful of background noise






## What is a Housing Element?

- **<u>State-mandated</u> policy document/part of the City's General Plan**
  - Primary planning document to address <u>City's housing needs</u>
  - State law <u>requirement for all cities & counties</u>
  - <u>Housing needs</u> of residents of <u>all income levels</u>
  - <u>State</u> Department of Housing and Community Development (HCD) <u>reviews and certifies</u>






## Housing Element Does Not

- Require the City to build housing units
- Provide funding
- Authorize construction
  - Projects still need to go through the development review process





Housing Element Update

6

## Why is the Housing Element Being Updated?

- State law requires an update every eight years
- Incorporates State housing law requirements
- Shows how City will facilitate housing demand/growth
- Allows eligibility for State funding for housing
- Involves community in housing planning process to develop effective housing policies and programs



Housing Element Update

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# Housing Element Components

- Community characteristics:
  - population, income, and employment
- Existing & projected housing needs by category
  - challenges and opportunities
- Goals & objectives/policies & programs to address housing needs
- List of land for future housing at different income levels – site inventory







# Demographics

- **Population:** 281,707 (2020)
  - 3.4% annual growth rate (2000-2020)
- Housing Tenure: **47% Owner & 53% Renter**
- **Median Sales Price:** existing homes (2018): $918,000
  - 197% increase (2000 – 2018)
- 50% of renter households spend 30% or more of gross income on housing



Sources: SCAG pre-certified local housing data, August 2020



# Housing Trends – Existing Housing Types

| Housing Type | # of Units | Percentage |
|---|---|---|
| Single-Family Detached | 43,013 | 39.5% |
| Single-Family Attached | 17,187 | 15.8% |
| Multi-Family, 2-4 units | 6,765 | 6.2% |
| Multi-Family, 5+ units | 40,692 | 37.4% |
| Mobile Homes | 1,165 | 1.1% |
| **TOTAL** | **108,822** | **100%** |

Source: SCAG pre-certified local housing data, August 2020





# Survey Results – Housing






## General Plan Update Survey – August 2020

- **NOT ENOUGH**
  - Multi-family housing (market rate & affordable) and near public transit
  - Housing for seniors, students, and special needs
- **NEW HOUSING**
  - Spread throughout business districts and near existing housing (Infill)
  - Mix of single and multi-family
  - New services





## Polling Questions



## Do You Agree with the Survey Results?
## A Deeper Dive…








## Regional Housing Needs Assessment (RHNA)






# What is RHNA?

- Regional Housing Needs Assessment
- Minimum # Units planned for each community (8 Years) – Mandated by State
- RHNA for Southern California: 1.34 million units
- Southern California Association of Governments Regional Planning Agency
  - Develops methodology and allocates units to cities and counties







# RHNA Process






# RHNA Allocation

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,396 |
| Category 2 (51 – 80% AMI) | 4,235 |
| Category 3 (81 – 120% AMI) | 4,308 |
| Category 4 (120% AMI or above; considered "market rate") | 8,671 |
| **TOTAL** | **23,610** |

- Need to identify extra sites for Categories 1-3 due to State Law ("no net loss" buffer)
- Actual number needed will likely exceed numbers above





# Site Inventory





# Background

- Analysis of adequate sites suitable to accommodate RHNA
  - List and map
  - Specific locations where future housing can be built
  - Identify the potential # of homes that can be built at those locations
  - State's site selection criteria (HCD's Guidebook)
    1. Site appropriately zoned?
    2. Site suitable for development?
    3. Realistic development capacity?







# Locations Generally "Off the Table"

- Preserved open space areas
- Areas with sensitive habitat or species
- Where topography isn't conducive to building (e.g., steep slopes)
- Flood zones or high-fire areas that aren't safe
- Areas deemed off-limits by John Wayne Airport (e.g., flight path, airport noise contours)







# Affirmatively Furthering Fair Housing (AFFH)

- Fair and equitable distribution of housing throughout community
- Protects against communities being overburdened
- Takes into consideration:
  - Variety of housing types
  - Mix of affordability levels
  - Access to transportation, employment, and community resources








# Potential Housing Strategies

- Rezone and create overlays for more homes especially near Irvine Station and job centers (IBC & Spectrum)
- Redevelop properties such as older apartment complexes and underutilized retail/office centers to include residential uses
- Expand Inclusionary Housing Ordinance
  - Increase requirement from 15 percent to 20 percent for affordable units



# Potential Housing Strategies

- Ease restrictive development standards such as reduced parking requirements or using on-site shared Electric Vehicle (EV) fleet for residents
- Encourage innovative design prototypes such as smaller units with increased energy efficiency

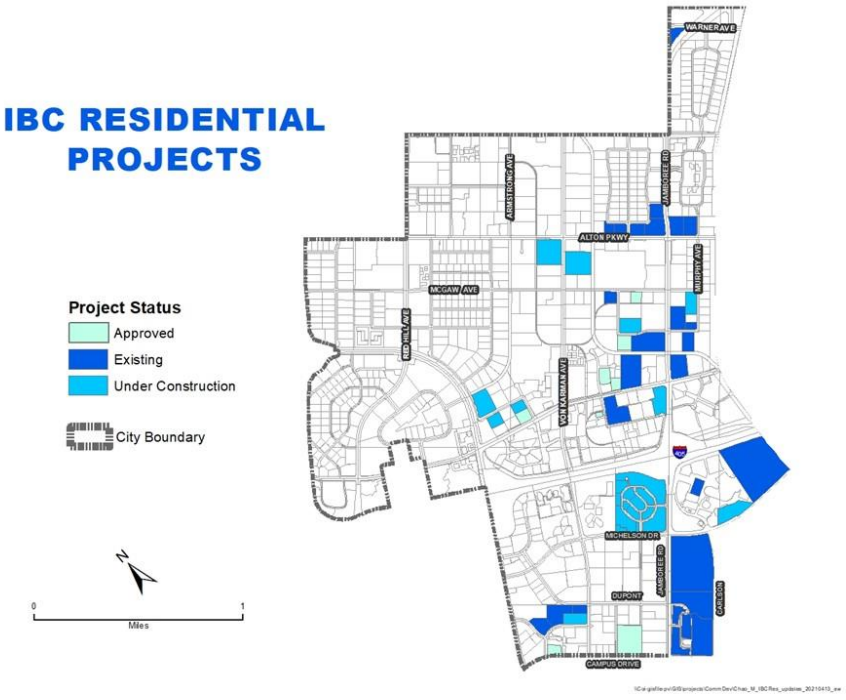




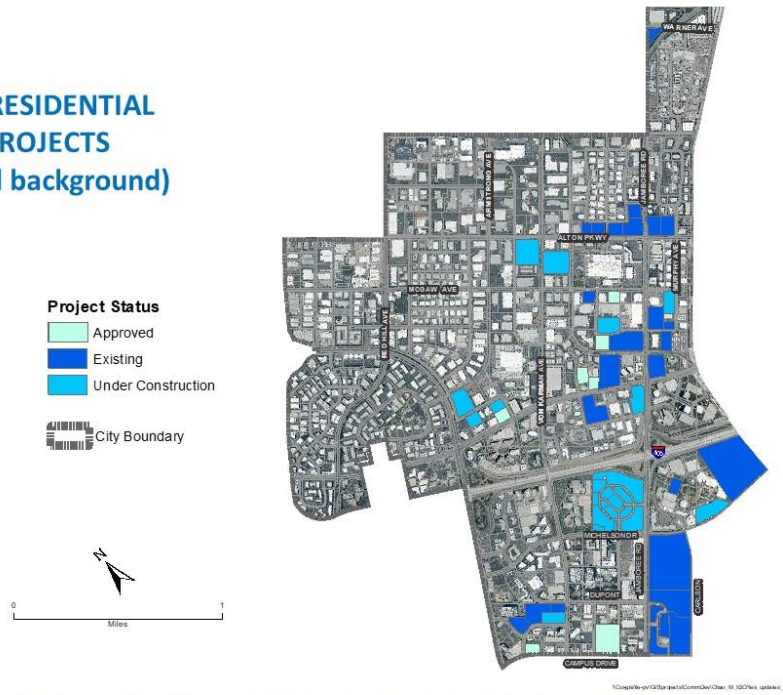
## Housing Element Update

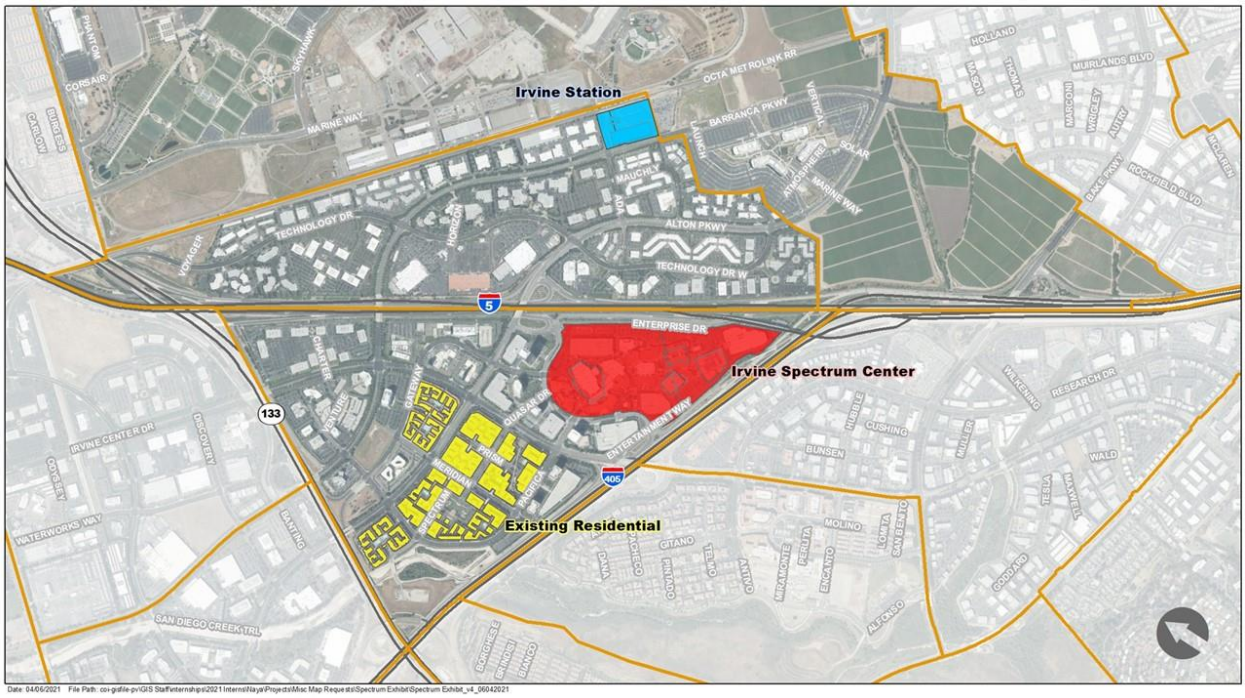
24

## IBC RESIDENTIAL PROJECTS



## IBC RESIDENTIAL PROJECTS (aerial background)






# Polling Questions



Housing Element Update

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See Polling Results in Sections 2a and 2b below

# Next Steps







## Spring 2021

- Finalize site inventory
- Prepare draft Housing Element




## Summer 2021

- ***Planning Commission and City Council review***
- ***Public review of draft Housing Element (30 days)***
- State review of the draft Housing Element (60 days)
- Finalize Housing Element

## Early Fall 2021 – Adoption Hearings

- ***Planning Commission***
- ***City Council***

**State Due Date – October 15, 2021 for certification (120-day grace period allowed)**



## Questions?

HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE





## More Opportunities for Involvement

**We Want Your Input!**

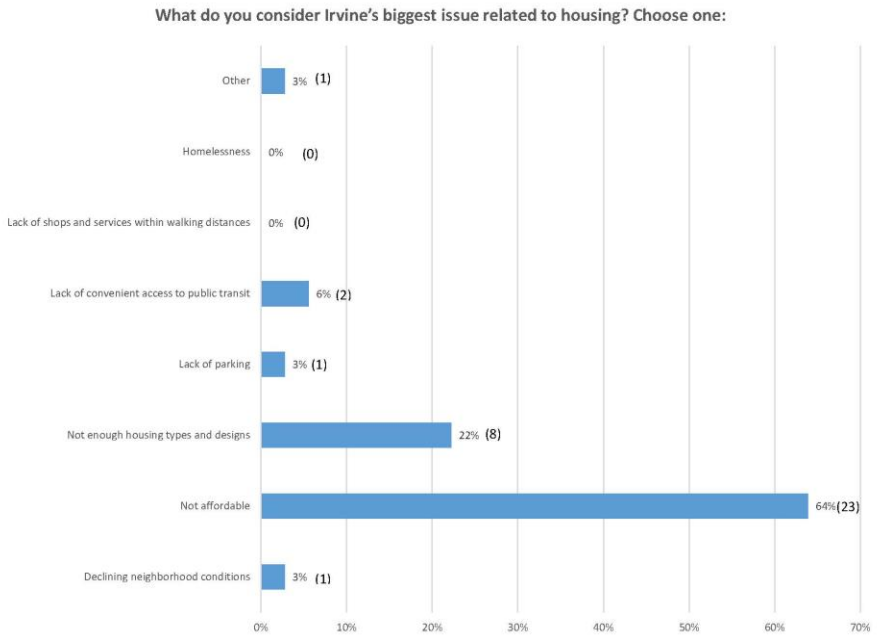
Visit *cityofirvine.org/HEUpdate*

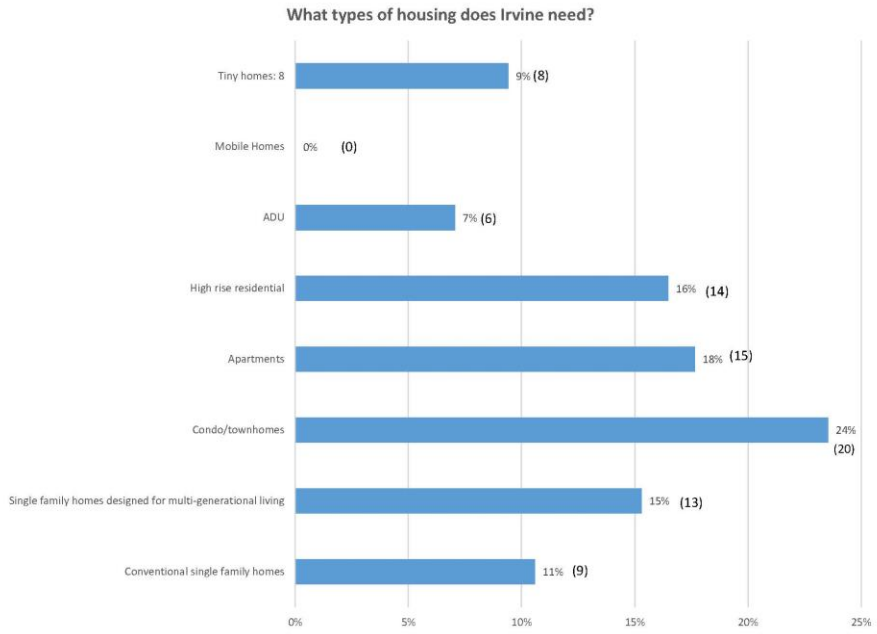
Contact Melissa Chao, Senior Planner
949-724-6395 or *mchao@cityofirvine.org*

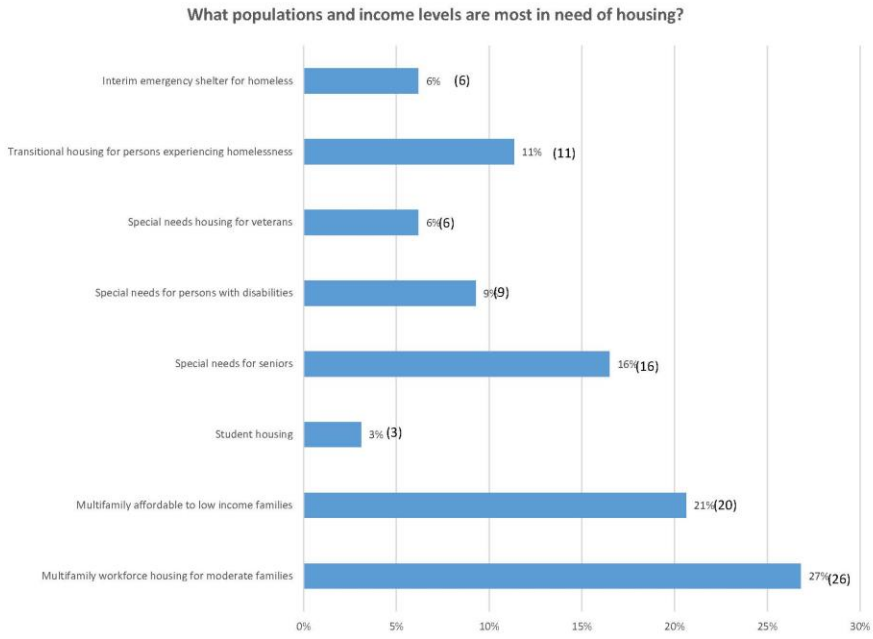
**Thank you!**

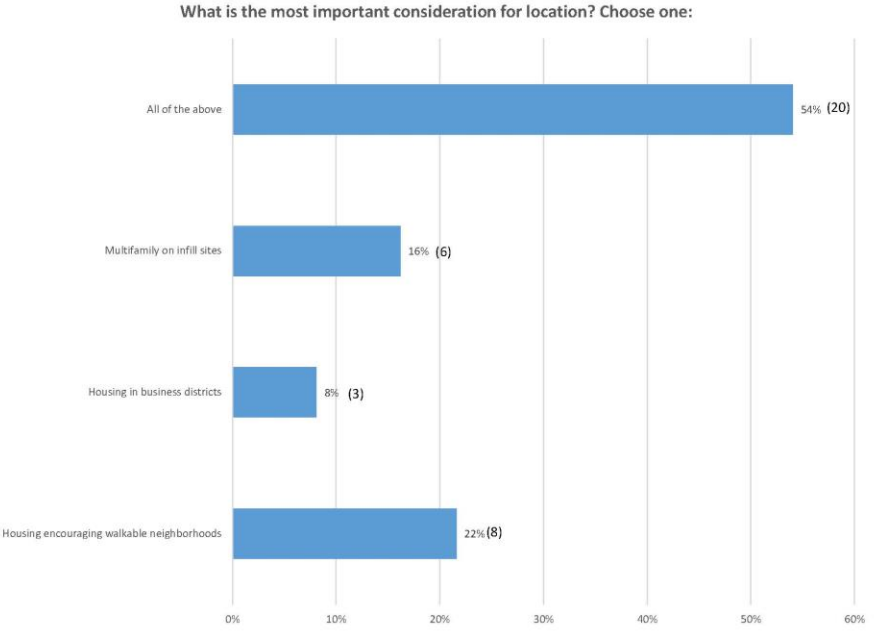


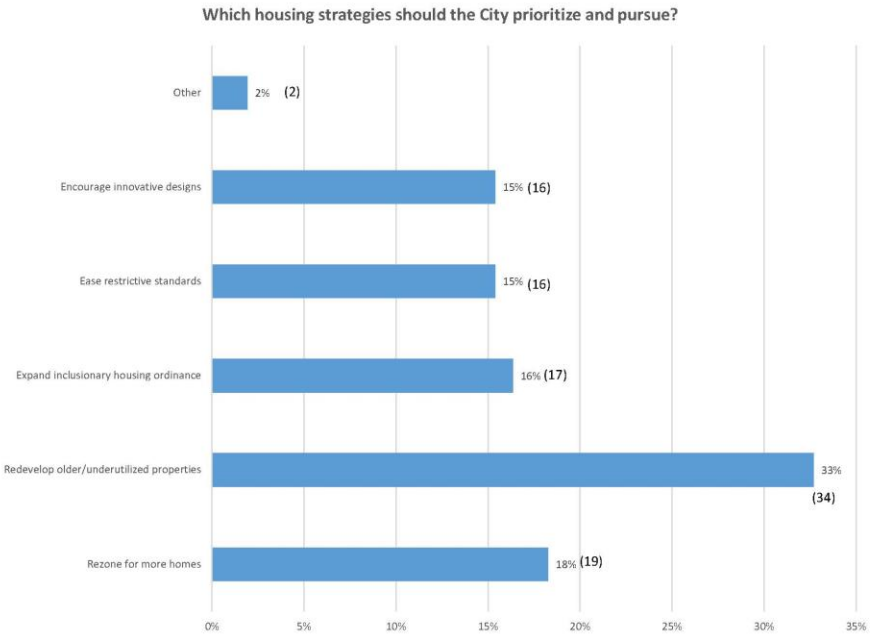
# 2a. Live Polling Results from April 22, 2021

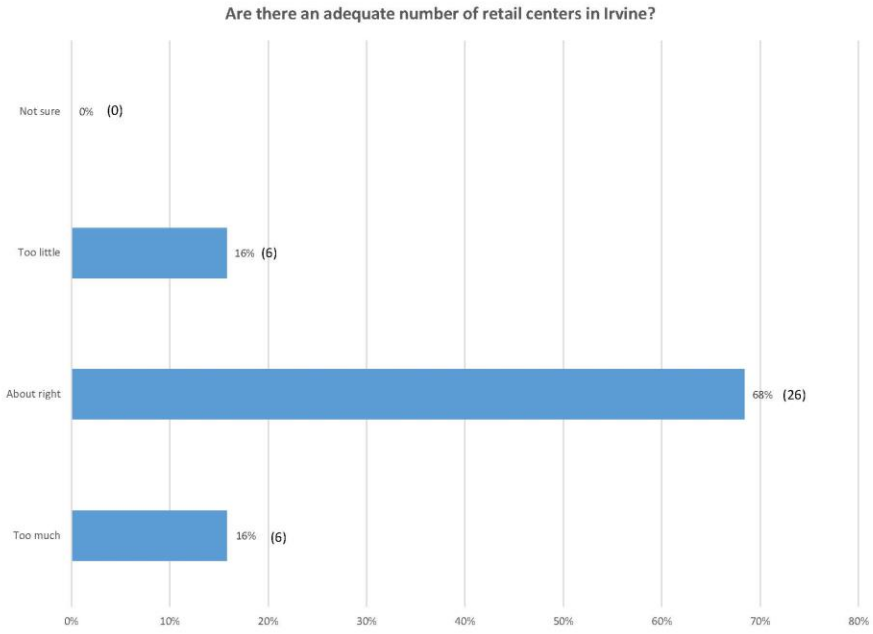


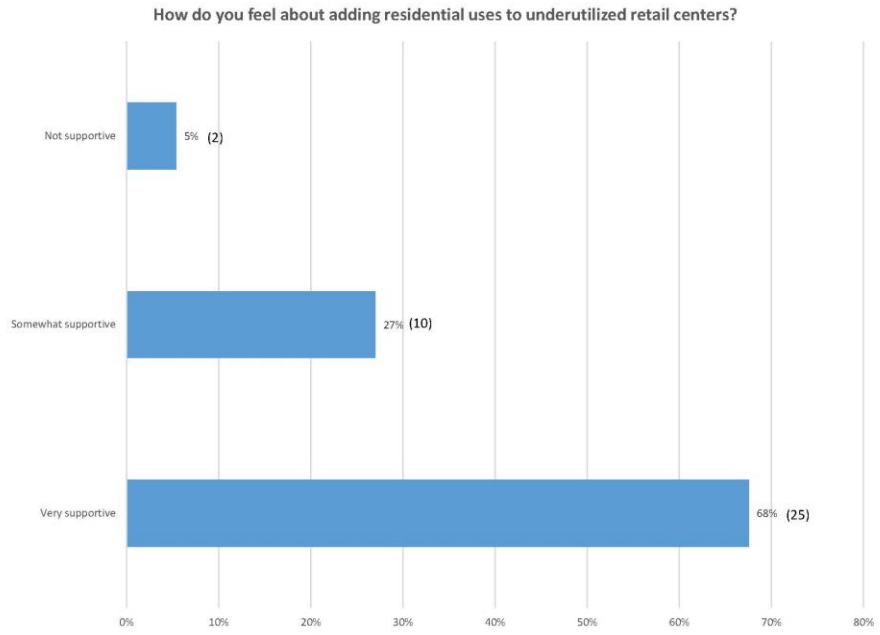



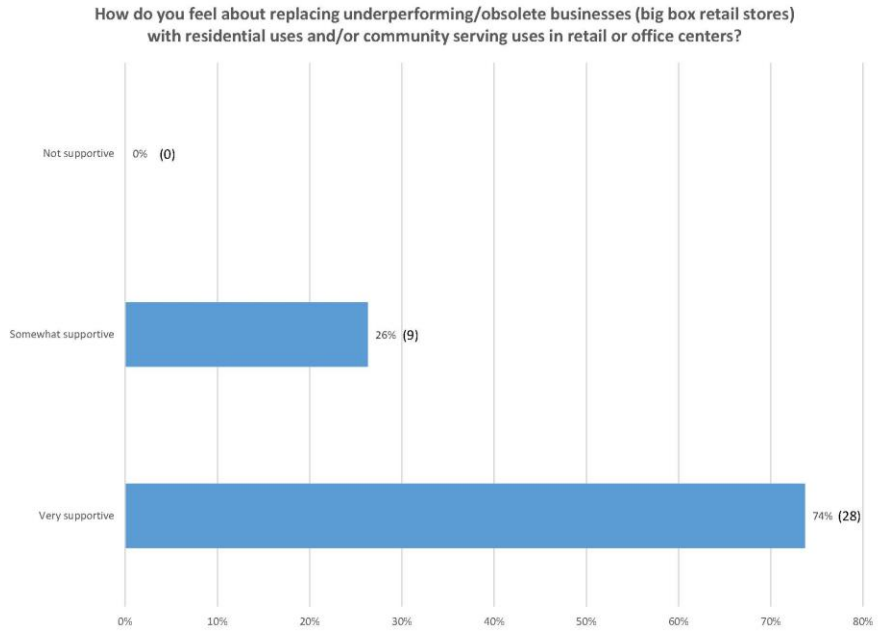

What populations and income levels are most in need of housing?
Interim emergency shelter for homeless
6% (6)
Transitional housing for persons experiencing homelessness
11% (11)
Special needs housing for veterans
6% (6)
Special needs for persons with disabilities
9% (9)
Special needs for seniors
16% (16)
Student housing
3% (3)
Multifamily affordable to low income families
21% (20)
Multifamily workforce housing for moderate families
27% (26)
0%
5%
10%
15%
20%
25%
30%


What is the most important consideration for location? Choose one:
All of the above
54% (20)
Multifamily on infill sites
16% (6)
Housing in business districts
8% (3)
Housing encouraging walkable neighborhoods
22% (8)
0%
10%
20%
30%
40%
50%
60%

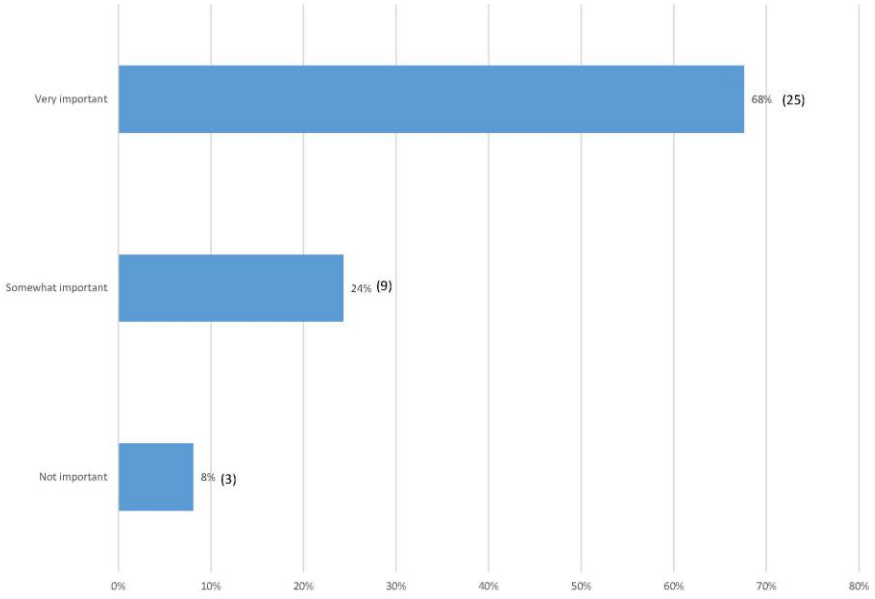

Which housing strategies should the City prioritize and pursue?
Other
2% (2)
Encourage innovative designs
15% (16)
Ease restrictive standards
15% (16)
Expand inclusionary housing ordinance
16% (17)
Redevelop older/underutilized properties
33% (34)
Rezone for more homes
18% (19)
0%
5%
10%
15%
20%
25%
30%
35%


Are there an adequate number of retail centers in Irvine?
Not sure
0% (0)
Too little
16% (6)
About right
68% (26)
Too much
16% (6)
0%
10%
20%
30%
40%
50%
60%
70%
80%

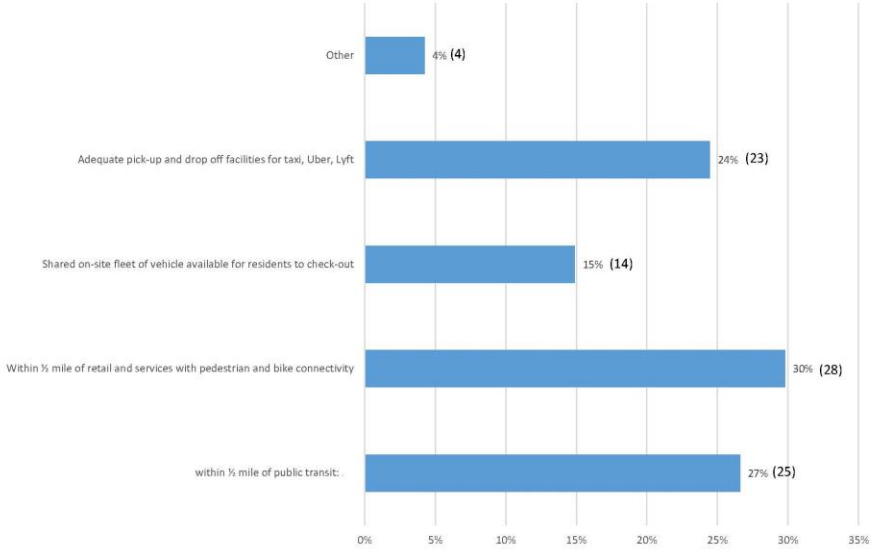

How do you feel about adding residential uses to underutilized retail centers?
Not supportive
5% (2)
Somewhat supportive
27% (10)
Very supportive
68% (25)
0%
10%
20%
30%
40%
50%
60%
70%
80%


How do you feel about replacing underperforming/obsolete businesses (big box retail stores) with residential uses and/or community serving uses in retail or office centers?
Not supportive
0% (0)
Somewhat supportive
26% (9)
Very supportive
74% (28)
0%
10%
20%
30%
40%
50%
60%
70%
80%

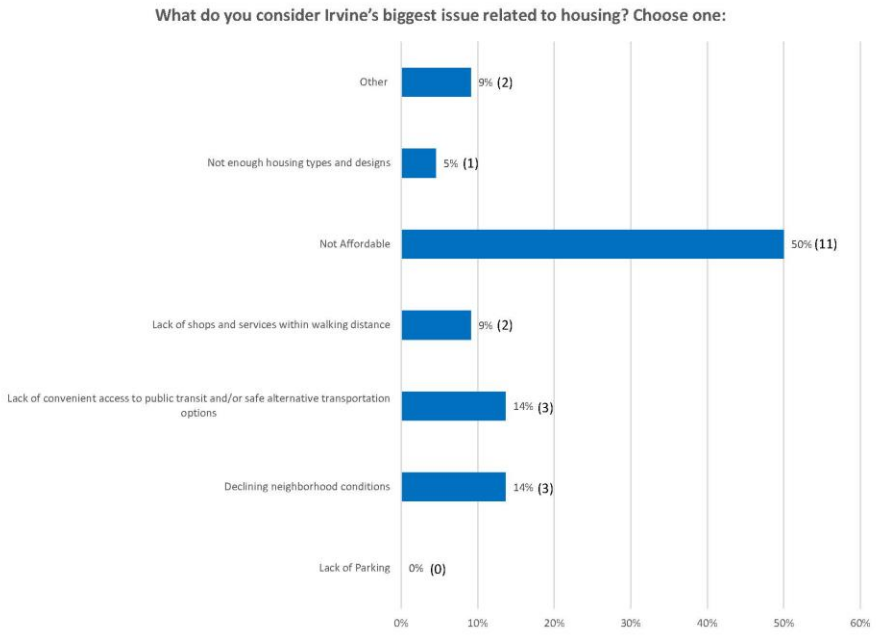
**Do you think being able to walk to a shopping center from your home would be a benefit?**

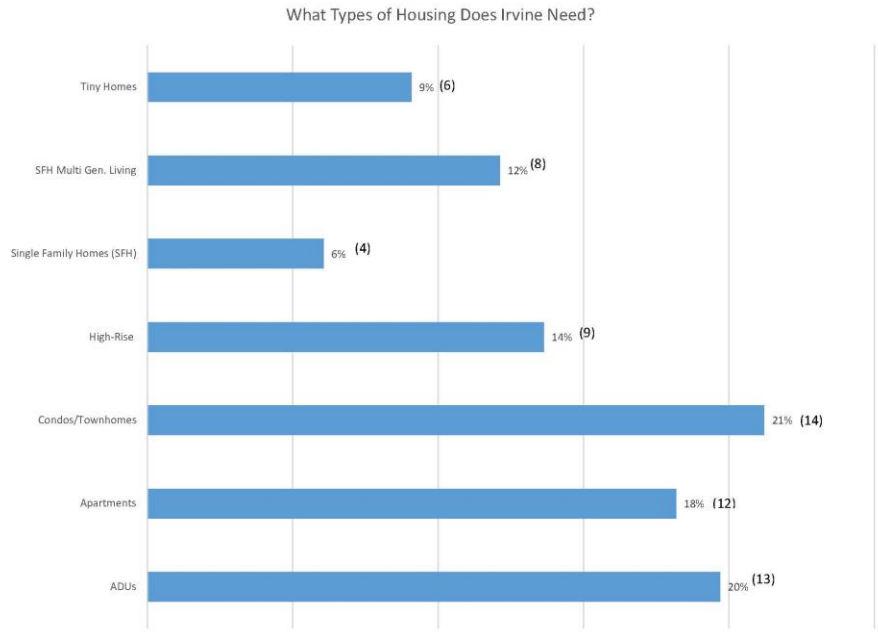



**The cost of providing on-site parking for housing projects, especially affordable homes, can be prohibitive. How can the City ensure new projects adequately address specific parking needs without it being a major obstacle?**

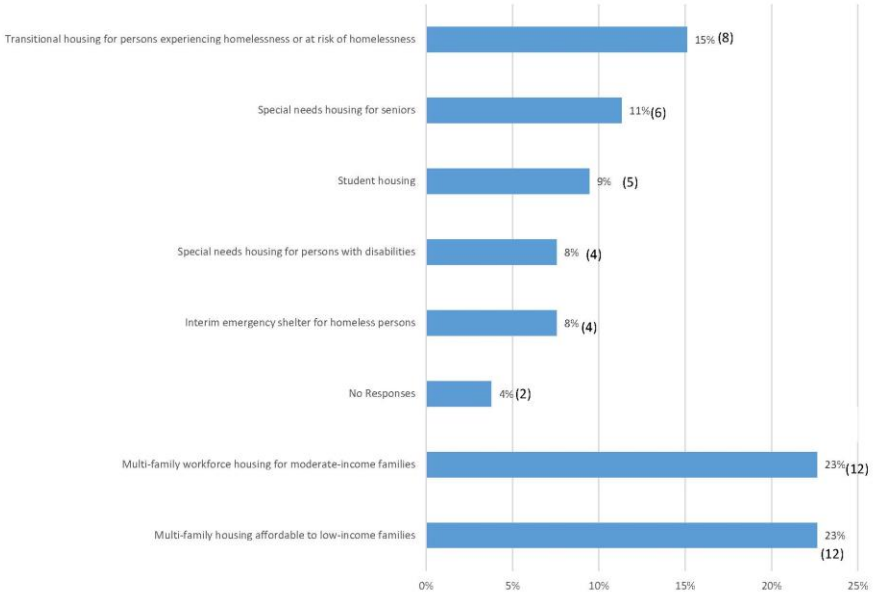


# 2b. Live Polling Results from April 29, 2021

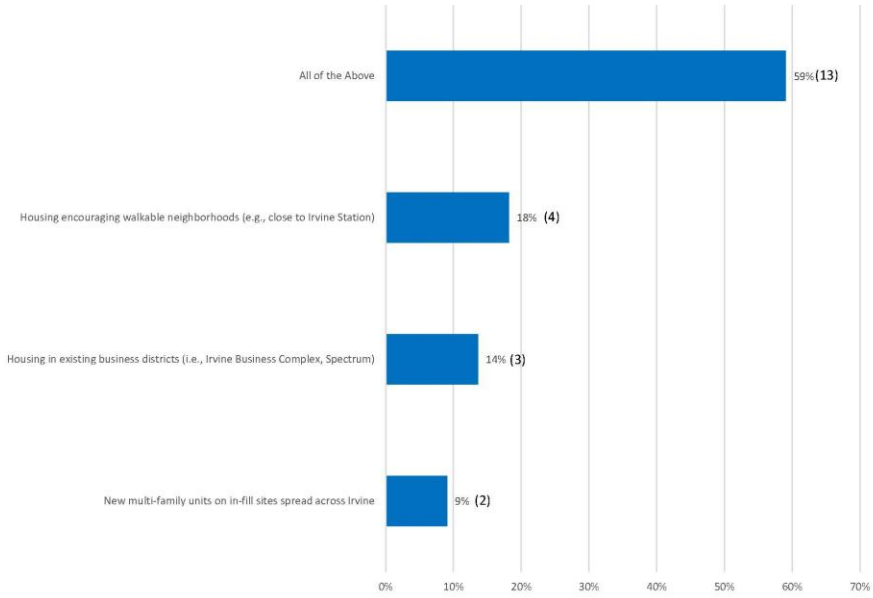


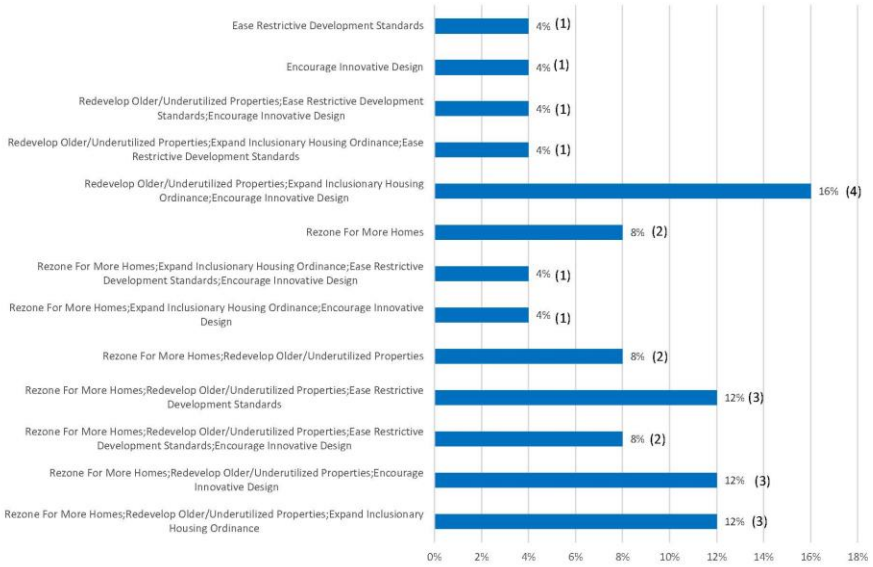
**What populations and income levels are most in need of housing ?**



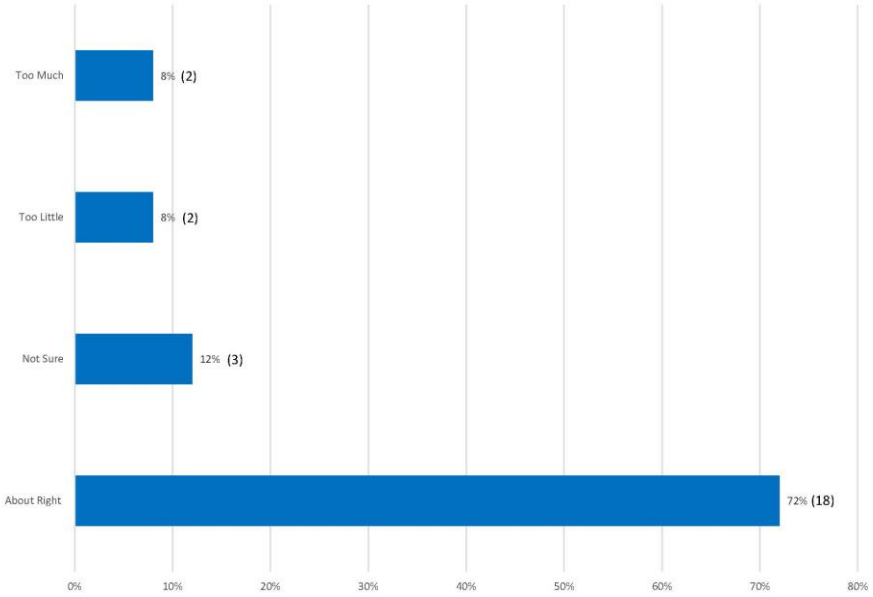

**What is the most important consideration for location? Choose one:**



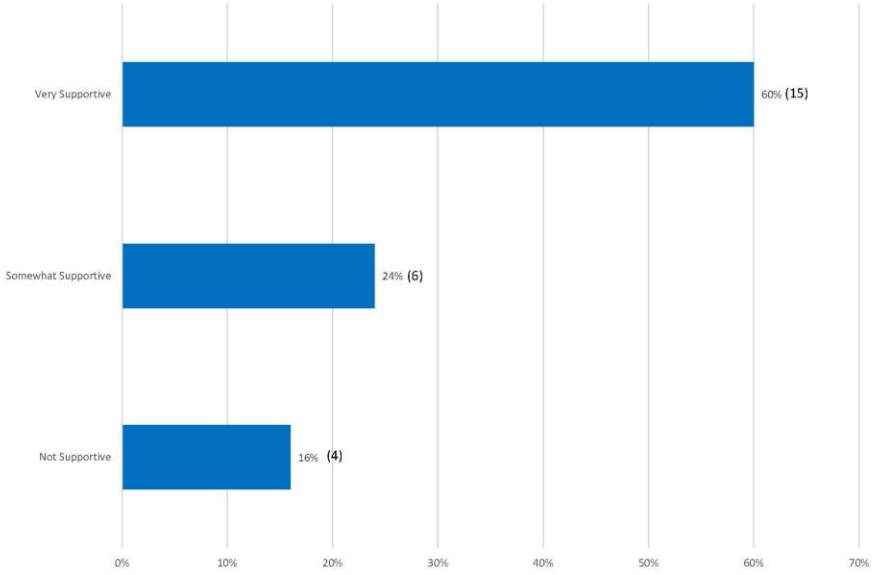
**Which housing strategies should the City prioritize and pursue? Choose top three:**



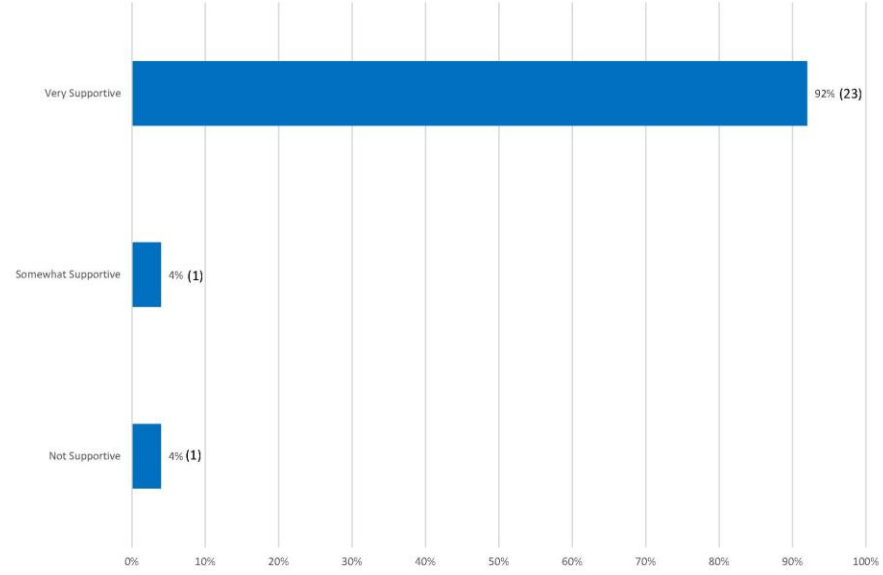

**Are there an adequate number of retail centers in Irvine? Choose one:**



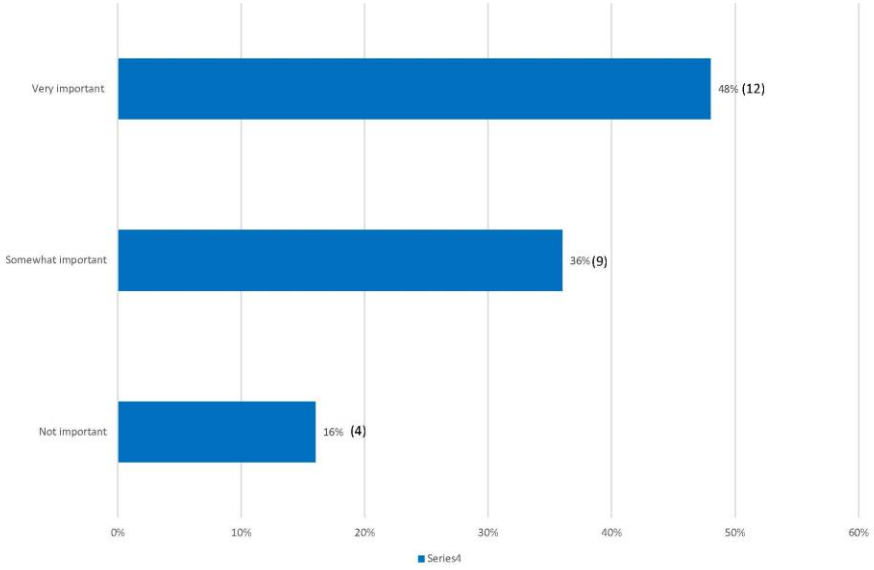
How do you feel about adding residential uses to underutilized retail centers (i.e., in parking lot)? Choose one:



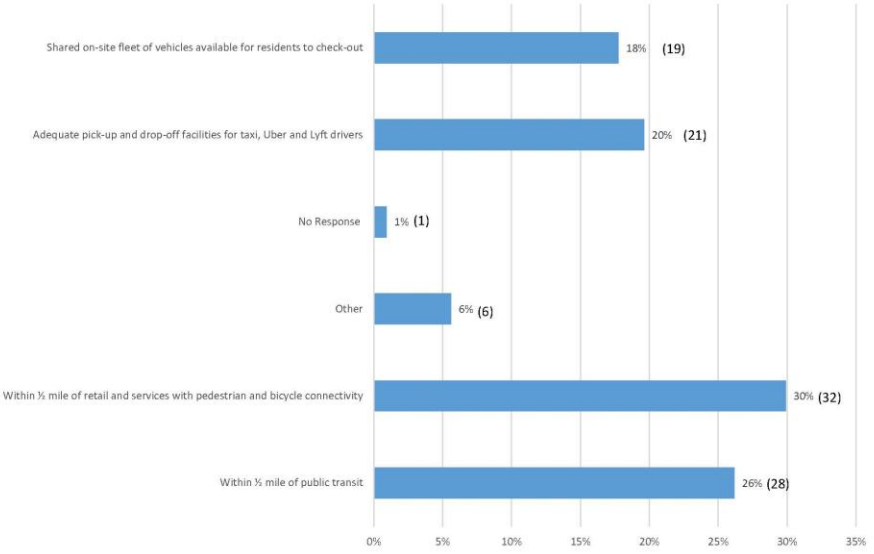

How do you feel about replacing underperforming/obsolete businesses with residential uses and/or community serving uses in retail or office centers? Choose one:



**Do you think being able to walk to a shopping center from your home would be a benefit?**




**The costs of providing on-site parking for housing projects, especially affordable homes, can be prohibitive. How can the City ensure new projects adequately address specific parking needs without it being a major obstacle?**



# 3. Workshop Attendee Lists

**Workshop 1 on April 22, 2021 at 10 a.m. (105 participants)**

| | |
|---|---|
| Steven | Giang |
| Michael | Vasoghi |
| Pat | Davis |
| Nishtha | Mohendra |
| Nishtha | Mohendra |
| Yong | Song |
| ebec | b |
| Lynn | Puckett |
| Diane | Clark |
| Ken | Montgomery |
| Ken | Montgomery |
| Diane | Nied |
| Tiffany | Craft |
| Tammy | Kim |
| Mary Ann | Gaido |
| Rebecca | Hanson |
| Dawn | McCarty |
| Tracy | Franks |
| Florin | Tiru |
| Doni | Adhiningrat |
| Mark | Asturias |
| Mark | Asturias |
| Joanna | Chang |
| Meghana | Joshi |
| Subhransu | Tripathy |
| Jorge | M |
| Anthony | Kuo |
| Andrea | Maloney |

| | |
|---|---|
| John | Himes |
| Judith | Hernandez |
| ANGELA | YOUNG |
| Tim | Strader |
| Tim | Strader |
| Mohammad Maruf | Sharif Zada |
| Robert | Ramirez |
| Tom | |
| Sean | Cao |
| Sal | Perez |
| Sylvia | Walker |
| Carol | Clayman |
| Daniel | Gehman |
| Daniel | Gehman |
| Katerina | Polezhaev |
| James | Gerrard |
| Justin | Equina |
| Massis | Chahbazian |
| Warren | Wang |
| Vasantha | Kandasamy |
| Amy | S |
| Jeanne | Baran |
| David | Ehrlich |
| Melanie | Finkelstein |
| Melanie | Finkelstein |
| Jing | Sun |
| Ford | Fujii |
| Barbara | Arenado |
| john | irvine |
| Jennifer | Jackson |
| mana | asgari |

| | |
|---|---|
| Mark | Dershem |
| Mariana | Montenegro |
| Mariana | Montenegro |
| Richard | Green |
| Jeremy | Carver |
| Michele | Silva |
| Tim | Shaw |
| PHILIP | ANDONIU |
| Cherry | Lai |
| Michelle | Santiago |
| Sharon | Toranto |
| Emily | Yau |
| xhidalgo | |
| Josh | Goldman |
| Susan | Sayre |
| Jeanne | Villacorte |
| Jeanne | Villacorte |
| Rachel | Owens |
| Luke | Unal |
| Ira | Sadis |
| Kelly | Jones |
| Brent | Stoll |
| Maximina | Marin |
| Felicity | Figueroa |
| Jesse | Barron |
| Sheila | Rafat |
| Anna | Kee |
| Leilani | Del Rosario |
| Scott | Spearman |
| Azad | Sabounjian |
| Azad | Sabounjian |

| | |
|---|---|
| Azad | Sabounjian |
| Azad | Sabounjian |
| Azad | Sabounjian |
| Oscar R | Garcia |
| Richard | Walker |
| Sung | Kim |
| Sung | Kim |
| Lindsey | Hashimoto |
| Farhad | abdollahi |
| kyooduk | choi |
| Stuart | Blakeney |
| Martin | Reiner |
| Martin | Reiner |
| Parvin | Sardarianpour |
| Jamie | Ota |

**Workshop 2 on April 29, 2021 at 5:30 p.m. (92 participants)**

| | |
|---|---|
| Anthony | Nguyen |
| Gerard | Bulalacao |
| Jeff | Davis |
| Karen | Martin |
| Andrew | Yam |
| Andrew | Yam |
| Nancy | Neudorf |
| Yasmin | Diaz |
| Felicity | Figueroa |
| Jennifer | Jackson |
| Jinny | S |
| Azita | Mesbah |
| Hope | Dorman |
| Alejandra | Reyes |
| Martha | B |

| | |
|---|---|
| Emily | Yau |
| Angela | Kong |
| LaVonda | Jackson |
| Ken | Wilhelm |
| Robert | Ramirez |
| Jeanne | Villacorte |
| Cheryl | Cohen |
| Tammy | KIim |
| julie | g |
| Kedarious | Colbert |
| Bill | Jacobs |
| Kevin | Corrigan |
| Diane | Nied |
| Brent | Stoll |
| Tammy | Traverso |
| Vasantha | Kandasamy |
| Ken | Montgomery |
| Thomas | Lo |
| Jiun | Shen |
| Rebecca | Newman |
| Ford | Fujii |
| Kevin | Nguyen |
| Callie | Rutter |
| Callie | Rutter |
| Laura | Stearns |
| Richard | Walker |
| Rebecca | Hanson |
| Doug | Elliott |
| JBourgeois | |
| Robin | Hunt |
| Gregg | Taylerson |

| | |
|---|---|
| John | Loper |
| Lilia | Luo |
| Courtney | Santos |
| xenia | panameno |
| Dominic | Mazza |
| Vugar | Zeynalov |
| Mark | Dershem |
| Anamika | Bhattacharya |
| Tom | Mason |
| Lindsey | Hashimoto |
| Cindi | Chow |
| Sung | kim |
| Travis | Baron |
| Christi O | Davies |
| Michele | Silva |
| Karla | Pena |
| Karla | Pena |
| Karla | Pena |
| Karla | Pena |
| Karla | Pena |
| Karla | Pena |
| PHILIP | ANDONIU |
| Andrea | Maloney |
| N | A |
| N | A |
| Meghana | Joshi |
| Jennifer | Kim |
| Patricia | Heilig |
| Julissa | Orozco |
| Isaac | Eun |
| Sylvia | Walker |

| | |
|---|---|
| Grace | Yoon-Taylor |
| Barbara | Arenado |
| Deborah | Dutra |
| Gary | Wang |
| Ken | Chew |
| frank | amini |
| Carolyn | Ybarra |
| Farhad | Mafie |
| Leilani | Del Rosario |
| Judith | Gass |
| Freda | Pongetti |
| ANGELA | YOUNG |
| Cherry | Lai |
| Raf | Batista |
| Sean | Cao |
| Pat | Davis |

# 4. Social Media Posts

## INSTAGRAM




cityofirvine

**cityofirvine** Help plan the City's future housing needs and priorities. Attend one of our virtual workshops to learn about and share input on the City's Housing Element Update:

🏠 April 22, 10 a.m. to noon
🏠 April 29, 5:30 p.m. to 7:30 p.m.

To register for a workshop, and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.

Liked by **orangecountyevents** and **others**

APRIL 16




cityofirvine

**cityofirvine** We are updating the Housing Element for the 2021-29 planning period and we want your input.

Please attend one of the following virtual community workshops to help plan the City's future housing needs and priorities:
🏠 April 22, 10 a.m. to noon
🏠 April 29, 5:30 p.m. to 7:30 p.m.

The community workshops will include a presentation on the Housing Element and an open discussion about the update.

To register for a workshop, and for additional information on the Housing

Liked by **orangecountyevents** and **others**

APRIL 12

Add a comment... Post




cityofirvine

**cityofirvine** We are updating the City's Housing Element and we need your input. Help plan for future housing needs and priorities in our community by attending one of these virtual workshops:

🏠 April 22, 10 a.m. to noon
🏠 April 29, 5:30 p.m. to 7:30 p.m.

To register for a workshop, and for additional information about the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.

Liked by **irvinemoms** and **others**

APRIL 19




cityofirvine

**cityofirvine** Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m.

The workshop will include a presentation on the Housing Element and an open discussion about the update.

To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.

Liked by **orangecountyevents** and **others**

APRIL 25

**FACEBOOK**


City of Irvine City Hall added an event.
April 12 ·
HOUSINGELEMENT
CITY OF IRVINE 2021 UPDATE
Community Workshop
THU, APR 22
Housing Element Update Community Workshops
3 Went · 16 Interested

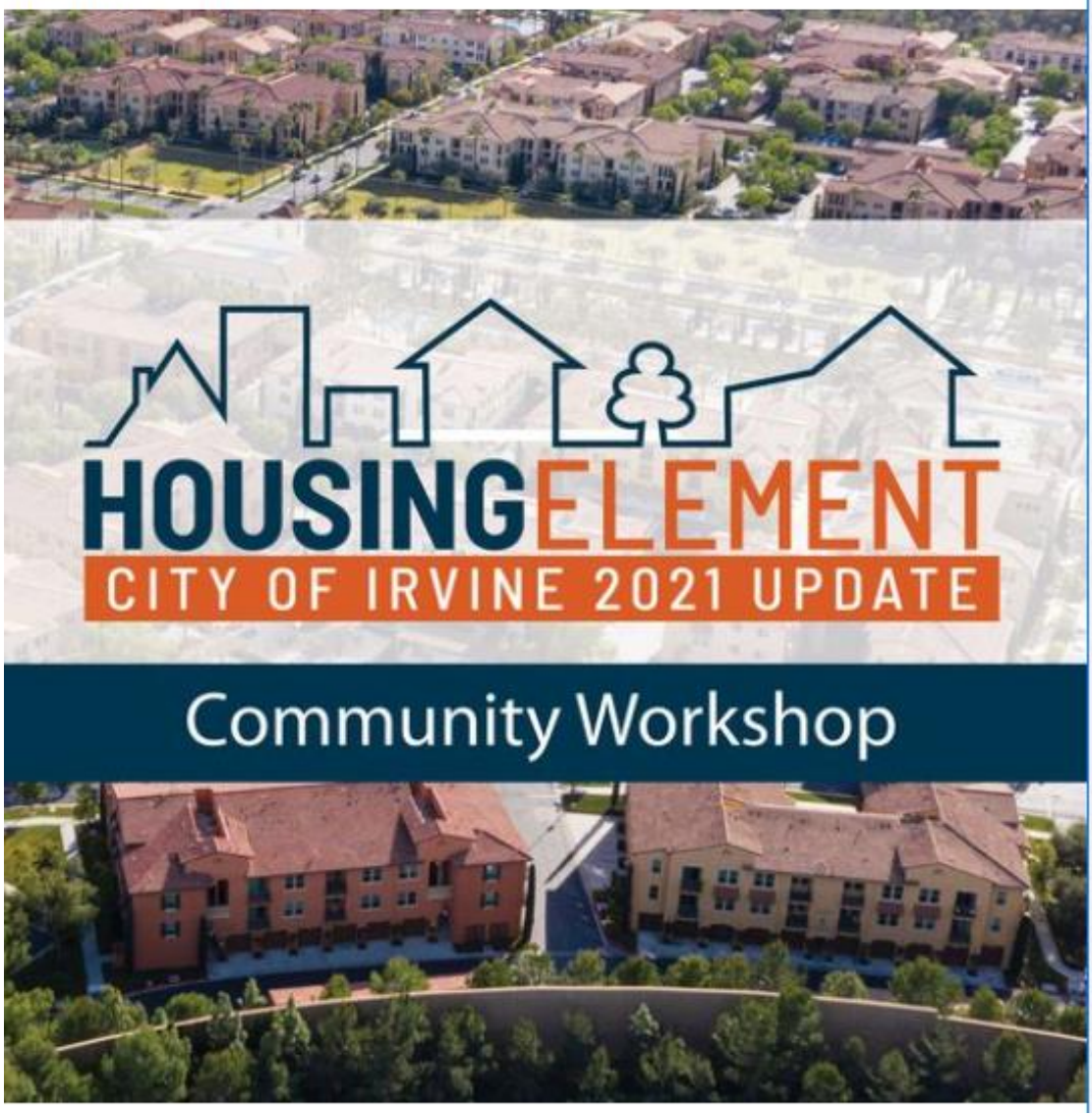
**City of Irvine City Hall**
Published by Irvine Ca · April 16 ·

Help plan the City's future housing needs and priorities. Attend one of our virtual workshops to learn about and share input on the City's Housing Element Update:

🏠 April 22, 10 a.m. to noon
🏠 April 29, 5:30 p.m. to 7:30 p.m.

To register for a workshop, and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.



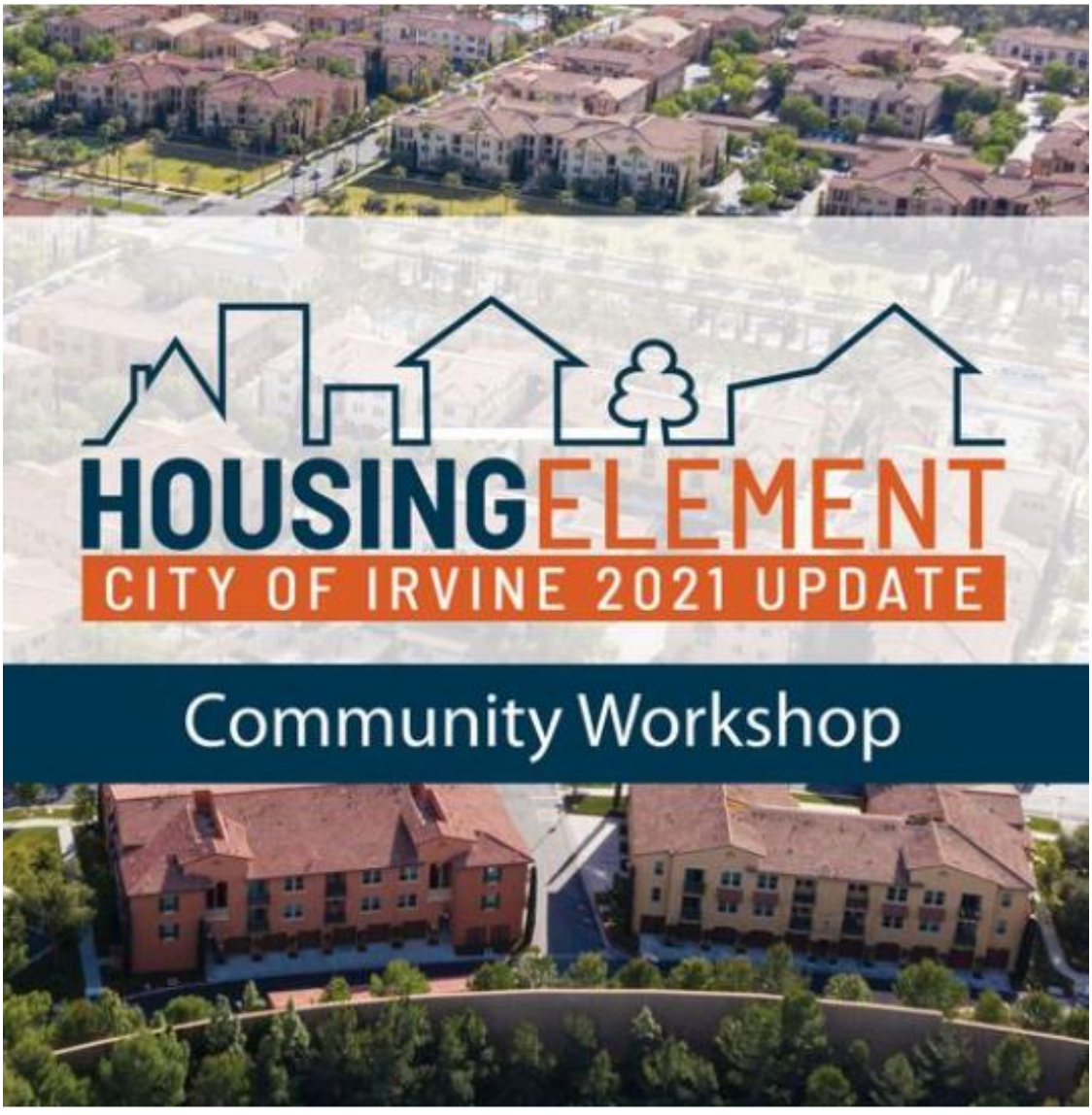
**City of Irvine City Hall**
Published by Irvine Ca · April 19 ·

We are updating the City's Housing Element and we need your input. Help plan for future housing needs and priorities in our community by attending one of these virtual workshops:

🏠 April 22, 10 a.m. to noon
🏠 April 29, 5:30 p.m. to 7:30 p.m.

To register for a workshop, and for additional information about the Housing Element Update, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.



**City of Irvine City Hall**
Published by Irvine Ca · April 25 ·

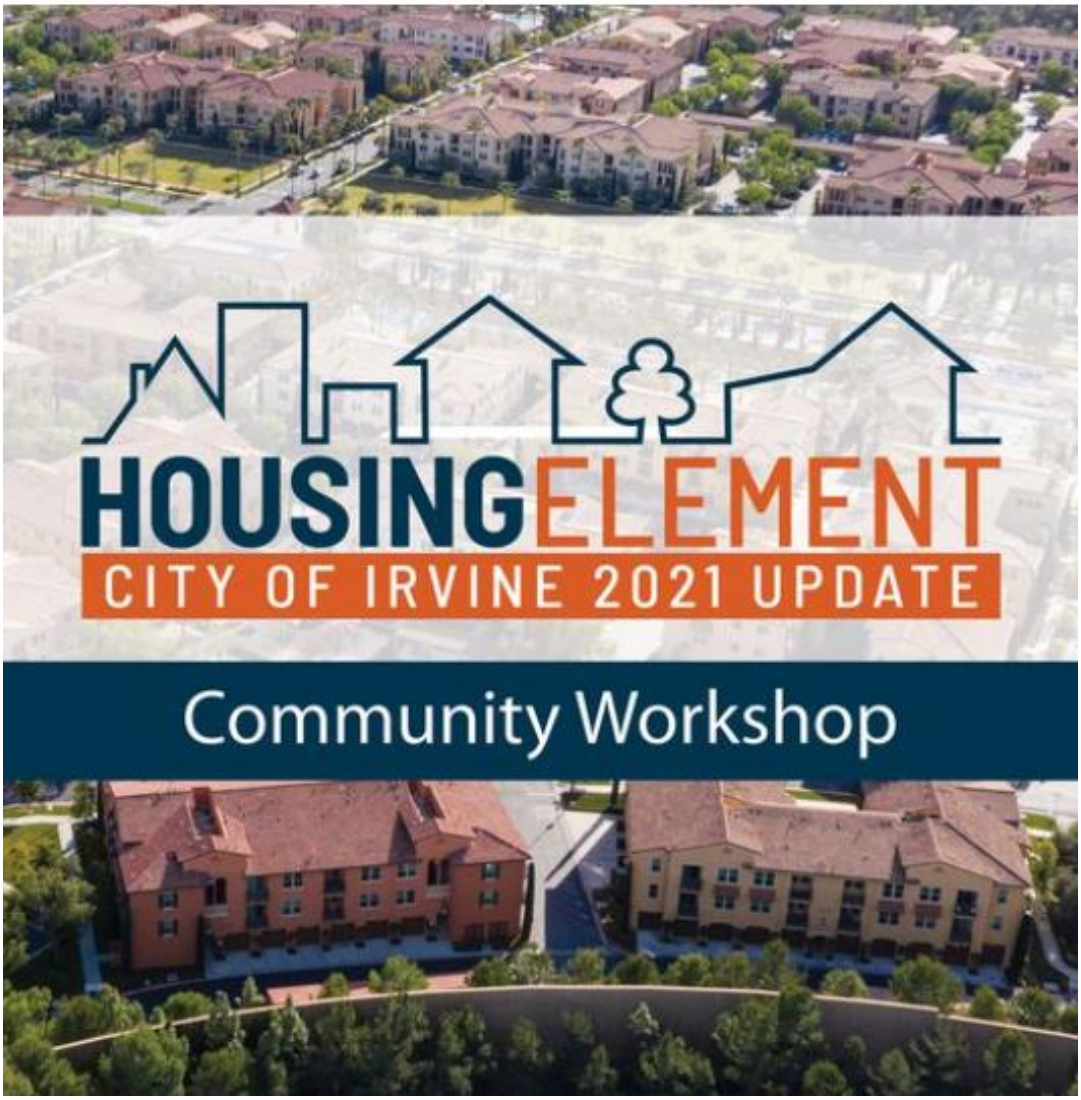
Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m.

The workshop will include a presentation on the Housing Element and an open discussion about the update.

To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

For language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.

#WeAreIrvine



## FACEBOOK AND INSTAGRAM STORIES







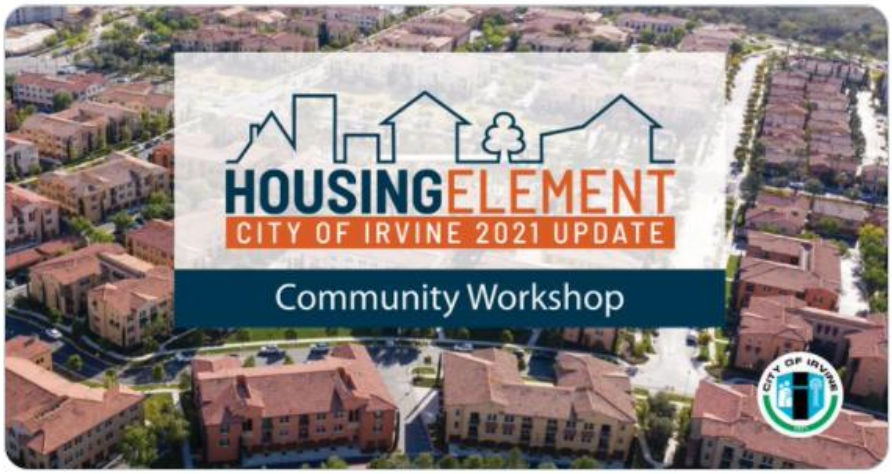
## TWITTER



**City of Irvine**
@City_of_Irvine

We invite you to attend a virtual community workshop this month to help plan the City's future housing needs and priorities. Details on the Housing Element Update are available in multiple languages at cityofirvine.org/HEUpdate.

Please join us and share your input!

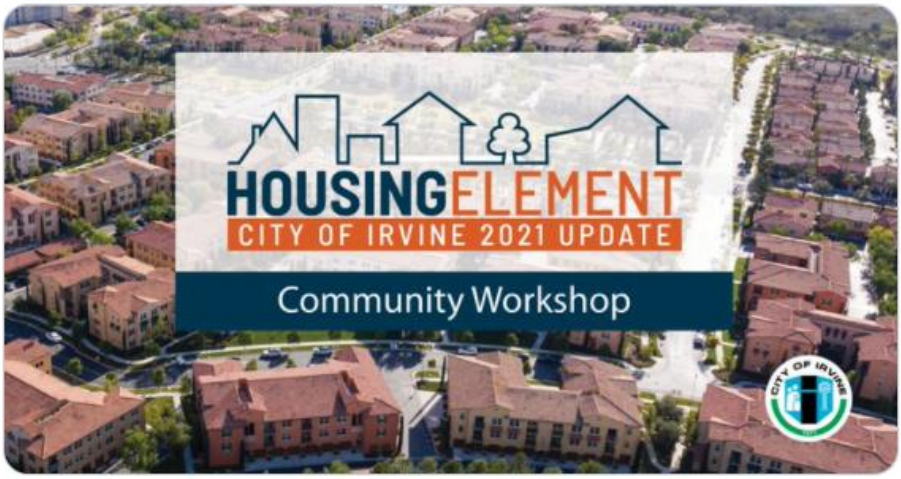



11:13 AM · Apr 13, 2021 · Twitter Web App

**City of Irvine**
@City_of_Irvine

Help plan the City's future housing needs and priorities. Attend a virtual workshop on April 22 or April 29 to learn about and share input on the City's Housing Element Update.

Information is available in multiple languages at cityofirvine.org/HEUpdate.



**City of Irvine** @City_of_Irvine · Apr 19

We are updating the City's **Housing Element** and we need your input. Help plan for future **housing** needs and priorities in our community by attending one of these virtual workshops:

🏠 April 22, 10 a.m. to noon
🏠 April 29, 5:30 p.m. to 7:30 p.m.

ℹ cityofirvine.org/HEUpdate

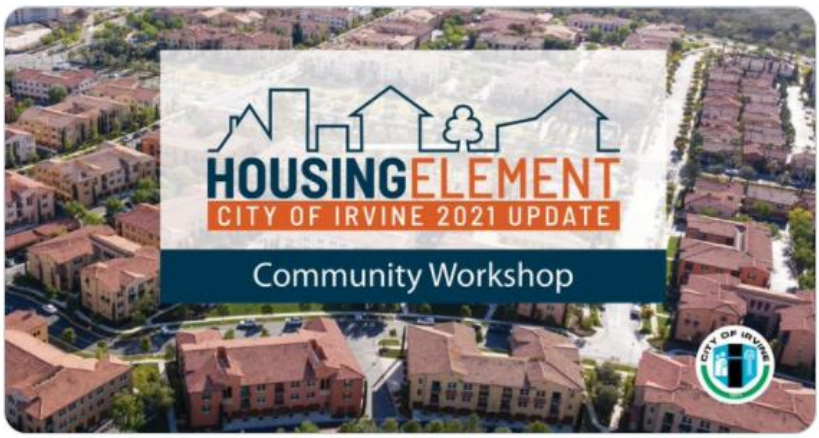



**City of Irvine**
@City_of_Irvine

Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m.

To register for the workshop and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

#WeAreIrvine




8:54 PM · Apr 25, 2021 · Twitter Web App

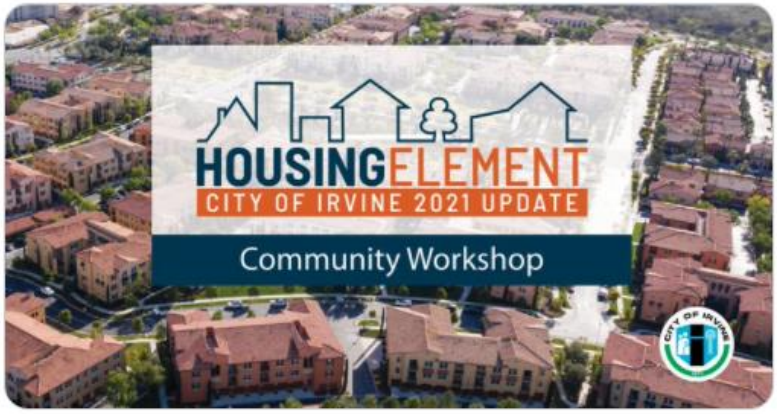
**City of Irvine** @City_of_Irvine · Apr 28

Help us plan Irvine's future housing needs & priorities at a virtual workshop tomorrow!

📅April 29
⌚5:30 to 7:30 p.m.

To register and learn more, visit cityofirvine.org/HEUpdate. Information is available in multiple languages.

#WeAreIrvine




## NEXTDOOR

**City of Irvine**
Public Information Office Linda Fontes • 12 Apr

**Housing Element Update Community Workshop.** The City of Irvine is updating the Housing Element for the 2021-29 planning period and will be hosting two virtual community workshops. All Irvine residents and stakeholders are encouraged to attend the virtual workshops to help plan the City's future housing needs and priorities.

The community workshops will be hosted by Irvine's Community Development department and will include a presentation on the Housing Element and an open discussion about the update. The public is invited to attend the meetings.

Virtual Community Workshop dates and times via Zoom:
April 22, 10 a.m. to noon
April 29, 5:30 p.m. to 7:30 p.m.

To register for a virtual meeting and for additional information on the Housing Element Update, visit cityofirvine.org/HEUpdate or call 949-724-6395. If you need language assistance, please email mchao@cityofirvine.org by April 30 to schedule an individualized meeting.

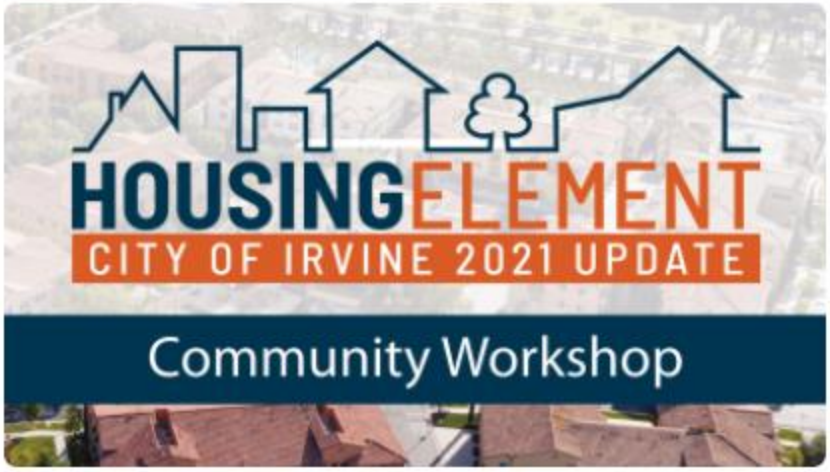
In addition to English, program information is available on the website in Chinese, Korean, Spanish, Vietnamese, Arabic, Japanese, and Farsi.




Housing Element Update Community Workshop Going?

Posted to **Subscribers of City of Irvine**

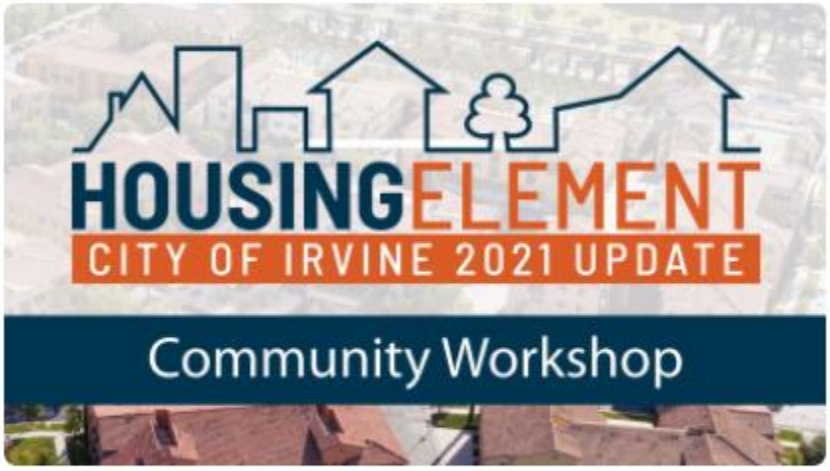
City of Irvine
Public Information Office Linda Fontes • 19 Apr




**We need your input!** We are updating the City's Housing Element and we need your input. Help plan for future housing needs and priorities in our community by attending one of these virtual workshops: 🏠 April 22, 10 a.m. to noon 🏠 April 29, 5:30 p.m. to 7:30 p.m. To register for a workshop, and for additional information
See more...

Posted to **Subscribers of City of Irvine**

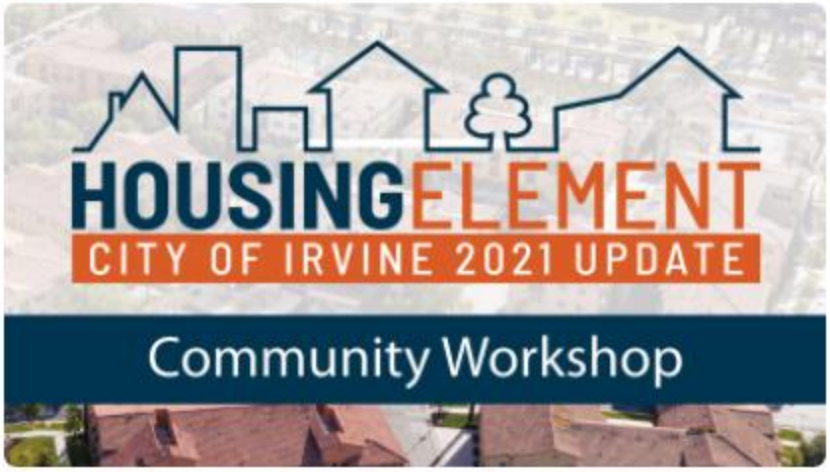
City of Irvine
Public Information Office Linda Fontes • 25 Apr




**Share Your Input on Housing Needs this Thursday.** Help us plan our future housing needs and priorities at a virtual workshop this Thursday, April 29, from 5:30 to 7:30 p.m. The workshop will include a presentation on the Housing Element and an open discussion about the update. To register for the workshop and learn more,
See more...

Posted to **Subscribers of City of Irvine**

City of Irvine
Public Information Office Linda Fontes • 28 Apr




**Reminder: Community Workshop on Housing in Irvine Tomorrow.** Help us plan our future housing needs and priorities at a virtual workshop tomorrow, April 29, 5:30 to 7:30 p.m. The workshop will include a presentation on the Housing Element and an open discussion about the update. To register for the workshop and learn
See more...

Posted to **Subscribers of City of Irvine**

# 5. Press Release

# NEWS RELEASE

**FOR IMMEDIATE RELEASE**

**CONTACT:** Kristina Perrigoue
Public Information Officer
949-724-6212
kperrigoue@cityofirvine.org

**City of Irvine to Host Housing Element Update Virtual Community Workshops**
*All Irvine residents and stakeholders are encouraged to help plan the City's future housing needs and priorities.*




**IRVINE, Calif. (April 12, 2021):** The City of Irvine is updating the Housing Element for the 2021-2029 planning period and will be hosting two virtual community workshops. All Irvine residents and stakeholders are encouraged to attend the virtual workshops to help plan the City's future housing needs and priorities.

The City of Irvine Housing Element is one of the seven mandated elements of the City's General Plan. It sets forth Irvine's strategy to preserve and enhance the community's residential character, expand housing opportunities for all economic segments, and provide guidance and direction for local government decision-making in all matters related to housing.

The community workshops will be hosted by Irvine's Community Development department and will include a presentation on the Housing Element and an open discussion about the update. The public is invited to attend the meetings.

Virtual Community Workshop dates and times via Zoom:

- April 22, 2021, from 10 a.m. to noon
- April 29, 2021, from 5:30 p.m. to 7:30 p.m.

To register for a virtual meeting and for additional information on the Housing Element Update, visit *cityofirvine.org/HEUpdate* or call 949-724-6395. If you need language assistance, please email *mchao@cityofirvine.org* by April 30 to schedule an individualized meeting.

For more information on the Housing Element Update, please visit cityofirvine.org/HEUpdate or email GPUpdate2035@cityofirvine.org. In addition to English, program information is available in Chinese (Traditional), Chinese (Simplified), Korean, Spanish, Vietnamese, Arabic, Japanese, and Farsi.

*Since its incorporation in 1971, Irvine has become a nationally recognized city, with a population of 281,707 that spans 66 square miles and is recognized as one of America's safest and most successful master-planned urban communities. Top-rated educational institutions, an enterprising business atmosphere, sound environmental stewardship, and respect for diversity all contribute to Irvine's enviable quality of life. This family-friendly city features more than 16,000 acres of parks, sports fields and dedicated open space and is the home of the Orange County Great Park. For more information, please visit cityofirvine.org.*

# # #

## Press Release Distribution List:

Korea Daily, Chinese Daily News, Japanese Daily Sun, Viet Daily News, Korea Times, Korea Central Daily, West Coast Jewish News, Sing Tao Daily, Hanin News, Para Todos, Korea Times, Jewish Life, India Journal, Koreatown Daily –Los Angeles Edition, Maeil Business Newspaper, Korea Times – Orange County Edition, Keyan Pang – US News Express, SUC Song News, Impacto USA, Yon Hap News, Islamic Center of Irvine, United Times, Rafu Shimpo Japanese Newspaper, China Press, Nguoi Viet Daily News, Azteca News, Los Angeles Times, Hoy Deportes, KBS America, MY Sweet Irvine, Radio Korea LA, Woori Radio News, Korean Radio, Orange County Register

Irvine Homeowners Associations list: https://www.cityofirvine.org/community-development/irvine-homeowners-associations

# 6. Email Newsletter



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## Community Link Newsletter

City of Irvine sent this bulletin at 04/16/2021 03:00 PM PDT




Mayor **Farrah N. Khan** ▫ Vice Mayor **Tammy Kim** ▫ Councilmember **Larry Agran** ▫ Councilmember **Mike Carroll** ▫ Councilmember **Anthony Kuo**

**April 16, 2021 | Edition 16**

### Welcome to the Community Link Newsletter

Our weekly newsletter aims to keep residents and businesses connected to us and all that is going on in and throughout the City. You can connect with us and learn more by visiting our website at *cityofirvine.org*, and following us on our social media channels, listed at the bottom of this email. We look forward to connecting with you.




### Housing Element Update Virtual Community Workshops

The City of Irvine is updating the Housing Element for the 2021-2029 planning period and will be hosting two virtual community workshops in April. All Irvine residents and stakeholders are encouraged to attend the virtual workshops to help plan the City's future housing needs and priorities.

The workshops will be held April 22, from 10 a.m. to noon; and April 29, from 5:30 to 7:30 p.m. via Zoom. Visit *cityofirvine.org/HEUpdate* to register for a meeting, view program material in eight languages, and learn more. If you need language assistance, please email *mchao@cityofirvine.org* by April 30 to schedule an individual meeting.




### Participate in the National Mayor's Challenge for Water Conservation

Mayor Farrah N. Khan is joining mayors across the country for the 10th Anniversary of the National Mayor's Challenge for Water Conservation by asking residents to make a long-term commitment to manage water resources more wisely.

The annual challenge, April 1- 30, is a nonprofit national community service campaign that encourages leaders to inspire their residents to make a series of simple pledges to use water more efficiently, reduce pollution, and save energy. Visit *mywaterpledge.com* to take the pledge.

# 7. Workshop Announcements (Oral)

City Council Announcement by Mayor Khan
City Council Meeting
Tuesday, April 27, 2021

**Housing Element Update**

- The City is in the process of updating our Housing Element, and we invite you to learn more about this effort and provide your input on housing in Irvine at a Community Workshop this Thursday at 5:30 p.m.

- Irvine, along with all California cities and counties, is required to adequately plan for and meet the housing needs of everyone in the community. In the Housing Element Update, the City must identify enough potentially developable land suitable for residential use to meet the Regional Housing Needs Assessment, or RHNA, allocation required by the State.

- The City's portion of SCAG's RHNA for the 2021-2029 Housing Element is 23,610 units.

- A flier with information on the Housing Element Update is available in eight languages and anyone who needs language assistance for the community meeting can email ***mchao@cityofirvine.org*** by April 30 to schedule an individualized meeting.

- To register for Thursday's meeting, subscribe for updates, and for more information on the Housing Element Update, available in multiple languages, visit ***cityofirvine.org/housingelementupdate***.

- We hope you will join us on Thursday to learn more and share your input.

General Announcements made at Planning Commission, Community Services Commission, Finance Commission, and Transportation Commission, as well as various committee/board meetings such as the Senior Citizen Council and Sports Committee during their regular meetings in early- to mid-April 2021

Community Development is updating Irvine's Housing Element as required by the State. Two community workshops are planned for April 22 from 10 am - 12 pm and April 29 from 5:30 – 7:30 pm. We invite everyone in the community to participate in one of the virtual workshops. Specific meeting details will be released in mid-April. For more information on the project, please go to www.cityofirvine.org/housingelementupdate.

## Public Engagement

## Appendix A-P: At-Risk Affordable Housing Outreach

## Table of Contents

1. Outreach Letters
2. Meeting Agendas

# 1. Outreach Letters

May 4, 2021

Sent via USPS and email:
mhirneise@families-forward.org
barzate@families-forward.org
nmohendra@families-forward.org

Ms. Madelynn Hirneise, Chief Executive Officer
Families Forward
8 Thomas
Irvine, CA 92618

**Subject: Families Forward – One Affordable Housing Unit Expiring December 16, 2024**

Dear Ms. Hirneise:

According to City records, affordability for one very low-income transitional unit at 391 Huntington will expire December 16, 2024 during the upcoming eight-year planning period (2021-2029) associated with the 6th cycle Housing Element. The City of Irvine is dedicated to preserving existing affordable units and we would like to discuss how we can work together to extend the terms of affordability.

If you have any questions and/or need assistance, please contact Amy Mullay, Senior Planner, at amullay@cityofirvine.org or 949-724-7454.

For additional information on the 6th cycle Housing Element update efforts, please visit www.cityofirvine.org/HEUpdate.

Please contact us at your earliest convenience and respond to this request by May 14, 2021.

Thank you for your time and attention to this matter.

Sincerely,

Kerwin Lau
Manager of Planning Services

cc: Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

May 4, 2021

Sent via USPS and email:
mhirneise@families-forward.org
barzate@families-forward.org
nmohendra@families-forward.org

Ms. Madelynn Hirneise, Chief Executive Officer
Families Forward
8 Thomas
Irvine, CA 92618

**Subject: Families Forward – Seven Affordable Housing Units Expiring July 27, 2021**

Dear Ms. Hirneise:

According to City records, affordability for these seven scattered extremely low-income rental units will expire July 27, 2021 during the upcoming eight-year planning period (2021-2029) associated with the 6th cycle Housing Element. The City of Irvine is dedicated to preserving existing affordable units and we would like to discuss how we can work together to extend the terms of affordability.

If you have any questions and/or need assistance, please contact Amy Mullay, Senior Planner, at amullay@cityofirvine.org or 949-724-7454.

For additional information on the 6th cycle Housing Element update efforts, please visit www.cityofirvine.org/HEUpdate.

Please contact us at your earliest convenience and respond to this request by May 14, 2021.

Thank you for your time and attention to this matter.

Sincerely,

Kerwin Lau
Manager of Planning Services

cc: Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

May 4, 2021

Sent via USPS

Harvard Manor LP
8383 Wilshire Blvd, #700
Beverly Hills, CA 90211

**Subject: Harvard Manor – 100 Affordable Housing Units Expiring 2025**

To Whom It May Concern:

According to City records, affordability for these 100 very low-income units at Harvard Manor at 21 California Ave, will expire in 2025 during the upcoming eight-year planning period (2021-2029) associated with the 6th cycle Housing Element. The City of Irvine is dedicated to preserving existing affordable units and we would like to discuss how we can work together to extend the terms of affordability.

If you have any questions and/or need assistance, please contact Amy Mullay, Senior Planner, at amullay@cityofirvine.org or 949-724-7454.

For additional information on the 6th cycle Housing Element update efforts, please visit www.cityofirvine.org/HEUpdate.

Please contact us at your earliest convenience and respond to this request by May 14, 2021.

Thank you for your time and attention to this matter.

Sincerely,

Kerwin Lau
Manager of Planning Services

cc: Shapell Properties, 24050 Aliso Creek Rd, Laguna Niguel, CA 92677
Shapell Properties c/o Harvard Manor, 21 California Ave, Irvine, CA 92612
Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

May 4, 2021

Sent via USPS and email:
larchuleta@jamboreehousing.com
rkinoshita@jamboreehousing.com

Ms. Laura Archuleta, President and CEO
Jamboree Housing
17701 Cowan Ave, Suite 200
Irvine, CA 92614

**Subject: The Meadows Mobile Home Park – 360 Affordable Housing Units Expiring 2028**

Dear Ms. Archuleta:

According to City records, affordability for these 360 senior ownership units, comprised of 72 very low income, 198 low income, and 90 moderate income units at 14851 Jeffrey Rd. will expire in 2028 during the upcoming eight-year planning period (2021-2029) associated with the 6th cycle Housing Element. The City of Irvine is dedicated to preserving existing affordable units and we would like to discuss how we can work together to extend the terms of affordability.

If you have any questions and/or need assistance, please contact Amy Mullay, Senior Planner, at amullay@cityofirvine.org or 949-724-7454.

For additional information on the 6th cycle Housing Element update efforts, please visit www.cityofirvine.org/HEUpdate.

Please contact us at your earliest convenience and respond to this request by May 14, 2021.

Thank you for your time and attention to this matter.

Sincerely,

Kerwin Lau
Manager of Planning Services

cc: Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

May 4, 2021

Sent via USPS and email:
letty@occhc.org
Nora@occhc.org

Ms. Letty Plascencia
Orange County Community Housing Corporation
501 N Golden Cir Dr, #200
Santa Ana, CA 92705

**Subject: OCCHC– Six Affordable Housing Units Expired 2020**

Dear Ms. Plascencia:

According to City records, affordability for these six scattered very low-income rental units expired in 2020. The City of Irvine is dedicated to preserving existing affordable units and we would like to discuss how we can work together to reinstate or extend the terms of affordability.

If you have any questions and/or need assistance, please contact Amy Mullay, Senior Planner, at amullay@cityofirvine.org or 949-724-7454.

For additional information on the 6th cycle Housing Element update efforts, please visit www.cityofirvine.org/HEUpdate.

Please contact us at your earliest convenience and respond to this request by May 14, 2021.

Thank you for your time and attention to this matter.

Sincerely,

Kerwin Lau
Manager of Planning Services

cc: Pete Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

# 2. Meeting Agenda

**Agenda**
**Families Forward Stakeholder Meeting**
**Housing Element Update**
May 20, 2021 from 3:30 – 4:30 p.m. via MS Teams

Attendees:

***City of Irvine***
- Andrew Douglass, Acting Housing Administrator
- Amy Mullay, Senior Planner
- Melissa Chao, Senior Planner

***Families Forward***
- Nishtha Mohendra MSW, Families Forward, Chief Program Officer
- Brian Arzate, Families Forward, Property Manager
- Daneille DeBerg
- Madelynn Hirneise, Families Forward, CEO (optional)

***Purpose***: *Extending affordable units expiring during 6th Cycle Housing Element covering 2021-2029*

I. Introductions

II. Housing Element Update Background

a. RHNA requirements by income level *(see Attachment 1)*
b. Planning Areas and Potential Opportunities
c. Affordable/Fair Housing Requirements
d. Shared interest in preserving existing affordable units

III. Expiring Units

a. Seven (7) scattered extremely low-income rental units - expiring July 27, 2021 – CDBG financing
b. One (1) very low-income transitional unit at 391 Huntington - expiring December 16, 2024 – HOME financing

IV. Potential ways to preserve existing affordable units

V. Other?

**Attachment 1**

**Final 6th Cycle RHNA Numbers from SCAG**

| Income Category (% of County Area Median Income (AMI)) | Units |
|---|---|
| Extremely Low / Very Low (0% - 50% AMI) | 6,396 |
| Low (51% - 80% AMI) | 4,235 |
| Moderate (81% - 120% AMI) | 4,308 |
| Above Moderate (120% AMI or above, which is considered market rate) | 8,671 |
| **TOTAL** | **23,610** |

**Agenda**
**Jamboree Housing Stakeholder Meeting**
**Housing Element Update**
June 30, 2021 from 11 – 11:30 a.m. via MS Teams

Attendees:

***City of Irvine***
- Andrew Douglass, Acting Housing Administrator
- Keri Bullock, Neighborhood Services Administrator
- Amy Mullay, Senior Planner
- Marika Poynter, Principal Planner
- Melissa Chao, Senior Planner

***Jamboree Housing***
- Laura Archuleta, President & CEO

***Purpose***: *Extending affordable units expiring during 6th Cycle Housing Element covering 2021-2029*

I. Introductions

II. Housing Element Update Background

a. RHNA requirements by income level *(see Attachment 1)*
b. Planning Areas and Potential Opportunities
c. Affordable/Fair Housing Requirements
d. Shared interest in preserving existing affordable units

III. Expiring Units in 2028

a. Meadows Mobile Home Park with 360 Ownership Units comprised of:
    - 72 Very Low Income
    - 198 Low Income
    - 90 Moderate Income

IV. Potential ways to preserve existing affordable units

V. Other?

**Attachment 1**

**Final 6th Cycle RHNA Numbers from SCAG**

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| Low (51% - 80% AMI) | 4,235 |
| Moderate (81% - 120% AMI) | 4,308 |
| Above Moderate (120% AMI or above, which is considered market rate) | 8,671 |
| **TOTAL** | **23,610** |

# Public Engagement

# Appendix A-Q: Draft Housing Element Release to Public

## Table of Contents


1. Planning Commission (July 1, 2021)
   a. Meeting Agenda
   b. Staff Report
   c. Presentation
   d. Comment Summary and Analysis

2. Release of Draft Housing Element Document on www.cityofirvine.org/HEUpdate
   a. Email notifcation (July 12, 2021)
   b. Individuals added to email list in Appendix A-C since July 1, 2021

3. Planning Commission (July 15, 2021)
   a. Meeting Agendas
   b. Staff Report
   c. Presentation
   d. Comment Summary and Analysis

4. Planning Commission (August 5, 2021)
   a. Meeting Agenda
   b. Staff Report
   c. Presentation
   d. Comment Summary and Analysis

5. Draft Housing Element Correspondence

6. Notice of Intent to adopt Initial Study/Negative Declaration for CEQA

# 1a. Meeting Agenda for July 1, 2021

# AGENDA

## PLANNING COMMISSION
## REGULAR MEETING

**July 1, 2021**
**5:30 PM**
**City Council Chamber**
One Civic Center Plaza
Irvine, CA 92606

Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner

### PARTICIPATION AT PLANNING COMMISSION MEETINGS

MEETINGS ARE AVAILABLE TO ATTEND IN-PERSON IN THE CITY COUNCIL CHAMBER OR WATCHED LIVE THROUGH THE "ZOOM" APPLICATION. INFORMATION FOR "ZOOM" CAN BE FOUND ONLINE AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO THE PLANNING COMMISSION AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/PLANNINGCOMMISSION.

**REQUEST TO SPEAK IN PERSON:** IF YOU WOULD LIKE TO ADDRESS THE PLANNING COMMISSION ON A SCHEDULED AGENDA ITEM – INCLUDING A REGULAR BUSINESS ITEM, A PUBLIC HEARING ITEM, OR PUBLIC COMMENTS – PLEASE REGISTER BY COMPLETING THE ELECTRONIC FORM AVAILABLE ON THE KIOSK AT THE ENTRANCE TO THE CITY COUNCIL CHAMBER. PLEASE IDENTIFY ON THE FORM YOUR NAME AND THE ITEM ON WHICH YOU WOULD LIKE TO SPEAK. THE REQUEST TO SPEAK FORM ON THE KIOSK ASSISTS THE CHAIR IN ENSURING THAT ALL PERSONS WISHING TO ADDRESS THE PLANNING COMMISSION ARE RECOGNIZED. IT ALSO ENSURES THE ACCURATE IDENTIFICATION OF MEETING PARTICIPANTS IN THE PLANNING COMMISSION MINUTES. YOUR NAME WILL BE CALLED AT THE TIME THE MATTER IS HEARD BY THE PLANNING COMMISSION. CITY POLICY IS TO LIMIT PUBLIC TESTIMONY TO UP TO FIVE MINUTES PER SPEAKER ON AGENDIZED ITEMS, AND THREE MINUTES DURING GENERAL PUBLIC COMMENTS (UNLESS THE TIME LIMIT IS EXTENDED BY THE CHAIR), WHICH INCLUDES THE PRESENTATION OF ELECTRONIC OR AUDIO-VISUAL INFORMATION. SPEAKERS MAY NOT YIELD THEIR TIME TO OTHER PERSONS.

**PLEASE TAKE NOTICE THAT** THE ORDER OF SCHEDULED AGENDA ITEMS BELOW AND/OR THE TIME THEY ARE ACTUALLY HEARD, CONSIDERED AND DECIDED MAY BE MODIFIED BY THE CHAIR DURING THE COURSE OF THE MEETING, SO PLEASE STAY ALERT.

**PLEASE NOTE:** THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 949-724-6465, OR VIA EMAIL AT PLANNINGCOMMISSION@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

## CALL TO ORDER

## ROLL CALL

## PLEDGE OF ALLEGIANCE

## INTRODUCTIONS

## ADDITIONS AND DELETIONS TO THE AGENDA

Additions to the agenda are limited by the California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda must be acted upon prior to the next Planning Commission meeting.

## PUBLIC COMMENTS

## COMMISSION BUSINESS

### 1. MINUTES - MAY 20, 2021

**RECOMMENDED ACTION:**
Adopt the minutes of the regular Planning Commission meeting held on May 20, 2021.

### 2. MINUTES - JUNE 3, 2021

**RECOMMENDED ACTION:**
Adopt the minutes of the Special Joint Meeting of the Planning Commission and Transportation Commission held on June 3, 2021.

**PUBLIC HEARINGS**

**3. TIME EXTENSION OF VESTING TENTATIVE TRACT MAP 18174 FOR A MIXED-USE DEVELOPMENT AT 18582 TELLER AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)**

**RECOMMENDED ACTION:**

1) Conduct the public hearing.
2) Adopt RESOLUTION NO. 21-3829 — A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A THREE-YEAR EXTENSION (00839733-PTT) OF VESTING TENTATIVE TRACT MAP 18174 FOR A MIXED-USE DEVELOPMENT AT 18582 TELLER AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX).

**4. VESTING TENTATIVE TRACT MAPS 19122, 19130, AND 19121 LOCATED IN GREAT PARK NEIGHBORHOODS OF PLANNING AREA 51 (ORANGE COUNTY GREAT PARK)**

**RECOMMENDED ACTION:**

1) Conduct the public hearing.
2) Adopt Resolution No. 21-3826 – A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP 19122 (FILE NO. 00826560-PTT), COVERING 27.5 GROSS ACRES TO ALLOW FUTURE DEVELOPMENT OF RESIDENTIAL AND NON-RESIDENTIAL USES WITHIN DEVELOPMENT DISTRICT 1-SOUTH OF THE GREAT PARK NEIGHBORHOODS IN PLANNING AREA 51 (ORANGE COUNTY GREAT PARK); FILED BY FIVEPOINT COMMUNITIES MANAGEMENT
3) Adopt Resolution No. 21-3827 – A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP NO. 19130 (FILE NO. 00826530-PTT), COVERING 192.7 GROSS ACRES TO ALLOW FUTURE DEVELOPMENT OF RESIDENTIAL AND PRIVATE PARK USES WITHIN DEVELOPMENT DISTRICT 5-SOUTH AND DEVELOPMENT DISTRICT 6-NORTH OF THE GREAT PARK NEIGHBORHOODS IN PLANNING AREA 51 (ORANGE COUNTY GREAT PARK); FILED BY FIVEPOINT COMMUNITIES MANAGEMENT
4) Adopt Resolution No. 21-3828 - A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP

19121 (FILE NO. 00826522-PTT), COVERING 69.0 GROSS ACRES TO ALLOW FUTURE DEVELOPMENT OF RESIDENTIAL, PRIVATE PARK, AND WATER QUALITY BASIN USES WITHIN A PORTION OF DEVELOPMENT DISTRICT 6 OF THE GREAT PARK NEIGHBORHOODS IN PLANNING AREA 51 (ORANGE COUNTY GREAT PARK); FILED BY FIVEPOINT COMMUNITIES MANAGEMENT

**COMMISSION BUSINESS**

**5. GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE**

**RECOMMENDED ACTION:**

1) Review and provide input on the key features of the Draft Housing Element Update.
2) Continue the item to regular Planning Commission meeting on July 15, 2021.

**6. COMMISSIONER LIMB'S WHITE PAPER DISCUSSION TO CREATE A PLAN FOR INCREASING IRVINE'S AFFORDABLE HOUSING TO MEET THE STATE'S REQUIREMENTS**

**7. COMMISSIONER GAIDO'S REQUEST TO ESTABLISH SUBCOMMITTEE TO CREATE A DESIGN IMPLEMENTATION MANUAL FOR ELECTRONIC SIGNS**

**STAFF REPORTS**

**PLANNING COMMISSION REPORTS**

**ADJOURNMENT**

**NOTICE TO THE PUBLIC**

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission

The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

## STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org/planningcommission* at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

## SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

## SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

MEDIA TYPES AND GUIDELINES

1. Written Materials/Handouts: Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings: Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals: Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

## CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Planning Commission liaison at 949-724-6465.

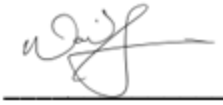
Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II).

## MEETING SCHEDULE

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on June 17, 2021 by 8 p.m. as well as on the City's web page.



_____
Commission Liaison

# 1b. Staff Report for July 1, 2021

## REQUEST FOR PLANNING COMMISSION ACTION

**MEETING DATE:** JULY 1, 2021

**TITLE:** GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE

Director of Community Development

### RECOMMENDED ACTION

1. Review and provide input on the key features of the Draft Housing Element Update.
2. Continue the item to regular Planning Commission meeting on July 15, 2021.

### EXECUTIVE SUMMARY

State law requires all cities to update the Housing Element of its General Plan every eight years. It further requires the current update to be completed by October 2021 and the City is undertaking this process. The City's Housing Element was adopted by the City Council in 2013 for the 2013-2021 planning period. This update will address the 2021-2029 planning period. Staff is preparing the draft 2021-2029 Housing Element that will be submitted to the California Department of Housing and Community Development (HCD) for its required review prior to Planning Commission and City Council final approval, which is tentatively scheduled for fall/winter 2021.

The most significant update included in the draft 2021-2029 Housing Element is the identification of sites to accommodate the Regional Housing Needs Assessment (RHNA) and enhanced housing policies to support housing and affordability consistent with new state statute. The RHNA has been significantly increased from the current 5$^{th}$ Cycle RHNA allocation issued by the Southern California Association of Governments (SCAG). It is important to note that housing element law does not require a city to build housing units, but rather to demonstrate that the city has the land capacity to address RHNA through a required sites inventory analysis.

The content of the draft 2021-2029 Housing Element is structured for consistency with the requirements set forth in state law. In addition to responding to the requirements of state law, the Housing Element demonstrates how the strategies to meet the City's locally determined housing needs are addressed through plans, programs, and projects. This report includes an update on the status of the Housing Element Draft and how complies with state housing element law. Staff plans to bring the full draft document for review and

input from the Planning Commission meeting at its July 15 meeting. The draft will then be submitted to HCD for its preliminary review and, ultimately brought back for final Commission input and City Council adoption in fall/winter 2021/2022.

**COMMISSION/BOARD/COMMITTEE RECOMMENDATION**

Not applicable.

**ANALYSIS**

Background

Under California law (Government Code Section 65580 et seq.), cities must update their housing element every eight years. As prescribed by law, the current update must be completed by October 2021. The City must transmit the draft 2021-2029 Housing Element to HCD for a 60 day preliminary review prior to final review and adoption by the Planning Commission and City Council. Once the draft 2021-2029 Housing Element is adopted by the Planning Commission in fall 2021 and the City Council in winter 2021, the final 2021-2029 Housing Element will be transmitted to HCD for certification. The purpose of a housing element is to assess a community's housing needs, identify obstacles to meeting those needs, and demonstrate capacity to accommodate the City's "fair share" of the region's need for new housing to accommodate projected population growth. The statewide housing mandate for all cities to accommodate their share of housing needs is known as the RHNA. A housing element must also include policies and goals that work towards implementation of the element over the planning period.

Irvine's current Housing Element for the planning period 2013-2021 was adopted by the City Council in September 2013 and it was found by HCD to be in full compliance with state housing element law. The Housing Element update will cover the state-required eight-year planning period beginning October 15, 2021, and ending October 15, 2029. The update will address various state mandates including the RHNA, which has been significantly increased from the current 12,149 units to 23,610 units. In addition to this increase, a significant change to state housing element statute is the requirement to demonstrate adequate sites to accommodate the RHNA at all affordability levels.

Housing Element Requirements

State law requires each city to prepare and adopt a housing element as part of its General Plan. According to State law, the Housing Element must: provide goals, policies, quantified objectives and scheduled programs to preserve, improve and develop housing. The Housing Element must identify and analyze existing and projected housing needs for all economic segments of the community.

*Housing Needs Assessment*

The state develops housing demand projections and apportions these projections to each of the state's regions. In Orange County, SCAG allocates the state's regional projected demand to individual jurisdictions. This allocation is referred to as the 6th Cycle RHNA, and is intended to reflect the projected housing demand of each jurisdiction. State law requires that jurisdictions incorporate this allocation into their Housing Element update. In order to assess projected housing needs, a complete description of the City's most recent population estimate, and general characteristics of the employment market is provided. This information offers insight into the types of jobs in the community and the incomes associated with such jobs. It also identifies proposed development activities and future housing needs generated by new employment opportunities.

The "Housing Needs" section of the Housing Element identifies and analyzes the existing and projected housing need of the community pursuant to the RHNA. This is different from previous cycles where the RHNA only included the projected need. An assessment must be undertaken of the community's existing and projected housing needs based on household characteristics, housing stock conditions, special housing needs, and demographic, and employment trends. The City's total final RHNA allocation is 23,610. The projected need for the City, which is based on planned development and the City's official growth forecast is 7,690 units. The existing need for the City is 15,864 and is solely based on a jurisdiction's access to jobs and transit. The existing need also included additional units that were reallocated from disadvantaged communities (DACs) in Orange County. An additional 56 units were allocated to the City as a result of any successful RHNA appeal. The assessment of existing housing needs includes current demographic information, such as the total population, the number of households over-burdened by housing costs (define here), the number of households living in overcrowded conditions, and special housing needs. It also includes the number of housing units that need rehabilitation, as well as assisted affordable units at risk of converting to market rate. The majority of the data included in this section has been pre-certified by HCD for the SCAG region.

Projected need is the household growth for jurisdictions between July 1, 2021, and October 1, 2029. Existing need is considered the remainder of the regional determination after projected need is subtracted. The allocation establishes the number of new units anticipated to be needed, by income category, to accommodate the expected population growth over the planning period of the Housing Element. The housing needs findings are used to inform and develop the Housing Element policies and programs to ensure that the City focuses its efforts on the community's identified needs.

*Sites Inventory, Analysis, and Goals and Policies*

State law requires jurisdictions to provide an inventory of land suitable for residential development that will allow for, and facilitate production of, the City's regional share of housing as determined by the RHNA.

To determine whether the City has sufficient land to accommodate its share of regional housing needs for all income groups, the City must identify "adequate sites" in the Housing Element site inventory. The purpose of the housing element's site inventory is to identify and analyze specific land (sites) that is available and suitable for residential development in order to determine the jurisdiction's capacity to accommodate residential development and reconcile that capacity with the jurisdiction's RHNA. The site inventory enables the jurisdiction to determine whether there are sufficient adequate sites to accommodate the RHNA by income category. A site inventory and analysis will determine whether program actions must be adopted to "make sites available" with appropriate zoning, development standards, and infrastructure capacity to accommodate the new housing need.

Other characteristics to consider when evaluating the appropriateness of sites include physical features (e.g., size and shape of the site, improvements currently on the site, slope instability or erosion, or environmental and pollution considerations), location (e.g., proximity and access to infrastructure, transit, job centers, and public or community services), competitiveness for affordable housing funding (e.g., Low Income Housing Tax Credit score criteria), and likelihood or interest in development due to access to opportunities such as jobs and high performing schools. When determining sites to include in the inventory to meet the lower income housing need, HCD recommends that a local government first identify development potential in high opportunity neighborhoods. High opportunity areas are places that currently have strong economic, environmental, and educational outcomes. Locating affordable housing in high opportunity areas would result in more racial integration of neighborhoods, and offer new economic opportunities to lower income segments of the population. This will assist the local government in meeting its requirements to affirmatively further fair housing and ensure developments are more competitive for development financing.

Sites are considered suitable for residential development if zoned appropriately and available for residential use during the planning period. Housing Element law does not require a jurisdiction to build housing units, but rather to demonstrate that the jurisdiction has the land capacity to address its RHNA. If a jurisdiction cannot demonstrate that the existing zoning and General Plan designations can accommodate its RHNA allocation, the jurisdiction is required to re-zone land in order to have sufficient capacity, among other programs that may also be required. Even if a city re-zones the land to accommodate residential, market and development trends will ultimately dictate the approval and construction of residential units. The City's draft 2021-2029 Housing Element demonstrates that Irvine does not have sufficient capacity under the current General Plan to meet the new RHNA through vacant land capacity and will need to re-zone land and update the Genera Plan and Zoning Ordinance to accommodate the RHNA. With the proposed re-zoning and inclusion of new policies and programs, the City is able to identify sufficient capacity to accommodate the 6th Cycle RHNA.

The City's 6th Cycle RHNA has been significantly increased from the 5th Cycle RHNA of 12,149 units to 23,610 total units. The 6th Cycle RHNA will replace the current allocation when the Housing Element is updated, adopted by the City Council, and certified by the state before the statutory deadline. Table 1 below shows Irvine's RHNA allocation of housing units broken down by income category for the 2021-2029 planning period.

Table 1
2021-2029 Irvine Regional Housing Needs Allocation

| Income Category | RHNA |
|---|---|
| Category 1 (0% - 50% AMI[1]) (Extremely Very Low/Very Low) | 6,396 |
| Category 2 (51% - 80% AMI) (Low) | 4,235 |
| Category 3 (81% - 120% AMI) (Moderate) | 4,308 |
| Category 4 (over 120% AMI) (Above Moderate) | 8,671 |
| Total Units | 23,610 |

Note: [1] AMI refers to Area Median Income for Orange County.

Housing Element statute has been modified the past several years, adding new requirements that must be included in a jurisdiction's Housing Element update. This includes the addition of the Affirmatively Further Fair Housing (AFFH) section and the "no net loss" requirement in the site inventory. "No net loss" requires a jurisdiction to maintain adequate sites to accommodate its remaining unmet RHNA by each income category at all times throughout the entire planning period. Specifically, if a jurisdictions approves a development of a parcel identified in its Housing Element sites inventory with fewer units than shown in the Housing Element, it must either make findings that the Housing Element's remaining sites have sufficient capacity to accommodate the remaining unmet RHNA by each income level, or identify and make available sufficient sites to accommodate the remaining unmet RHNA for each income category. In addition to the "no net loss" requirement, the City must identify an adequate supply of above moderate or "market rate" units to ensure the affordable units are constructed. As a result of this requirement, the City must identify more sites and units than identified in the RHNA.

*Constraints*

A number of factors can constrain the development and improvement of housing. These include both governmental and non-governmental constraints, which are reviewed in Housing Constraints section of the draft 2021-2029 Housing Element. State law requires the City to analyze land use controls, fees and exactions, on- and off-site improvement requirements, building codes and enforcement thereof, permit and processing procedures, and potential constraints on the development or improvement of housing for persons with disabilities. The draft 2021-2029

Housing Element generally finds that the City land use controls do not create unnecessary constraints to housing development.

Non-governmental constraints must also be analyzed, including the availability and cost of land, as well as construction. These constraints are often out of the City's control, but can result in housing that is not affordable to low- and moderate-income households.

*Goals, Policies, and Programs*

Based on the results of the public participation, housing needs assessment, sites inventory and analysis, and constraints, the draft 2021-2029 Housing Element establishes goals, policies, and programs to facilitate the provision of housing that fulfills the diverse needs of the community.

The draft 2021-2029 Housing Element establishes six goals, which are statements of community desires that are broad in both purpose and aim, but are designed specifically to establish direction. Policies provide specific standards for achieving each goal, and are further articulated in the programs, which identify actions the City will implement to achieve each goal and policy.

Many of the goals, policies, and programs have not changed from the 2013-2021 Housing Element. Some have been modified to simplify, avoid redundancy, or reflect current practice, and are outlined in the Goals, Policies and Programs section. New goals, policies, and programs have been added to build upon Irvine's success in building affordable housing throughout the community and address the City's significant RHNA allocation. Some of the key proposed policies being considered include:

- An increase to the inclusionary zoning ordinance to mandate 20 percent of new housing projects are at affordable price points, rather than the current 15 percent mandate.
- Target city, county, state, and certain privately owned sites for 100 percent affordable residential projects.
- Coordinate efforts and enhance partnership with the Irvine Community Land Trust (ICLT).
- Increase the affordable in-lieu fee to reflect current costs.
- Extend the term of affordability on affordable units set to expire in the next Housing Element Cycle (2021-2029)
- Introduce residential uses in targeted retail centers in the city to create mixed use environments.

- Maximize density near the Irvine Transportation Center with a residential overlay, for transit-oriented development.
- Expand the residential overlay and unit cap in the Irvine Business Complex.
- Introduce residential overlay at religious and school sites.
- Allow conversion of hotel and motel to residential units.

*Site Inventory*

State law mandates that cities develop a sites inventory analysis to identify vacant land or land that can be redeveloped during the planning period. The inventory must include a map identifying parcels, general plan and zoning designation, acreage and unit capacity across affordability levels. The sites inventory analysis included in the draft 2021-2029 Housing Element demonstrates that the RHNA of 23,610 total housing units can be accommodated through a combination of the remaining vacant residential sites in Irvine and non-vacant sites that can be redeveloped with a residential component. This will require the City to complete a comprehensive update to the General Plan and Zoning Ordinance following the adoption of the Housing Element.

Per Housing Element statute and HCD's "Housing Element Site Inventory Guidebook", the City must identify adequate sites at the parcel level. Additionally, according to the guidebook, "the analysis of 'appropriate zoning' should not include residential buildout projections resulting from the implementation of a jurisdiction's inclusionary program or potential increase in density bonus, because these tools are not a substitute for addressing whether the underlying (base) zoning densities are appropriate to accommodate the RHNA for lower income households." This means, the City, despite having a successful inclusionary housing program, is unable to utilize the existing or proposed inclusionary housing program to meet the affordable RHNA allocation. Additional constraints to developing the site inventory include, but are not limited to:

- Density Realism: The City must show precedent for high density residential assumptions by providing documentation that nearby developments are at similar densities.
- Parcel Size: HCD will scrutinize affordable units on sites that are less than 0.5 acres or more than 10 acres.
- Affirmatively Furthering Fair Housing (AFFH): The City is required to spread affordable units throughout the City to ensure there isn't a concentration of affordable units in one area.

A detailed breakdown of the residential development capacity by income category will be provided in the Projected Housing Needs section of the draft 2021-2029

Housing Element. The City will accomplish this task while continuing Irvine's tradition of strategic and thoughtful planning. Additionally, the draft 2021-2029 Housing Element continues the community's commitment to a full spectrum of housing opportunities for all income groups at all stages of life.

*Quantified Objectives*

A component of the Housing Element includes quantified objectives for achieving the maximum number of units, by income level, to be constructed, rehabilitated, and conserved over the planning period. Staff has identified the City's housing needs, surveyed developable parcels, identified financial resources, analyzed constraints, and assessed appropriate programs and policies. As a result of this analysis an estimate was made of the maximum number of units that can reasonably be expected to be developed by the private sector. It is important to note that quantified objectives need not equal the RHNA allocation.

Review of Past Programs in the Previous Housing Element

The City must evaluate the results from housing programs implemented during the previous Housing Element. The review of past programs discusses the progress, effectiveness, and appropriateness of the previous Housing Element goals, objectives, policies, and programs.

*Public Participation*

Pursuant to California Government Code Section 65583(c)(9), local governments are required to "make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element." To meet these requirements, the City of Irvine has organized multiple activities over the last 10 months to engage with all economic segments of the community through a community outreach survey, two focus groups, three community workshops, a Planning Commission study session, a City Council scoping session, and stakeholder meetings with the development community, property owners, non-profit organizations, public agencies, such as the Irvine Unified School District, affordable housing providers including the Irvine Community Land Trust, and special interest groups.

To promote the community engagement activities and events, the City used its website, social media accounts, press releases, mailers, interest list notifications, fliers, and public email system. The City also provided outreach materials in English and seven additional languages: Chinese (Traditional and Simplified), Korean, Vietnamese, Japanese, Farsi, Arabic, and Spanish to ensure the outreach materials reached many diverse segments of the community.

The City Council conducted a scoping session on February 9, 2021, and the Planning Commission conducted a study session on February 18, 2021, on the Housing Element update process. Input from the workshops and meetings with the public, City Council, and Planning Commission, as well as staff review of the current Housing Element and changes in state housing law were used to develop the draft document presented to the Planning Commission.

In preparing for the Sites Inventory Analysis, staff identified potential opportunity sites and mailed outreach letters to those property owners. The purpose of these mailers was to gauge interest of property owners in either converting their site for residential purposes or developing residential homes in combination with their existing use within the next eight years. In addition, staff met with major property owners, Irvine Company and FivePoint, to discuss potential opportunity sites for the Housing Element.

City staff held meetings with a variety of stakeholders including affordable housing developers and several meetings with the Irvine Community Land Trust (ICLT) on opportunities to coordinate and collaborate. The City hosted three community workshops throughout the month of April. On April 5, 2021, the City held a virtual community workshop with stakeholders in the Irvine Business Complex (IBC) and Spectrum areas, specifically property owners, commercial real estate brokers, the Building Industry Association (BIA), Irvine Chamber of Commerce, and the general public with an interest in these neighborhoods. On April 22, 2021, and April 29, 2021, the City held virtual community-wide workshop to present the 6$^{th}$ Cycle Housing Element Update. On April 22, 2021, 105 participants attended the workshop and on April 29, 2021, 92 participates attended the workshop.

In addition, staff utilized community survey and focus group results from City residents that are part of the City's, separate and ongoing, General Plan Update. The survey included questions focused on housing issues to support the Housing Element public engagement effort. The focus groups allowed for dedicated discussions that highlighted residents' perspectives on housing topics, including state-mandated housing and where such housing will be compatible in the City.

The City gathered feedback from all outreach activities and evaluated the findings to identify the issues and topics that were most pressing to the Irvine community. The City then used this information to help develop goals, policies, and proposed activities for the planning period.

Review Process

The Housing Element will be forwarded to HCD for a mandatory 60-day review for consistency with state law and provisional certification. The review by HCD must occur at least 90 days prior to the City Council taking final action on the Housing Element. Upon incorporation of state feedback, staff will present the final draft 2021-2029 Housing

Element to the Planning Commission in the fall/winter followed by final review and the City Council consideration of formal adoption. The City will be taking advantage of the 120 day grace period following the October 15, 2021, deadline to adopt the final Housing Element. The entire 6th Cycle Housing Element cycle has been delayed at several levels, including the six-month delay at SCAG for the adoption of the final RHNA (March 2021), the delayed release of the Affirmatively Furthering Fair Housing (AFFH) guidelines by HCD (April 2021), and COVID. Upon submittal of the final Housing Element to HCD for certification, the state will have 90 days to confirm whether the Housing Element is consistent with HCD's provisional certification and thereby complies with state law.

**ENVIRONMENTAL REVIEW**

An environmental evaluation for the project will be prepared after review and incorporation of any amendments requested by HCD. Staff will bring the environmental certification when the Planning Commission considers adoption of the Housing Element in the fall.

**ALTERNATIVES CONSIDERED**

The Planning Commission can provide feedback to be incorporated into the draft document, prior to the transmittal to HCD for the required 60 days review.

**FINANCIAL IMPACT**

The Community Development Department budget includes a work program to update the Housing Element. The program includes staff time and consultant services to research and prepare the updated Housing Element. The City will also rely on reimbursement from Senate Bill 2 and Local Early Action Plan (LEAP) grants to fund the Housing Element.

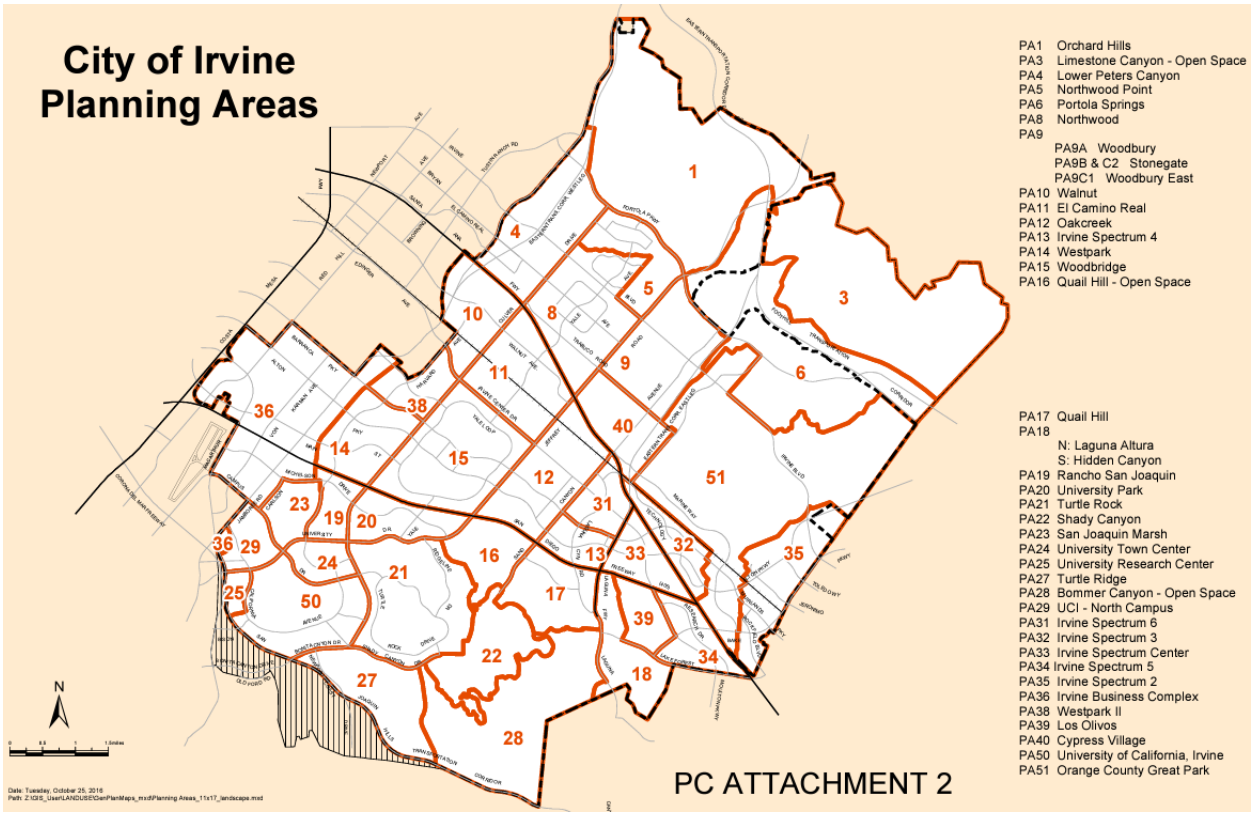
**REPORT PREPARED BY**: Marika Poynter, Principal Planner

**PC ATTACHMENTS:**

1. Site Inventory Table
2. Planning Area Map

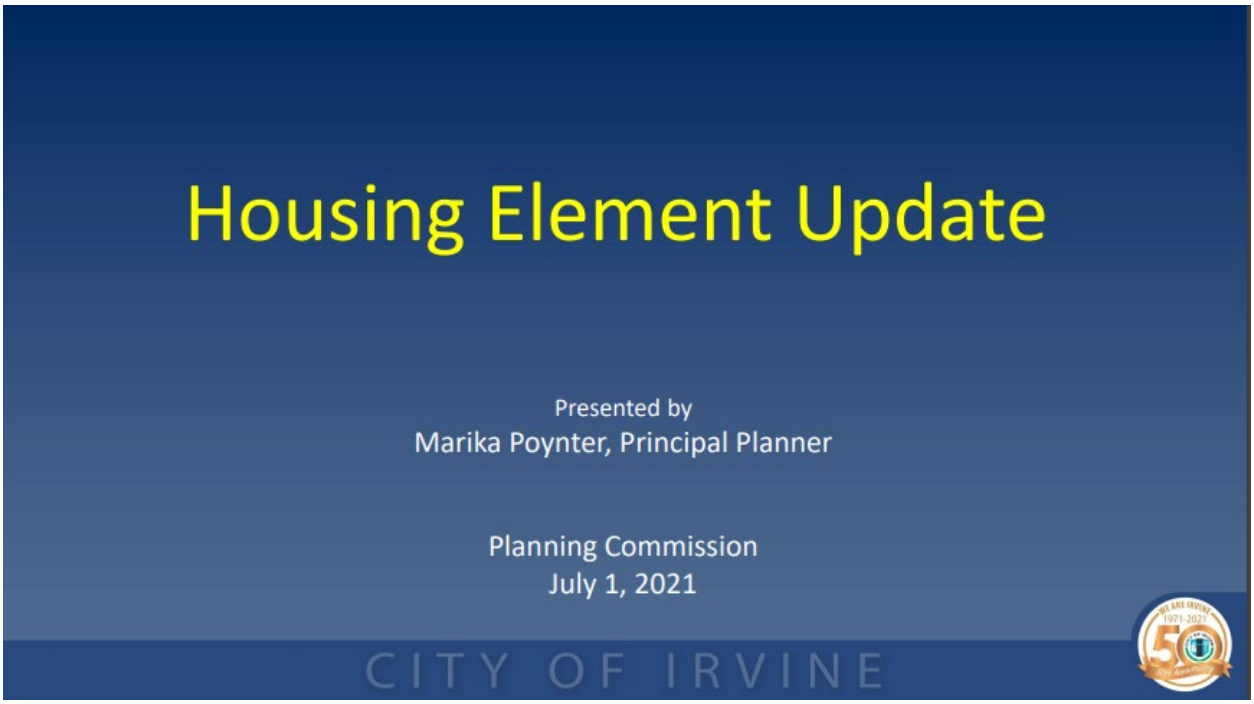
| | Total | Category 1 | Category 2 | Category 3 | Category 4 |
|---|---|---|---|---|---|
| **RHNA** | **23,610** | **6,396** | **4,235** | **4,308** | **8,671** |
| PA 4 (Lower Peters Canyon) | 2,007 | 512 | 341 | | 1,154 |
| PA 19 (Rancho San Joaquin) | 2,202 | 279 | 186 | 173 | 1,564 |
| PA 23 (San Joaquin Marsh) | 1,000 | 600 | 400 | | |
| PA 24 (University Town Ctr.) | 823 | 237 | 158 | 43 | 385 |
| PA 32 (Spectrum 3) | 17,740 | 447 | 298 | 1,702 | 15,293 |
| PA 33 (Irvine Spectrum Ctr.) | 943 | 200 | 134 | 62 | 547 |
| PA 36 (IBC) | 10,986 | 1,517 | 1,010 | 791 | 7,668 |
| PA 40 (Cyress Village) | 613 | 300 | 156 | | 157 |
| PA 51 (OC Great Park) | 15,772 | 2,645 | 2,189 | 1,948 | 8,990 |
| All Other PA | 8,903 | 0 | 0 | 754 | 8,149 |
| **Site Inventory** | **60,989** | **6,737** | **4,872** | **5,473** | **43,907** |
| ***Difference*** | ***37,379*** | ***341*** | ***637*** | ***1,165*** | ***35,236*** |

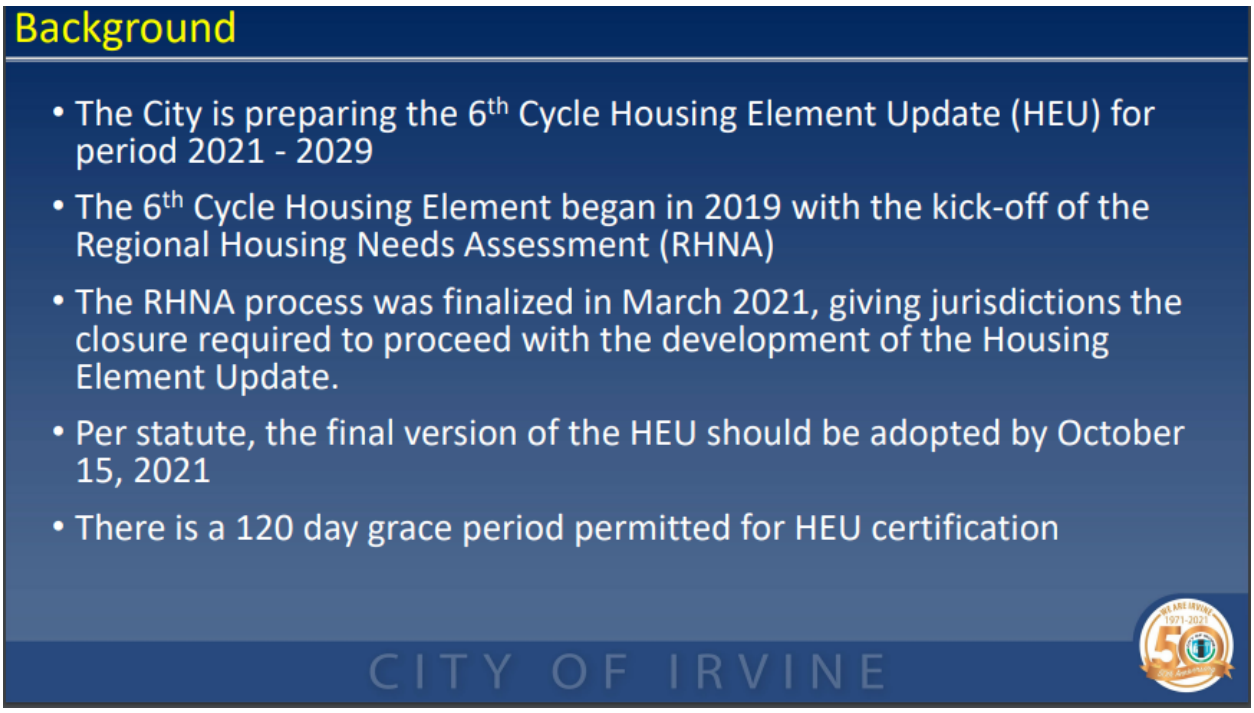
CITY OF IRVINE PC ATTACHMENT 1




PC ATTACHMENT 2

## 1c. Presentation for July 1, 2021



## Background

- Draft HEU to Planning Commission on July 1 and 15
- Draft HEU submitted to HCD after Planning Commission review
  - This is a statutory 60 day review by HCD of the draft HEU
  - The City will not meet the statutory October 15, 2021 with this schedule, but will utilize the 120-day grace period for certification.
- Final HEU to Planning Commission and City Council in December / January
- Final certification by HCD in early 2022

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## Housing Element Purpose

- The City is preparing the 6th Cycle Housing Element Update (HEU) for period 2021 - 2029
- The Housing Element is a State-mandated policy document that:
  - Provides direction for implementation of various programs to meet existing and future housing needs for all income levels in the City
  - Provides goals, policies, programs, and objectives that accommodate opportunities for the preservation of existing housing and development of new housing
  - Demonstrates how the City will accommodate its RHNA allocation

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## Regional Housing Needs Assessment

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,396 |
| Category 2 (51 – 80% AMI) | 4,235 |
| Category 3 (81 – 120% AMI) | 4,308 |
| Category 4 (120% AMI or above; considered "market rate") | 8,671 |
| **TOTAL** | **23,610** |

- Buffer for "no net loss" for Categories 1 and 2 – City will apply it for Categories 1, 2, and 3
- Actual number needed is anticipated to exceed allocation
- Affirmatively Furthering Fair Housing (AFFH)

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## Key Discussion Items

- Site Inventory
  - Constraints/Approach to developing sites
  - Draft Site Inventory
- Policies and Programs
  - Enhancements to existing policies and programs
  - Proposed new policies and programs to facilitate and encourage housing production, and more specifically affordable housing

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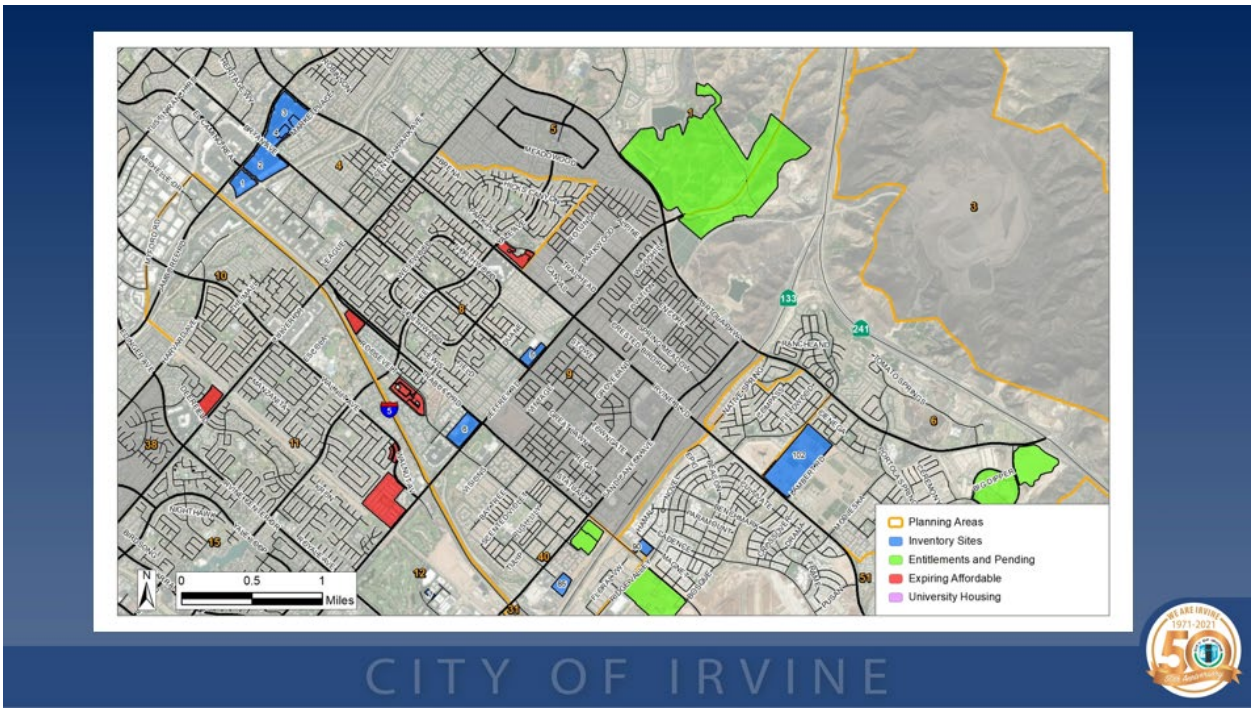
## Constraints and Approach for Developing Site Inventory

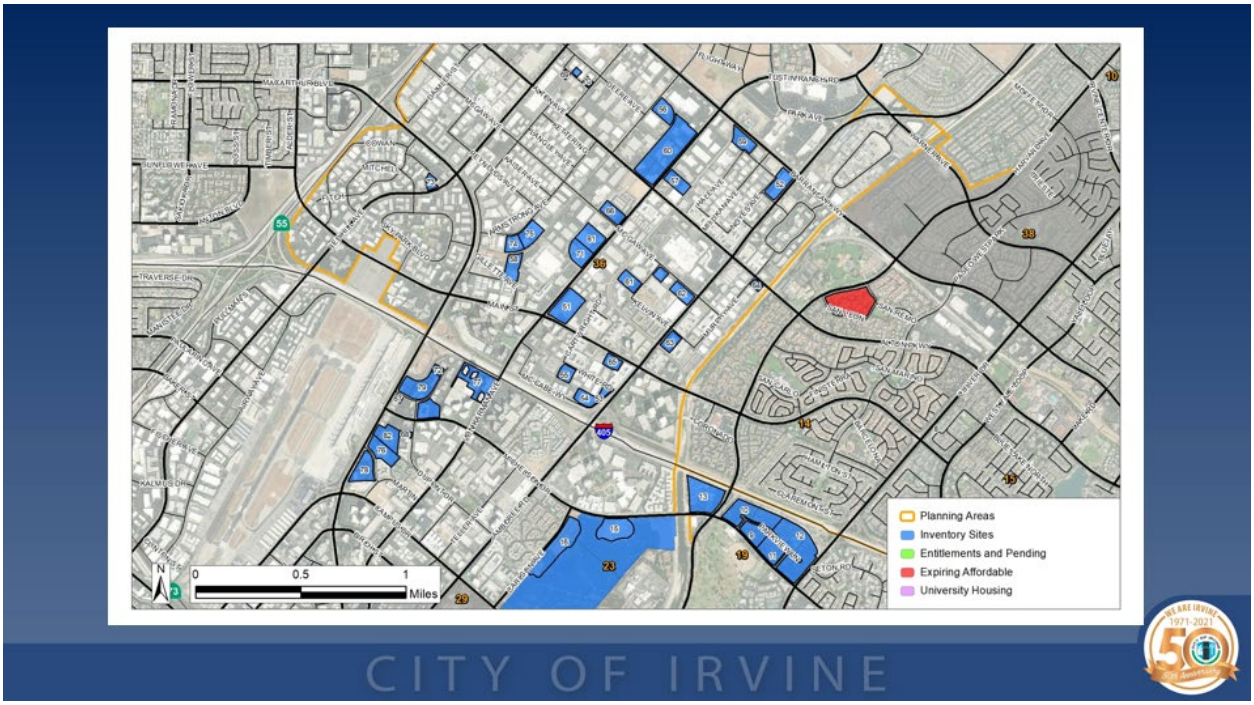
- Inclusionary Housing: HCD will not permit inclusionary to be used on any future projects to meet the RHNA (HCD guidelines)
- Density Realism: City must show precedent for high density residential assumptions (nearby developments at similar density) (HCD guidelines)
- Parcel Size: HCD will scrutinize sites identified for affordable units on sites below 0.5 acres and more than 10 acres (HCD guidelines)
- Preservation of Open Space/Natural Lands: The City did not include locally protected open space/natural lands in the site inventory.
- Preservation of Neighborhood Core: The City focused the proposed draft site inventory to preserve the neighborhood core

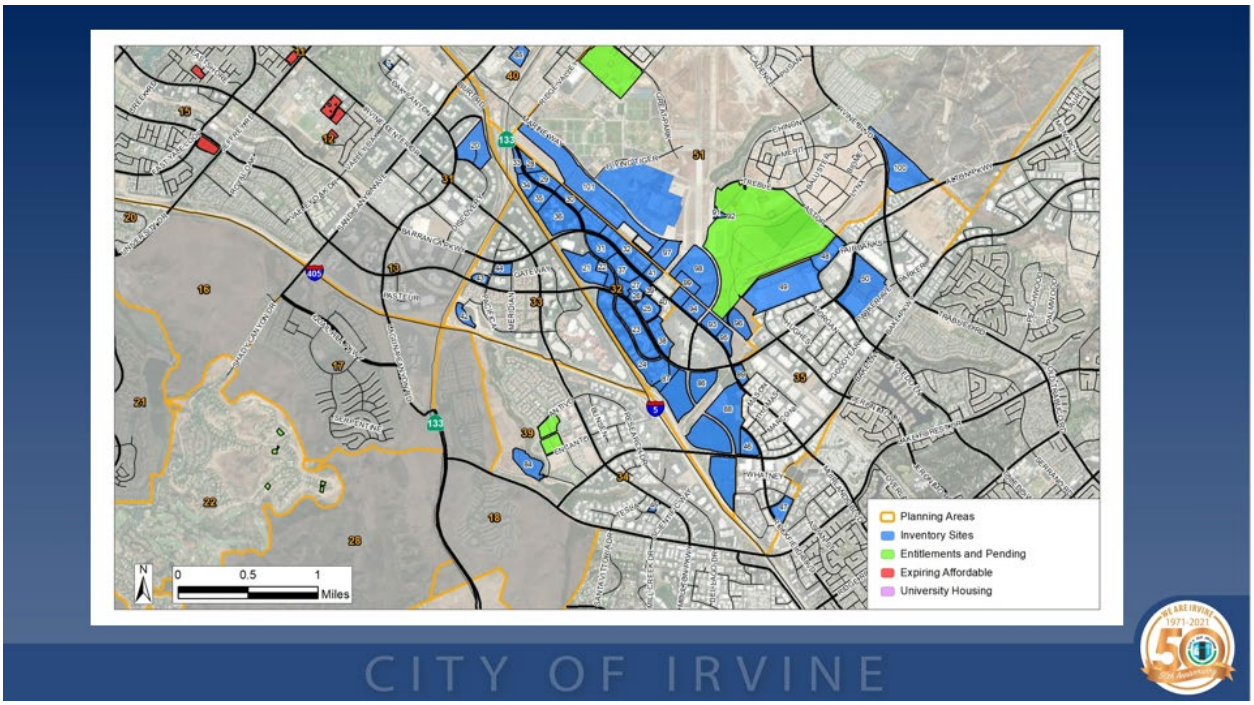
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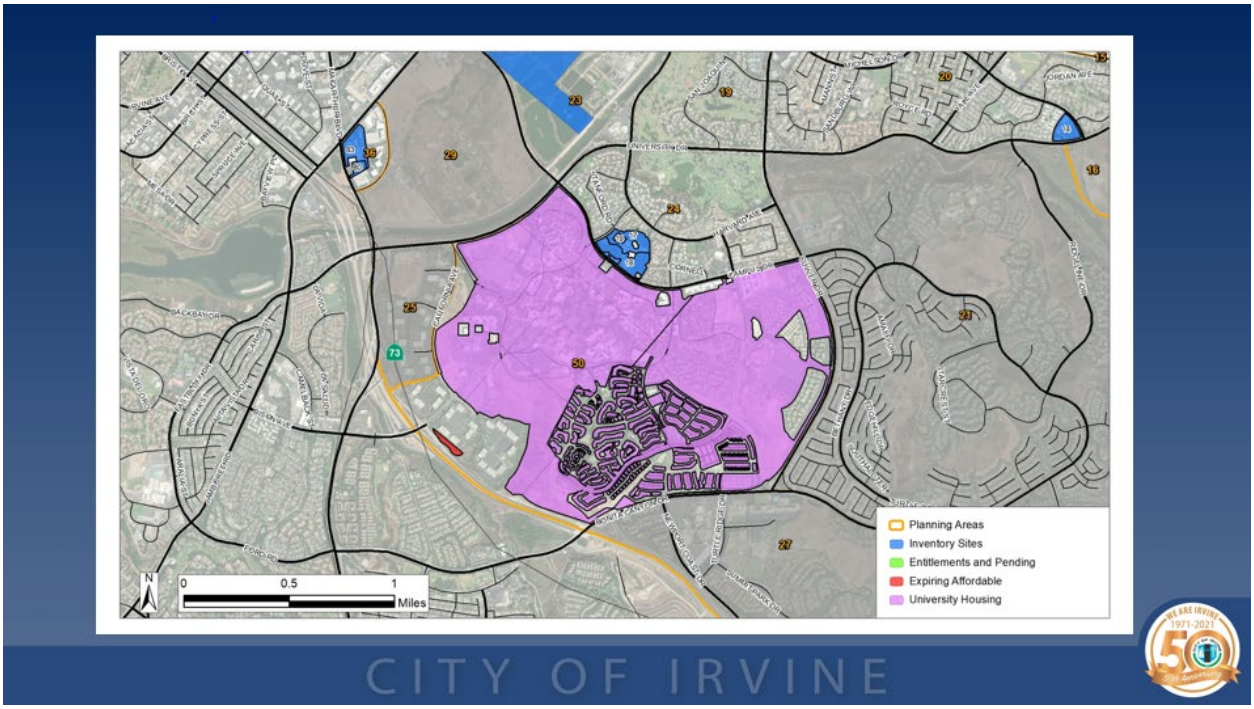
| Planning Area Name | Total | Category 1 | Category 2 | Category 3 | Category 4 |
|---|---|---|---|---|---|
| **RHNA** | **23,610** | **6,396** | **4,235** | **4,308** | **8,671** |
| PA 4 (Lower Peters Canyon) | 2,007 | 512 | 341 | | 1,154 |
| PA 19 (RSJ Area) | 2,202 | 279 | 186 | 173 | 1,564 |
| PA 23 (San Joaquin Marsh) | 1,000 | 600 | 400 | | |
| PA 24 (University Town Ctr.) | 823 | 237 | 158 | 43 | 385 |
| PA 32 (Spectrum 3) | 17,740 | 447 | 298 | 1,702 | 15,293 |
| PA 33 (Irvine Spectrum Ctr.) | 943 | 200 | 134 | 62 | 547 |
| PA 36 (IBC) | 10,986 | 1,517 | 1,010 | 791 | 7,668 |
| PA 40 (Cypress Village) | 613 | 300 | 156 | | 157 |
| PA 51 (Great Park Neighborhoods) | 15,772 | 2,645 | 2,189 | 1,948 | 8,990 |
| All Other PA (including UCI) | 8,903 | 0 | 0 | 2,864 | 23,479 |
| **Site Inventory** | **78,429** | **6,737** | **4,872** | **7,583** | **59,237** |
| ***Difference*** | *54,819* | *341* | *637* | *3,275* | *50,566* |

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Planning Areas
Inventory Sites
Entitlements and Pending
Expiring Affordable
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Planning Areas
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Expiring Affordable
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## Draft Policy Recommendations

- Update the Land Use Element and Zoning Ordinance (subsequent effort) to consider:
  - Overlays to promote residential and mixed use:
    - In Planning Area 32 at 50-70 units/acre
    - In the IBC at 50-70 units/acre
    - At targeted retail centers at 30-60 units/acre
    - At religious and school sites at 30-60 units/acre – focus on workforce housing
    - Allow conversion of hotel/motel to residential

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## Draft Policy Recommendations

- Increased density with focus on transit-oriented development in Great Park Neighborhoods – adjacent to the Irvine Train Station – this is not to include the designated Orange County Great Park
- Target City, County, State, and certain privately owned sites for 100 percent affordable residential projects
- Consider increasing the inclusionary zoning ordinance to mandate 20 percent of new housing projects are at affordable price points instead of the existing 15 percent

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## Draft Policy Recommendations

- Extend the term of affordability on affordable housing units set to expire in the next Housing Element Cycle (2021-2029) – approximately 912 units
- Amend the existing affordable in-lieu fees

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## Draft Policy Recommendations

- Coordinate efforts and enhance partnership with the Irvine Community Land Trust (ICLT)
- Consider ways to streamline the affordable housing development process
  - Expedite the entitlement process for affordable housing projects
  - Evaluate the costs and benefits of reducing or deferring development fees

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## Recommended Action

- Review and provide input on the key features of the Draft Housing Element Update
- Continue the item to the regular Planning Commission on July 15, 2021

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# 1d. Comments Summary and Analysis for July 1, 2021 PC

| Comments and Questions Received at July 1 PC Meeting | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Why affordable housing is not going into outlying areas such as Portola Springs? Understands no transit and no retail/commercial serving the area.<br><br>Opposed to using Great Park because many lots already sold off and not consistent with original vision.<br><br>In the IBC between Barranca and Main as well as Redhill and Jamboree is a good place for units because many properties are for lease.<br><br>Impact on existing residential property owners; protect character of Rancho San Joaquin area; Retain Boomers because its used for parking for University Synagogue | Susan Sayre, Irvine resident | Refer to Chapter 7, Adequate Sites Inventory Analysis and Methodology, and Appendix D, Site Inventory Form, of the draft Housing Element (HE) posted on-line at www.cityofirvine.org/HEUpdate.<br><br>City staff is aware of the community's desire to preserve the traditional residential core. Mutiple property owners in the Planning Area 19, known as, Rancho San Joaquin, expressed their desire to potentially develop residential uses on their properties, which is reflected in the site inventory. Incorporating the properties into the draft site inventory helps to meet the state requirements of identifying potential sites for housing units and lays the groundwork for further planning and analysis to be completed with future General Plan /Zoning Ordinance work efforts. Any future housing developments will be subject to the development application process and any project specific issues will be addressed at that time.<br><br>The proposed sites are spread throughout the City as required by AB 686, Affirmatively Furthering Fair Housing (AFFH), which is further detailed in Appendix B of the draft HE. |
| Concerned over infrastructure impacts such as parks, | Susan Sayre, irvine resident | Notification of all school districts and utilities serving Irvine as well as Orange County Fire |

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| pedestrian and bicycle trails, and over crowded schools | | Authority (OCFA) and City public safety staff occurred throughout the HEU process.<br><br>As part of the subsequent General Plan Update work effort, an Environmental Impact Report (EIR) will be prepared to assess any impacts to schools, police/fire services, parks/ recreation, water/sewer, and more due to implementing the adopted 6th cycle HE and accommodating the RHNA. |
| Concerned over traffic circulation/additonal parking needs; need public transit system like Spectromotion application.<br><br>Understands that Transportation Department will be commencing a public transportation study. | Susan Sayre, Irvine resident | As part of the subsequent General Plan Update work effort, an Environmental Impact Report (EIR) with traffic study will be prepared.<br><br>Additionally, the Circulation element of the General Plan will be updated to incorporate findings from recent and on-going transportation efforts, in coordination with the City's Transportation Department and OCTA staff. |
| Site inventory summary spreadsheet by Planning Area – what is the realistic number of units you have to plan for?<br><br>What will Planning Area 19, 23 and 24 look like?<br><br>Preserve village character and recreational amenities. | Ford Fuji, 31 year Irvine resident (26 years in University Park and last five years in RSJ) | Refer to Chapter 7, Adequate Sites Inventory Analysis and Methodology, and Appendix D, Site Inventory Form, of the draft Housing Element (HE) posted on-line at www.cityofirvine.org/HEUpdate.<br><br>Irvine is the recipient of the highest RHNA allocation in Orange County.<br><br>The HE must demonstrate there is enough land to accommodate the RHNA by income level (not just the total number), AFFH (new 6th cycle requirement), and provide a no net loss buffer for lower income levels, consistent with State requirements. |

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| | | The site inventory spreads units throughhout the City to meet AFFH requirements. |
| The State requires jurisdictions to base its site inventory on "density realism." Since there are no units in Planning Area 32 what density realism factor is applicable? | Commissioner Limb | PA 32 is close in proximity to PA 33 where existing (higher) density is demonstrated and is close to the Irvine Station which would serve as a catalyst for higher density - transit orieted development.<br><br>Refer to Section 7.6 in Chapter 7, Adequate Sites Inventory Analysis and Methodology, posted on-line at www.cityofirvine.org/HEUpdate for more details. |
| Consider extending affordability terms for existing affordable units. How long would these extensions be for? | Commissioner Knowland | Extensions are 30 years minimum, but City prefers extensions to be in perpetuity and will advocate for those terms. The duration is subject to negotiation with housing developers. Additionally, it is dependent on funding and the City will draw on any available incentives to achieve the longest affordability term possible.<br><br>Refer to the objectives, policies, and programs under Goal 3, Preserve Existing Affordable Housing, in the Housing Plan chapter of the draft HE. |
| When the City conducted outreach, what were the main concerns or wishes of residents for the HEU? | Commissioner Knowland | The main concerns are to: (1) preserve residential neighborhood core; (2) access to jobs and transit; and (3) need for affordable housing. Refer to Appendix A, Public Engagement, in the draft HE for more details. |
| Why are UCI housing units categories 3 and 4? | Commissioner Gaido | It is based on what UCI charges for the units. The graduate student units are considered market-rate. |

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| | | University Hills faculty housing, which is similar to the ICLT development model with the use of leased land, fits within the moderate income level. |
| What happens if we eliminate the affordable housing in-lieu fee or shrink the eligibility criteria for when developers can use in-lieu fees to meet their affordable housing requirements? Believe the City is not getting the affordable units (i.e., not effective). | Commissioner Gaido | Comment noted. Refer to Policy HE-E.3 related to updating inclusionary housing policies and in-lieu fees, in Chapter 8, Housing Plan, of the draft HE. |
| Needs Assessment:<br><br>What is our recommendation on the homeless? Suggest partnering with City of Tustin (e.g., shelter on former Tustin air base)<br><br>Assess the types of jobs (existing and proposed) and associated income levels to match the needs for "workforce housing" to support Irvine's jobs rich environment.f | Commissioner Gaido;<br>Chair Pierson | Refer to Goal 5, which explores maximizing solutions for those experiencing or at risk of homelessness, and its supporting policies and programs in Chapter 8, Housing Plan, of the draft HE.<br><br>The methodology used to allocate the RHNA was developed by SCAG and the data used reflects local input. Thus, the RHNA allocations by income level are representative of the needs of different income levels.<br><br>A higher level of detail is not able to be extracted from the SCAG data in a manner that facilitates further analysis of moderate income level housing needs. |
| HE deadline – what is at jeopardy? | Vice Chair Huang | Every City in San Diego County took advantage of the 120-day grace period except the City of San Diego, so we have been gleaning lessons from SANDAG cities because their HEU cycle is about one year ahead of SCAG's cycle.<br><br>Also, HCD only released its AFFH Guidance Memo on April 27, 2021. |

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| | | SCAG, acknowledging the challenges that jurisdictions are facing in preparing their 6th Cycle HEUs, requested a six-month deadline extension from HCD. However, this request was rejected by the State.<br><br>We don't anticipate exceeding the 120-day grace period and are working diligently towards the extended deadline of February 12, 2022.<br><br>Along with email notifications, the entire draft on-line was posted before the July 15, 2021 Planning Commission meeting . We will leave the public comment period open until we come back to the Planning Commission and City Council, likely in Winter 2020/2021. |
| City Council is communicating with HCD directly – still a lot of uncertainty or unknowns. Therefore, consider deferring item until the next Planning Commission meeting from July 15, 2021 to August 5, 2021.<br><br>Don't want to shortcut this process. Want to ensure that Planning Commission understands what we are submitting.<br><br>Will hold the August 5 date in case PC is not ready to determine if the draft document is ready for submittal to HCD. | Chair Pierson;<br>Commissioner Knowland | February 12, 2022 is the HE deadline with the 120-day grace period factored in. State statute requires a 90-days minimum between when the draft HE is first submitted for the 60-day HCD pre-submittal review and the City's actual adoption of the HEU. When this mandatory 90-day period is factored in, staff recommends not deferring the Planning Commission's review of the draft HE document and also is unsure how much back and forth will be required with HCD.<br><br>The Governor's office will be the one to grant 6-month extension, but there is no certainty that will occur. However, the extension request was rejected by the State. |

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| | | Also, staff's understanding is that housing advocates want a two to four week rest period between the public release of the draft HEU and submittal to HCD for review.<br><br>To clarify, the Planning Commission is reviewing the draft HE document on July 15, 2021 for submittal to HCD for their review, not approving it for adoption. The final draft HE is anticipated to come before the Planning Commission and City Council in Winter 2021/2022 for adoption purposes. |
| What are the penalities if the HEU is not certified by February 12, 2022 deadline? | Chair Pierson | Without a certified HEU, the City risks the following:<br><br>• Millions of dollars in funding per year being withheld when a certified HEU is required prerequisite for funding grants and opportunities<br>• Default to a four year HEU cycle, which is probably a million dollar exercise in itself<br>• With the exception of emergency building permits, HCD can stop all residential and commercial building permits, no matter the scale and size. |
| When is the full draft HE available for review? | Commissioner Jong | The draft HE will be available around July 9, 2021.<br><br>Much of the draft 6th cycle HE builds upon the 5th cycle HE document. The site inventory is new. Pre-approved HCD data sets are used in the existing conditions chapter, which is new. |

## 2. Release of Draft Housing Element Document on-line at www.cityofirvine.org/HEUpdate on July 12, 2021

### 6th Cycle Draft Housing Element

The City of Irvine has released its 6th Cycle draft Housing Element for the 2021-2029 period. The draft update accommodates the City's total 23,610-unit Regional Housing Needs Assessment (RHNA) allocation, a State mandate, and includes a comprehensive plan of housing goals, policies, and programs consistent with State Housing Element laws.

View the draft below and submit any comments or questions to the City of Irvine's Community Development Department at 1 Civic Center Irvine, CA 92606. Comments and questions may also be sent via email at *GPUpdate@cityofirvine.org* or phone at 949-724-6395.

2021-2029 DRAFT HOUSING ELEMENT

**2021-2029 Draft Housing Element Sections:**

1) Housing Element - No Appendices
2) Appendix A: Public Engagement
3) Appendix B: Affirmatively Furthering Fair Housing Analysis
4) Appendix C: Senate Bill 2 Compliance Sites Inventory
5) Appendix D: Sites Inventory Form

## Updated HEU webpage on August 2, 2021 for updated draft Chapter 8, Housing Plan (excerpt below)

## 2021-2029 DRAFT HOUSING ELEMENT

* At the July 15, 2021 Planning Commission meeting, the Planning Commission requested the Community Development staff to strengthen policies and programs associated with the development of affordable housing. Staff has revised the policies and programs in Chapter 8: Housing Plan to include language that is more definitive, establishes more detailed timeframes for fee programs, and strengthens the support for services to renters and homeowners.

The Chapter 8: Housing Plan revisions is available under the 2021-2029 Draft Housing Element Sections and Upcoming Meetings.

**2021-2029 Draft Housing Element Sections:**

1) Housing Element - No Appendices
2) Appendix A: Public Engagement
3) Appendix B: Affirmatively Furthering Fair Housing Analysis
4) Appendix C: Senate Bill 2 Compliance Sites Inventory
5) Appendix D: Sites Inventory Form
6) Chapter 8: Housing Plan Revisions*

## 2a. Email notification of draft HE release sent on July 12, 2021




The City of Irvine has released its 6th Cycle draft Housing Element for the 2021-2029 planning period. The Housing Element is a mandatory part of the City's General Plan that requires periodic review and updating by the State of California.

Per statute, the 6th Cycle Housing Element should be adopted by October 15, 2021; however, a 120-day grace period is permitted.

The draft update accommodates the City's total 23,610-unit Regional Housing Needs Assessment (RHNA) allocation, a State mandate, and includes a comprehensive plan of housing goals, policies, and programs consistent with State Housing Element laws.

The Draft Housing Element is available on the City's Housing Element Update website at *cityofirvine.org/HEUpdate.* The City welcomes all residents, community stakeholders, and interested parties to review and comment on the document.

Please submit any comments and/or questions on the Draft Housing Element to the City of Irvine's Community Development Department at 1 Civic Center Irvine, CA 92606. Comments and questions may also be sent via email at GPUpdate@cityofirvine.org or phone at 949-724-6395.

For more information about Housing Element Update in the City of Irvine, please visit *cityofirvine.org/HEUpdate*.

برای کسب اطلاعات به‌زبان فارسی، لطفاً با شمارهٔ 949-724-6395 تماس بگیرید.
한국어로된 정보를 원하시면 949-724-6395 로 연락 바랍니다 .
如需中文資訊，請致電 949-724-6395。
有关中文信息，请致电 949-724-6395。
日本語で情報を共有する場合、電話番号949-724-6395までご連絡ください
Para obtener información en español, llame al 949-724-6395.
Để biết thêm thông tin bằng tiếng Việt, xin vui lòng gọi đến số 949-724-6395.
للحصول على المعلومات باللغة العربية، اتصل بالرقم 949-724-6395.

City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
949-724-6000
*cityofirvine.org*




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## 2b. Refer to Part 4 of Appendix A-C for project email notification list. Additional individuals were added to the list as follows (July 2021 and on):

| | | |
|---|---|---|
| Greg Sullivan | CBRE - Infill Land | greg.sullivan@cbre.com |
| Ross Johnson | YIMBY Law | ross@yesinmybackyard.org |
| Alexis Mondares | Public Law Center | amondares@publiclawcenter.org |
| Jim Gallagher | | jimgallagher@cox.net |
| Beverly Khosh | MicroAdvantage, Inc. | beverly.khosh@gmail.com |
| Wesley Hueler | | wesley@irvinelanes.com |
| John L. Hueler | | jlheuler@gmail.com |
| Neal Swerdlow | | nssfinance@aol.com |
| Hind Baki | Mitchell M. Tsai, Attorney At Law | hind@mitchtsailaw.com |
| | The 200 | info@thetwohundred.org |
| Robert Apodaca | Vice Chair, The 200 | robert@thetwohundred.org |
| Dave Klug | City of Irvine | DKlug@cityofirvine.org |
| Marshall Moncrief | Be Well OC | marshall.moncrief@mind-oc.org |
| Valentina Gipson | AT&T | vk3921@att.com |
| Todd Clay | COX | Todd.Clay@cox.com |
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| Christina Perez | WMOC | cperez12@wm.com |
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| Lanae O'Shields | SoCalGas | LOShields@socalgas.com |
| Sheena Ellis | SoCalGas | SDEllis@socalgas.com |
| Christopher Keevern | SoCalGas | CKeevern@socalgas.com |
| Dennis "DJ" Gallagher | SCE | Dennis.Gallagher@sce.com |
| Brian | OCPA | brian@ocpower.org |
| Antonia Graham | OCPA | acgraham@ocpower.org |
| Doug Stuman | Stuman Lloyd | dougstuman@me.com |

# 3a. Meeting Agenda for July 15, 2021

# AGENDA

## PLANNING COMMISSION
## REGULAR MEETING

**July 15, 2021**
**5:30 PM**
**City Council Chamber**
One Civic Center Plaza
Irvine, CA 92606

Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner

### PARTICIPATION AT PLANNING COMMISSION MEETINGS

MEETINGS ARE AVAILABLE TO ATTEND IN-PERSON IN THE CITY COUNCIL CHAMBER OR WATCHED LIVE THROUGH THE "ZOOM" APPLICATION. INFORMATION FOR "ZOOM" CAN BE FOUND ONLINE AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO THE PLANNING COMMISSION AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/PLANNINGCOMMISSION.

**REQUEST TO SPEAK IN PERSON:** IF YOU WOULD LIKE TO ADDRESS THE PLANNING COMMISSION ON A SCHEDULED AGENDA ITEM – INCLUDING A REGULAR BUSINESS ITEM, A PUBLIC HEARING ITEM, OR PUBLIC COMMENTS – PLEASE REGISTER BY COMPLETING THE ELECTRONIC FORM AVAILABLE ON THE KIOSK AT THE ENTRANCE TO THE CITY COUNCIL CHAMBER. PLEASE IDENTIFY ON THE FORM YOUR NAME AND THE ITEM ON WHICH YOU WOULD LIKE TO SPEAK. THE REQUEST TO SPEAK FORM ON THE KIOSK ASSISTS THE CHAIR IN ENSURING THAT ALL PERSONS WISHING TO ADDRESS THE PLANNING COMMISSION ARE RECOGNIZED. IT ALSO ENSURES THE ACCURATE IDENTIFICATION OF MEETING PARTICIPANTS IN THE PLANNING COMMISSION MINUTES. YOUR NAME WILL BE CALLED AT THE TIME THE MATTER IS HEARD BY THE PLANNING COMMISSION. CITY POLICY IS TO LIMIT PUBLIC TESTIMONY TO UP TO FIVE MINUTES PER SPEAKER ON AGENDIZED ITEMS, AND THREE MINUTES DURING GENERAL PUBLIC COMMENTS (UNLESS THE TIME LIMIT IS EXTENDED BY THE CHAIR), WHICH INCLUDES THE PRESENTATION OF ELECTRONIC OR AUDIO-VISUAL INFORMATION. SPEAKERS MAY NOT YIELD THEIR TIME TO OTHER PERSONS.

**PLEASE TAKE NOTICE THAT** THE ORDER OF SCHEDULED AGENDA ITEMS BELOW AND/OR THE TIME THEY ARE ACTUALLY HEARD, CONSIDERED AND DECIDED MAY BE MODIFIED BY THE CHAIR DURING THE COURSE OF THE MEETING, SO PLEASE STAY ALERT.

**PLEASE NOTE:** THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 949-724-6465, OR VIA EMAIL AT PLANNINGCOMMISSION@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

## CALL TO ORDER

## ROLL CALL

## PLEDGE OF ALLEGIANCE

## INTRODUCTIONS

## ADDITIONS AND DELETIONS TO THE AGENDA

Additions to the agenda are limited by the California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda must be acted upon prior to the next Planning Commission meeting.

## PUBLIC COMMENTS

## COMMISSION BUSINESS

### 1. MINUTES

**RECOMMENDED ACTION:**
Adopt the minutes of the regular Planning Commission meeting held on June 17, 2021.

## PUBLIC HEARINGS

### 2. TIME EXTENSION OF VESTING TENTATIVE TRACT MAP 17997 FOR THE BLUE BAY CONDOMINIUMS PROJECT, A 120-UNIT RESIDENTIAL DEVELOPMENT AT 2602 MCGAW AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)

**RECOMMENDED ACTION:**

1) Conduct the public hearing.
2) Adopt RESOLUTION NO. 21-3830 — A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A 16-MONTH EXTENSION (FILE No. 00842179-PTT) OF VESTING TENTATIVE TRACT MAP 17997 FOR THE BLUE BAY CONDOMINIUMS PROJECT AT 2602 MCGAW AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)

**3. MAJOR MODIFICATION TO LOTS 114-164 OF THE APPROVED MASTER PLAN FOR TRACT 17855 LOCATED IN PLANNING AREA 5B (EASTWOOD)**

**RECOMMENDED ACTION:**

1) Conduct the public hearing.
2) Adopt RESOLUTION NO. 21-3831 — A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING MAJOR MODIFICATION 00839065-PMP TO MASTER PLAN 00645468-PMP SPECIFIC TO LOTS 114-164 CONTAINING 51 DETACHED SINGLE-FAMILY RESIDENCES WITHIN TRACT 17855; INCLUDING AN ALTERNATIVE REAR YARD SETBACK ON CERTAIN LOTS, LOCATED IN PLANNING AREA 5B (EASTWOOD); FILED BY C&V CONSULTING, INC. ON BEHALF OF IRVINE COMPANY

**COMMISSION BUSINESS**

**4. GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE**

**RECOMMENDED ACTION:**

1) Review and provide input on the key features of the Draft Housing Element Update.
2) Recommend transmittal of the Draft 2021-2029 Housing Element Update to the California Department of Housing and Community Development (HCD).

**STAFF REPORTS**

**PLANNING COMMISSION REPORTS**

**ADJOURNMENT**

**NOTICE TO THE PUBLIC**

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the

City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission

The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

## STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org/planningcommission* at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

**SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS**

MEDIA TYPES AND GUIDELINES

1. Written Materials/Handouts: Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings: Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals: Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

**CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS**

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Planning Commission liaison at 949-724-6465.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II).

**MEETING SCHEDULE**

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on 7-1-2021 by 8 p.m. as well as on the City's web page.



Commission Liaison

# SUPPLEMENTAL AGENDA*

Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner

## PLANNING COMMISSION REGULAR MEETING

**July 15, 2021**
**5:30 PM**
**CITY COUNCIL CHAMBER**
One Civic Center Plaza
Irvine, CA 92606

### PARTICIPATION AT PLANNING COMMISSION MEETINGS

MEETINGS ARE AVAILABLE TO ATTEND IN-PERSON IN THE CITY COUNCIL CHAMBER OR WATCHED LIVE THROUGH THE "ZOOM" APPLICATION. INFORMATION FOR "ZOOM" CAN BE FOUND ONLINE AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO THE PLANNING COMMISSION AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/PLANNINGCOMMISSION.

**REQUEST TO SPEAK IN PERSON:** IF YOU WOULD LIKE TO ADDRESS THE PLANNING COMMISSION ON A SCHEDULED AGENDA ITEM – INCLUDING A REGULAR BUSINESS ITEM, A PUBLIC HEARING ITEM, OR PUBLIC COMMENTS – PLEASE REGISTER BY COMPLETING THE ELECTRONIC FORM AVAILABLE ON THE KIOSK AT THE ENTRANCE TO THE CITY COUNCIL CHAMBER. PLEASE IDENTIFY ON THE FORM YOUR NAME AND THE ITEM ON WHICH YOU WOULD LIKE TO SPEAK. THE REQUEST TO SPEAK FORM ON THE KIOSK ASSISTS THE CHAIR IN ENSURING THAT ALL PERSONS WISHING TO ADDRESS THE PLANNING COMMISSION ARE RECOGNIZED. IT ALSO ENSURES THE ACCURATE IDENTIFICATION OF MEETING PARTICIPANTS IN THE PLANNING COMMISSION MINUTES. YOUR NAME WILL BE CALLED AT THE TIME THE MATTER IS HEARD BY THE PLANNING COMMISSION. CITY POLICY IS TO LIMIT PUBLIC TESTIMONY TO UP TO FIVE MINUTES PER SPEAKER ON AGENDIZED ITEMS, AND THREE MINUTES DURING GENERAL PUBLIC COMMENTS (UNLESS THE TIME LIMIT IS EXTENDED BY THE CHAIR), WHICH INCLUDES THE PRESENTATION OF ELECTRONIC OR AUDIO-VISUAL INFORMATION. SPEAKERS MAY NOT YIELD THEIR TIME TO OTHER PERSONS.

PLEASE TAKE NOTICE THAT THE ORDER OF SCHEDULED AGENDA ITEMS BELOW AND/OR THE TIME THEY ARE ACTUALLY HEARD, CONSIDERED AND DECIDED MAY BE MODIFIED BY THE CHAIR DURING THE COURSE OF THE MEETING, SO PLEASE STAY ALERT.

PLEASE NOTE: THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 949-724-6465, OR VIA EMAIL AT PLANNINGCOMMISSION@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

*** NOTE: ITEMS WITH AN ASTERISK (*) INCLUDE THE FOLLOWING CHANGES TO THE MEETING AGENDA ORIGINALLY PUBLISHED ON JULY 1, 2021:**

**ITEM 4 – ATTACHMENT 3 ADDED**
**ITEM 5 – ADDED**

**CALL TO ORDER**

**ROLL CALL**

**PLEDGE OF ALLEGIANCE**

**INTRODUCTIONS**

**ADDITIONS AND DELETIONS TO THE AGENDA**

**PUBLIC COMMENTS**

**COMMISSION BUSINESS**

**1. MINUTES**

**RECOMMENDED ACTION:**
Adopt the minutes of the regular Planning Commission meeting held on June 17, 2021.

**PUBLIC HEARINGS**

**2. TIME EXTENSION OF VESTING TENTATIVE TRACT MAP 17997 FOR THE BLUE BAY CONDOMINIUMS PROJECT, A 120-UNIT RESIDENTIAL DEVELOPMENT AT 2602 MCGAW AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)**

**RECOMMENDED ACTION:**

1) Conduct the public hearing.
2) Adopt RESOLUTION NO. 21-3830 — A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A 16-MONTH EXTENSION (FILE No. 00842179-PTT) OF VESTING TENTATIVE TRACT MAP 17997 FOR THE BLUE BAY CONDOMINIUMS PROJECT AT 2602 MCGAW AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)

**3. MAJOR MODIFICATION TO LOTS 114-164 OF THE APPROVED MASTER PLAN FOR TRACT 17855 LOCATED IN PLANNING AREA 5B (EASTWOOD)**

**RECOMMENDED ACTION:**

1) Conduct the public hearing.
2) Adopt RESOLUTION NO. 21-3831 — A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING MAJOR MODIFICATION 00839065-PMP TO MASTER PLAN 00645468-PMP SPECIFIC TO LOTS 114-164 CONTAINING 51 DETACHED SINGLE-FAMILY RESIDENCES WITHIN TRACT 17855; INCLUDING AN ALTERNATIVE REAR YARD SETBACK ON CERTAIN LOTS, LOCATED IN PLANNING AREA 5B (EASTWOOD); FILED BY C&V CONSULTING, INC. ON BEHALF OF IRVINE COMPANY

**COMMISSION BUSINESS**

**4. *GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE**

**RECOMMENDED ACTION:**

1) Review and provide input on the key features of the Draft Housing Element Update.
2) Recommend transmittal of the Draft 2021-2029 Housing Element Update to the California Department of Housing and Community Development (HCD).

**PUBLIC HEARING**

**5. *TIME EXTENSION OF VESTING TENTATIVE TRACT MAP 18174 FOR A MIXED-USE DEVELOPMENT AT 18582 TELLER AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)**

**RECOMMENDED ACTION:**

Continue the item to the meeting of August 5, 2021.

## STAFF REPORTS

## PLANNING COMMISSION REPORTS

## ADJOURNMENT

### NOTICE TO THE PUBLIC

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission

The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

### STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be downloaded from the City's

website at *cityofirvine.org/planningcommission* at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

## SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

## SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

### MEDIA TYPES AND GUIDELINES

1. Written Materials/Handouts: Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings: Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals: Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

## CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Planning Commission liaison at 949-724-6465.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II).

## MEETING SCHEDULE

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)

- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on July 9, 2021 by 8 p.m. as well as on the City's web page.



Commission Liaison

# 3b. Staff Report for July 15, 2021

## REQUEST FOR PLANNING COMMISSION ACTION

**MEETING DATE:** JULY 15, 2021

**TITLE:** GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE

Director of Community Development

### RECOMMENDED ACTION

1. Review and provide input on the key features of the Draft Housing Element Update.
2. Recommend transmittal of the Draft 2021-2029 Housing Element Update to the California Department of Housing and Community Development (HCD).

### EXECUTIVE SUMMARY

State law requires all cities to update the Housing Element of its General Plan every eight years. It further requires the current update to be completed by October 2021 and the City is undertaking this process. The City's Housing Element was adopted by the City Council in 2013 for the 2013-2021 planning period. This next update, referred to as the 6th Cycle, will address the 2021-2029 planning period. Staff is preparing the draft 2021-2029 Housing Element that will be submitted to the California Department of Housing and Community Development (HCD) for its required review prior to Planning Commission and City Council final approval, which is tentatively scheduled for fall/winter 2021.

The most significant update included in the draft 2021-2029 Housing Element is the identification of sites to accommodate the Regional Housing Needs Assessment (RHNA) and enhanced housing policies to support housing and affordability consistent with new state statute. The RHNA has been significantly increased from the current 5th Cycle RHNA allocation issued by the Southern California Association of Governments (SCAG). It is important to note that housing element law does not require a city to build housing units, but rather to demonstrate that the city has the land capacity to address RHNA through a required sites inventory analysis.

The content of the draft 2021-2029 Housing Element is structured for consistency with the requirements set forth in state law. In addition to responding to the requirements of state law, the Housing Element demonstrates how the strategies to meet the City's locally determined housing needs are addressed through plans, programs, and projects. This report includes an update on the status of the Housing Element Draft and how it complies with state housing element law. The Planning Commission reviewed the preliminary site

inventory and plan, programs, and policies at the July 1, 2021, meeting. Once the Planning Commission provides initial feedback, the draft will be submitted to HCD for its preliminary review and, ultimately brought back for final Commission input and City Council adoption in fall/winter 2021.

**COMMISSION/BOARD/COMMITTEE RECOMMENDATION**

Not applicable.

**ANALYSIS**

Background

Under California law (Government Code Section 65580 et seq.), cities must update their housing element every eight years. As prescribed by law, the current update must be completed by October 2021, although HCD is permitting a 120-day grace period. The City must transmit the draft 2021-2029 Housing Element to HCD for a 60 day preliminary review prior to final review and adoption by the Planning Commission and City Council. Once the draft 2021-2029 Housing Element is adopted by the Planning Commission in fall 2021 and the City Council in winter 2021, the final 2021-2029 Housing Element will be transmitted to HCD for certification. The purpose of a housing element is to assess a community's housing needs, identify obstacles to meeting those needs, and demonstrate capacity to accommodate the City's "fair share" of the region's need for new housing to accommodate projected population growth. The statewide housing mandate for all cities to accommodate their share of housing needs is known as the RHNA. A housing element must also include policies and goals that work towards implementation of the element over the planning period.

Irvine's current Housing Element for the planning period 2013-2021 was adopted by the City Council in September 2013 and it was found by HCD to be in full compliance with state housing element law. The Housing Element update will cover the state-required eight-year planning period beginning October 15, 2021, and ending October 15, 2029. The update will address various state mandates including the RHNA, which has been significantly increased from the current 12,149 units to 23,610 units. In addition to this increase, a significant change to state housing element statute is the requirement to demonstrate adequate sites to accommodate the RHNA at all affordability levels.

Irvine supports the production of housing and has a proven track record of providing housing for all people at all income levels. Irvine has provided more affordable housing units than any other city in Orange County through the City's existing inclusionary housing program.

Housing Element Requirements

State law requires each city to prepare and adopt a housing element as part of its General Plan. According to State law, the Housing Element must: provide goals, policies, quantified objectives and scheduled programs to preserve, improve and develop housing. The Housing Element must identify and analyze existing and projected housing needs for all economic segments of the community.

*Housing Needs Assessment*

The state develops housing demand projections and apportions these projections to each of the state's regions. In Orange County, SCAG allocates the state's regional projected demand to individual jurisdictions. This allocation is referred to as the 6th Cycle RHNA, and is intended to reflect the projected housing demand of each jurisdiction. State law requires that jurisdictions incorporate this allocation into their Housing Element update. In order to assess projected housing needs, a complete description of the City's most recent population estimate, and general characteristics of the employment market is provided. This information offers insight into the types of jobs in the community and the incomes associated with such jobs. It also identifies proposed development activities and future housing needs generated by new employment opportunities.

The "Housing Needs" section of the Housing Element identifies and analyzes the existing and projected housing need of the community pursuant to the RHNA. This is different from previous cycles where the RHNA only included the projected need. An assessment must be undertaken of the community's existing and projected housing needs based on household characteristics, housing stock conditions, special housing needs, and demographic and employment trends. The City's total final RHNA allocation is 23,610. The RHNA is inclusive of the projected need for the City, which is based on planned development and the City's official growth forecast, at 7,690 units as well as the existing need for the City, at 15,864,which is solely based on a jurisdiction's access to jobs and transit. The existing need also included additional units that were reallocated from disadvantaged communities (DACs) in Orange County. An additional 56 units were allocated to the City as a result of a successful RHNA appeal by another jurisdiction. The assessment of existing housing needs includes current demographic information, such as the total population, the number of households over-burdened by housing costs, the number of households living in overcrowded conditions, and special housing needs. It also includes the number of housing units that need rehabilitation, as well as assisted affordable units at risk of converting to market rate. The majority of the data included in this section has been pre-certified by HCD for the SCAG region.

Projected need is the household growth for jurisdictions between July 1, 2021, and October 1, 2029. Existing need is considered the remainder of the regional determination after projected need is subtracted. The allocation establishes the number of new units anticipated to be needed, by income category, to accommodate the expected population growth over the planning period of the Housing Element. The housing needs findings are

used to inform and develop the Housing Element policies and programs to ensure that the City focuses its efforts on the community's identified needs.

In October 2020, the City filed an appeal of the draft RHNA with SCAG. The City requested a reduction of 8,259 total units from the draft RHNA allocation to address the following outstanding issues:

- Appeal #1: Methodology
  - High Quality Transit Area (HQTA) Errors
  - Residual Allocation Redistribution due to Disadvantaged Community component of the RHNA Methodology, specifically outdated growth forecast information
- Appeal #2: Local Planning Factors and Information Furthering Fair Housing (AFFH)
- Appeal #3: Changed Circumstances
- Appeal #4: Regional Determination of 1.34 Million Housing Units Violates State Law
- Appeal #5: Inconsistency Between Regional Housing Needs Assessment and Sustainable Communities Strategy

The City's RHNA Appeal was denied by SCAG's RHNA Appeal Board in January 2021.

*Sites Inventory, Analysis, and Goals and Policies*

State law requires jurisdictions to provide an inventory of land suitable for residential development that will allow for, and facilitate production of, the City's regional share of housing as determined by the RHNA.

To determine whether the City has sufficient land to accommodate its share of regional housing needs for all income groups, the City must identify "adequate sites" in the Housing Element site inventory. The purpose of the housing element's site inventory is to identify and analyze specific land (sites) that is available and suitable for residential development in order to determine the jurisdiction's capacity to accommodate residential development and reconcile that capacity with the jurisdiction's RHNA. The site inventory enables the jurisdiction to determine whether there are sufficient adequate sites to accommodate the RHNA by income category. A site inventory and analysis will determine whether program actions must be adopted to "make sites available" with appropriate zoning, development standards, and infrastructure capacity to accommodate the new housing need.

Other characteristics to consider when evaluating the appropriateness of sites include physical features (e.g., size and shape of the site, improvements currently on the site, slope instability or erosion, or environmental and pollution considerations), location (e.g., proximity and access to infrastructure, transit, job centers, and public or community services), competitiveness for affordable housing funding (e.g., Low Income Housing Tax

Credit score criteria), and likelihood or interest in development due to access to opportunities such as jobs and high performing schools. When determining sites to include in the inventory to meet the lower income housing need, HCD recommends that a local government first identify development potential in high opportunity neighborhoods. High opportunity areas are places that currently have strong economic, environmental, and educational outcomes. Locating affordable housing in high opportunity areas would result in more integration of neighborhoods, and offer new economic opportunities to lower income segments of the population. This will assist the local government in meeting its requirements to affirmatively further fair housing and ensure developments are more competitive for development financing.

Sites are considered suitable for residential development if zoned appropriately and available for residential use during the planning period. Housing Element law does not require a jurisdiction to build housing units, but rather to demonstrate that the jurisdiction has the land capacity to address its RHNA. If a jurisdiction cannot demonstrate that the existing zoning and General Plan designations can accommodate its RHNA allocation, the jurisdiction is required to re-zone land in order to have sufficient capacity, among other programs that may also be required. Even if a city re-zones the land to accommodate residential, market and development trends will ultimately dictate the construction of residential units. The City's draft 2021-2029 Housing Element demonstrates that Irvine does not have sufficient capacity under the current General Plan to meet the new RHNA through vacant land capacity and will need to re-zone land and update the Genera Plan and Zoning Ordinance to accommodate the RHNA. With the proposed re-zoning and inclusion of new policies and programs, the City is able to identify sufficient capacity to accommodate the 6th Cycle RHNA.

The City's 6th Cycle RHNA has been significantly increased from the 5th Cycle RHNA of 12,149 units to 23,610 total units. The 6th Cycle RHNA will replace the current allocation when the Housing Element is updated, adopted by the City Council, and certified by the state before the statutory deadline. Table 1 below shows Irvine's RHNA allocation of housing units broken down by income category for the 2021-2029 planning period.

Table 1
2021-2029 Irvine Regional Housing Needs Allocation

| Income Category | RHNA |
|---|---|
| Category 1 (0% - 50% AMI[1]) (Extremely Very Low/Very Low) | 6,396 |
| Category 2 (51% - 80% AMI) (Low) | 4,235 |
| Category 3 (81% - 120% AMI) (Moderate) | 4,308 |
| Category 4 (over 120% AMI) (Above Moderate) | 8,671 |
| Total Units | 23,610 |

Note: [1] AMI refers to Area Median Income for Orange County.

Housing Element statute has been modified the past several years, adding new requirements that must be included in a jurisdiction's Housing Element update. This includes the addition of the Affirmatively Further Fair Housing (AFFH) section and the "no net loss" requirement in the site inventory. "No net loss" requires a jurisdiction to maintain adequate sites to accommodate its remaining unmet RHNA by each income category at all times throughout the entire planning period. Specifically, if a jurisdiction approves the development of a parcel identified in its Housing Element sites inventory with fewer units than shown in the Housing Element, it must either make findings that the Housing Element's remaining sites have sufficient capacity to accommodate the remaining unmet RHNA by each income level or identify and make available sufficient sites to accommodate the remaining unmet RHNA for each income category. In addition to the "no net loss" requirement, the City must identify an adequate supply of above moderate or "market rate" units to ensure the affordable units can be constructed. As a result of this requirement, the City must identify more sites and units than identified in the RHNA.

*Constraints*

A number of factors can constrain the development and improvement of housing. These include both governmental and non-governmental constraints, which are reviewed in the Housing Constraints section of the draft 2021-2029 Housing Element. State law requires the City to analyze land use controls, fees and exactions, on- and off-site improvement requirements, building codes and enforcement thereof, permit and processing procedures, and potential constraints on the development or improvement of housing for persons with disabilities. The draft 2021-2029 Housing Element generally finds that the City land use controls do not create unnecessary constraints to housing development.

Non-governmental constraints must also be analyzed, including the availability and cost of land, as well as construction. These constraints are often out of the City's control but can result in housing that is not affordable to low- and moderate-income households.

*Goals, Policies, and Programs*

Based on the results of the public participation, housing needs assessment, sites inventory and analysis, and constraints, the draft 2021-2029 Housing Element establishes goals, policies, and programs to facilitate the provision of housing that fulfills the diverse needs of the community.

The draft 2021-2029 Housing Element establishes six goals, which are statements of community desires that are broad in both purpose and aim, but are designed specifically to establish direction. Policies provide specific standards for achieving each goal, and are further articulated in the programs, which identify actions the City will implement to achieve each goal and policy.

Many of the goals, policies, and programs have not changed from the 2013-2021 Housing Element. Some have been modified to simplify, avoid redundancy, or reflect current practice, and are outlined in the Goals, Policies and Programs section. New goals, policies, and programs have been added to build upon Irvine's success in building affordable housing throughout the community and address the City's significant RHNA allocation. Some of the key proposed policies being considered include:

- An increase to the inclusionary zoning ordinance to mandate 20 percent of new housing projects are at affordable price points, rather than the current 15 percent mandate.
- Target city, county, state, and certain privately owned sites for 100 percent affordable residential projects.
- Coordinate efforts and enhance partnership with the Irvine Community Land Trust (ICLT).
- Amend the affordable in-lieu fee to reflect current costs.
- Extend the term of affordability on affordable units set to expire in the next Housing Element Cycle (2021-2029)
- Introduce residential uses in targeted retail centers in the city to create mixed use environments.
- Maximize density near the Irvine Station with a residential overlay, for transit-oriented development.
- Expand the residential overlay and unit cap in the Irvine Business Complex.
- Introduce residential overlay at religious and school sites.
- Allow conversion of hotel and motel to residential units.

*Site Inventory*

State law mandates that cities develop a sites inventory analysis to identify vacant land or land that can be redeveloped during the planning period. The inventory must include a map identifying parcels, general plan and zoning designation, acreage and unit capacity across affordability levels. The sites inventory analysis included in the draft 2021-2029 Housing Element demonstrates that the RHNA of 23,610 total housing units can be accommodated through a combination of the remaining vacant residential sites in Irvine and non-vacant sites that can be redeveloped with a residential component. This will require the City to complete a comprehensive update to the General Plan and Zoning Ordinance following the adoption of the Housing Element.

Per Housing Element statute and HCD's "Housing Element Site Inventory Guidebook," the City must identify adequate sites at the parcel level. Additionally, according to the guidebook, "the analysis of 'appropriate zoning' should not include residential buildout projections resulting from the implementation of a jurisdiction's inclusionary program or potential increase in density bonus, because these tools are not a substitute for addressing whether the underlying (base) zoning densities are appropriate to accommodate the RHNA for lower income households." This means, the City, despite having a successful inclusionary housing program, is unable to utilize the existing or proposed inclusionary housing program to meet the affordable RHNA allocation. Additional constraints to developing the site inventory include, but are not limited to:

- Inclusionary Housing: HCD will not permit an existing inclusionary program to be used on any future projects to meet the RHNA requirements.
- Density Realism: The City must show precedent for high density residential assumptions by providing documentation that nearby developments are at similar densities.
- Parcel Size: HCD will scrutinize affordable units on sites that are less than 0.5 acres or more than 10 acres.
- Affirmatively Furthering Fair Housing (AFFH): The City is required to spread affordable units throughout the City to ensure there isn't a concentration of affordable units in one area.

A detailed breakdown of the residential development capacity by income category will be provided in the Projected Housing Needs section of the draft 2021-2029 Housing Element. Additionally, the draft 2021-2029 Housing Element continues the community's commitment to a full spectrum of housing opportunities for all income groups at all stages of life.

The City, in cooperation with the University of California, Irvine (UCI) has petitioned HCD to allow a one-time credit for housing units previously constructed that have not been counted in prior Housing Elements. This would include all for sale and rental units at University Hills and all housing dedicated for students, graduate students/families. In addition to these units, the City has included future units planned for University of California owned property on Irvine Boulevard in the draft Housing Element site inventory.

*Quantified Objectives*

A component of the Housing Element includes quantified objectives for achieving the maximum number of units, by income level, to be constructed, rehabilitated, and conserved over the planning period. Staff has identified the City's housing needs, surveyed developable parcels, identified financial resources, analyzed constraints, and assessed appropriate programs and policies. As a result of this

analysis an estimate was made of the maximum number of units that can reasonably be expected to be developed by the private sector. It is important to note that quantified objectives need not equal the RHNA allocation.

Review of Past Programs in the Previous Housing Element

The City must evaluate the results from housing programs implemented during the previous Housing Element. The review of past programs discusses the progress, effectiveness, and appropriateness of the previous Housing Element goals, objectives, policies, and programs.

*Public Participation*

Pursuant to California Government Code Section 65583(c)(9), local governments are required to "make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element." To meet these requirements, the City of Irvine has organized multiple activities over the last 10 months to engage with all economic segments of the community through a community outreach survey, two focus groups, three community workshops, a Planning Commission study session, a City Council scoping session, and stakeholder meetings with the development community, property owners, non-profit organizations, public agencies, such as the Irvine Unified School District, affordable housing providers including the Irvine Community Land Trust, and special interest groups.

To promote the community engagement activities and events, the City used its website, social media accounts, press releases, mailers, interest list notifications, fliers, and public email system. The City also provided outreach materials in English and seven additional languages: Chinese (Traditional and Simplified), Korean, Vietnamese, Japanese, Farsi, Arabic, and Spanish to ensure the outreach materials reached many diverse segments of the community.

The City Council conducted a scoping session on February 9, 2021, and the Planning Commission conducted a study session on February 18, 2021, on the Housing Element update process. Input from the workshops and meetings with the public, City Council, and Planning Commission, as well as staff review of the current Housing Element and changes in state housing law were used to develop the draft document presented to the Planning Commission.

In preparing for the Sites Inventory Analysis, staff identified potential opportunity sites and mailed outreach letters to those property owners. The purpose of these mailers was to gauge interest of property owners in either converting their site for residential purposes or developing residential homes in combination with their existing use within the next eight years. In addition, staff met with major property owners, Irvine Company and FivePoint, to discuss potential opportunity sites for the Housing Element.

City staff held meetings with a variety of stakeholders including affordable housing developers and several meetings with the Irvine Community Land Trust (ICLT) on opportunities to coordinate and collaborate. The City hosted three community workshops throughout the month of April. On April 5, 2021, the City held a virtual community workshop with stakeholders in the Irvine Business Complex (IBC) and Spectrum areas, specifically property owners, commercial real estate brokers, the Building Industry Association (BIA), Irvine Chamber of Commerce, and the general public with an interest in these neighborhoods. On April 22, 2021, and April 29, 2021, the City held virtual community-wide workshop to present the 6th Cycle Housing Element Update. On April 22, 2021, 105 participants attended the workshop and on April 29, 2021, 92 participates attended the workshop.

In addition, staff utilized community survey and focus group results from City residents that are part of the City's, separate and ongoing, General Plan Update. The survey included questions focused on housing issues to support the Housing Element public engagement effort. The focus groups allowed for dedicated discussions that highlighted residents' perspectives on housing topics, including state-mandated housing and where such housing will be compatible in the City.

The City gathered feedback from all outreach activities and evaluated the findings to identify the issues and topics that were most pressing to the Irvine community. The City then used this information to help develop goals, policies, and proposed activities for the planning period.

Review Process

The Housing Element will be forwarded to HCD for a mandatory 60-day review for consistency with state law and provisional certification. The review by HCD must occur at least 90 days prior to the City Council taking final action on the Housing Element. Upon incorporation of state feedback, staff will present the final draft 2021-2029 Housing Element to the Planning Commission in the fall/winter followed by final review and the City Council consideration of formal adoption. The City will be taking advantage of the 120 day grace period following the October 15, 2021 deadline to adopt the final Housing Element. The entire 6th Cycle Housing Element cycle has been delayed at several levels, including the six-month delay at SCAG for the adoption of the final RHNA (March 2021), the delayed release of the Affirmatively Furthering Fair Housing (AFFH) guidelines by HCD (April 2021), and COVID. Upon submittal of the final Housing Element to HCD for certification, the state will have 90 days to confirm whether the Housing Element is consistent with HCD's provisional certification and thereby complies with state law.

**ENVIRONMENTAL REVIEW**

An environmental evaluation for the project will be prepared after review and incorporation of any amendments requested by HCD. Staff will bring the environmental certification when the Planning Commission considers adoption of the Housing Element in the fall.

**ALTERNATIVES CONSIDERED**

The Planning Commission can provide feedback to be incorporated into the draft document, prior to the transmittal to HCD for the required 60 days review.

**FINANCIAL IMPACT**

The Community Development Department budget includes a work program to update the Housing Element. The program includes staff time and consultant services to research and prepare the updated Housing Element. The City will also rely on reimbursement from Senate Bill 2 and Local Early Action Plan (LEAP) grants to fund the Housing Element.

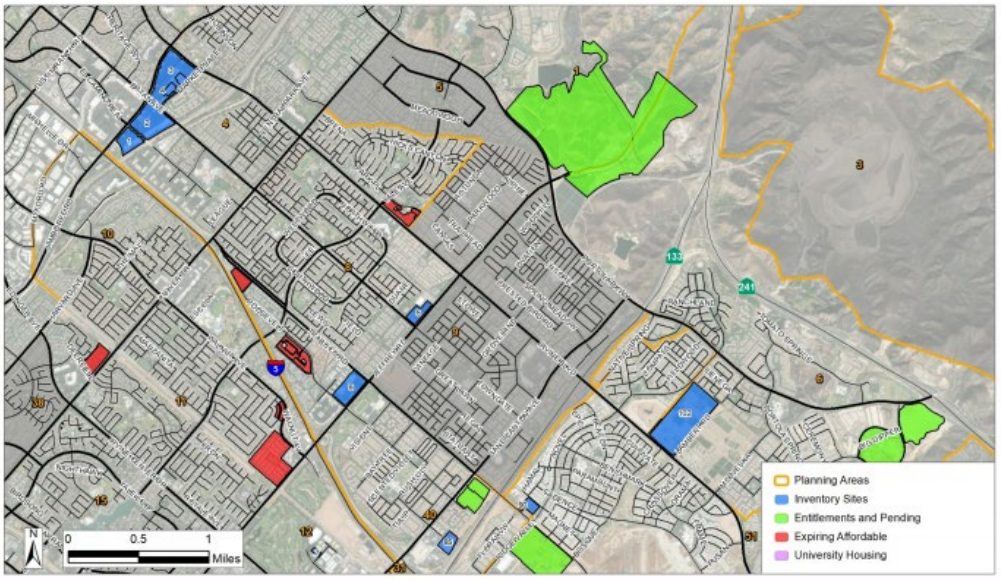
**REPORT PREPARED BY**: Marika Poynter, Principal Planner

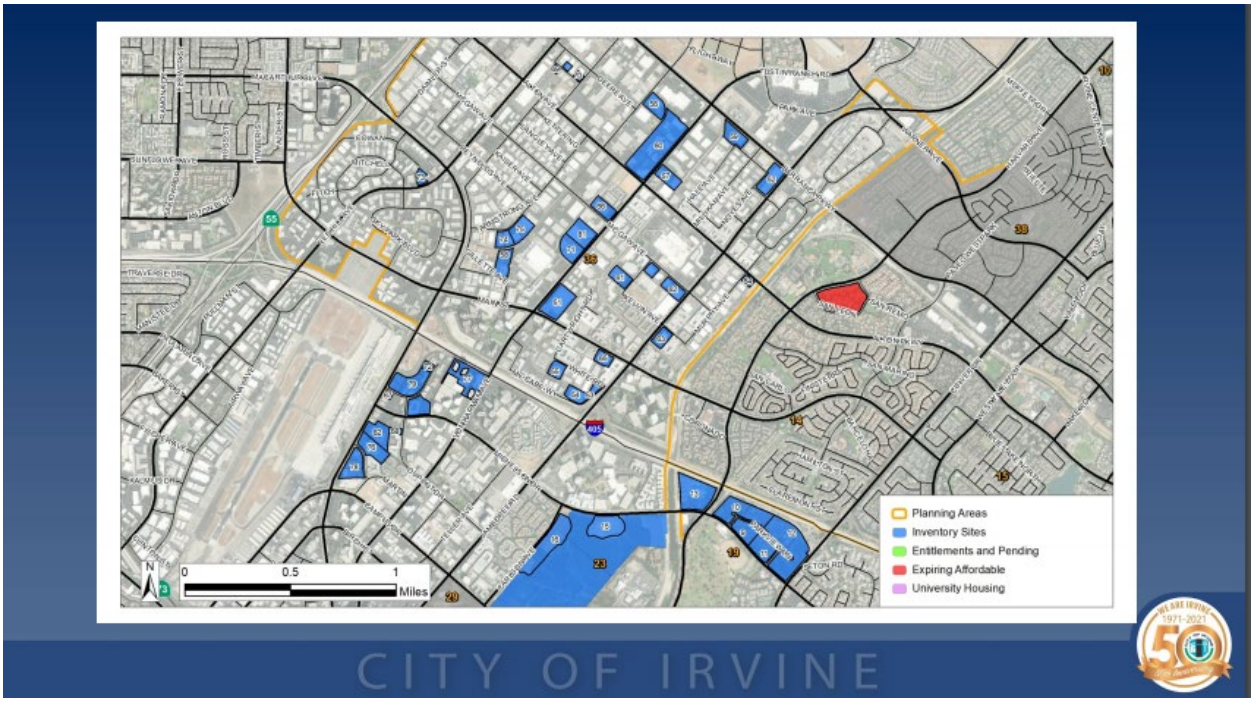
**PC ATTACHMENTS:**

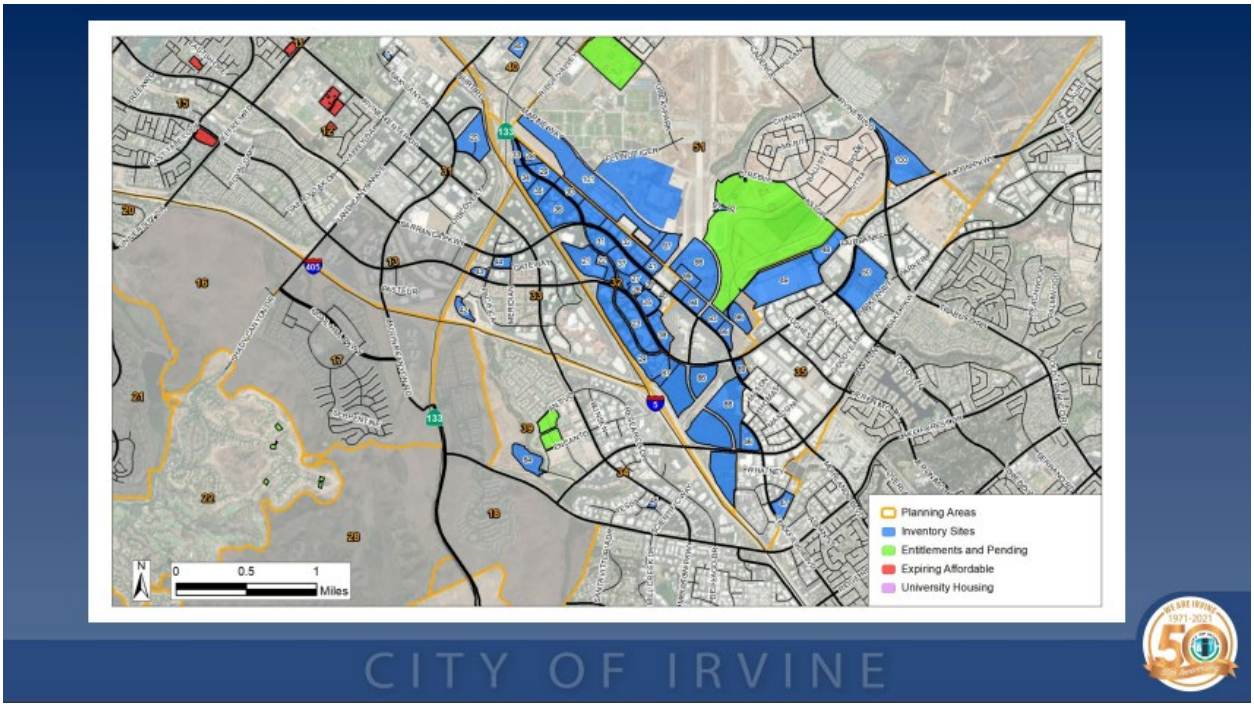
1. Site Inventory Table and Map
2. Planning Area Map
3. Draft 6th Cycle Housing Element

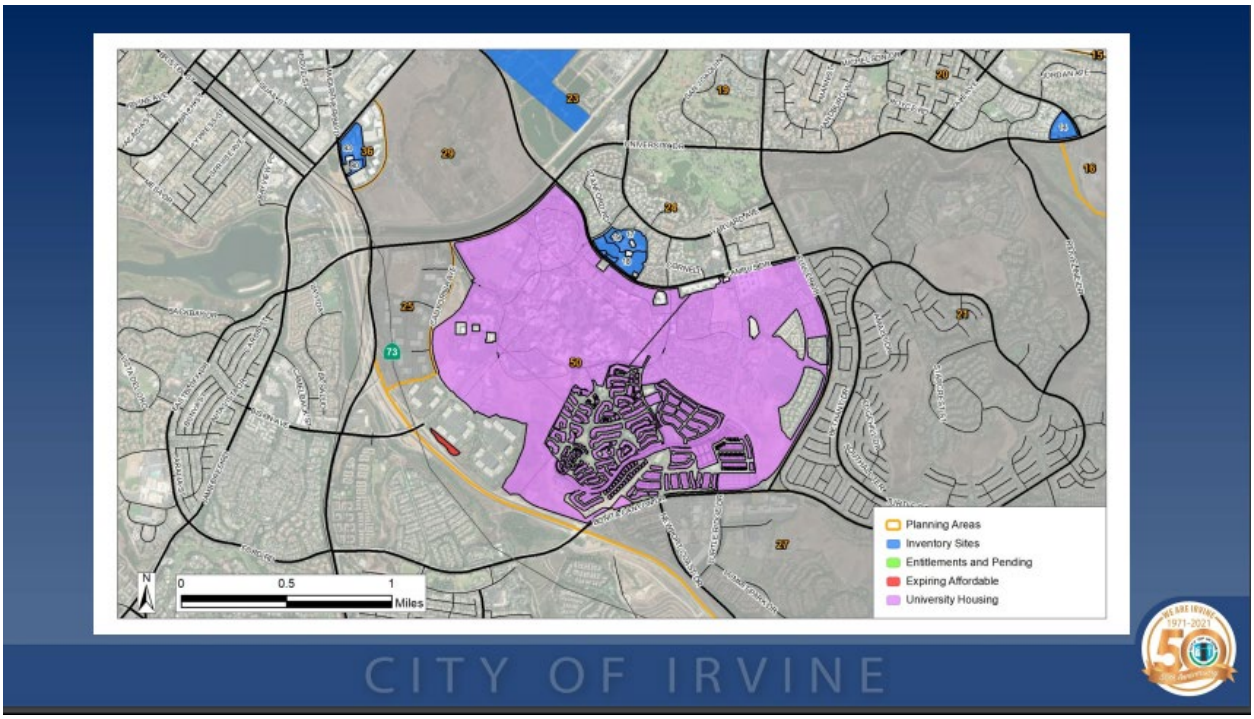
| Planning Area Name | Total | Category 1 | Category 2 | Category 3 | Category 4 |
|---|---|---|---|---|---|
| **RHNA** | **23,610** | **6,396** | **4,235** | **4,308** | **8,671** |
| PA 4 (Lower Peters Canyon) | 2,007 | 512 | 341 | | 1,154 |
| PA 19 (RSJ Area) | 2,202 | 279 | 186 | 173 | 1,564 |
| PA 23 (San Joaquin Marsh) | 1,000 | 600 | 400 | | |
| PA 24 (University Town Ctr.) | 823 | 237 | 158 | 43 | 385 |
| PA 32 (Spectrum 3) | 17,740 | 447 | 298 | 1,702 | 15,293 |
| PA 33 (Irvine Spectrum Ctr.) | 943 | 200 | 134 | 62 | 547 |
| PA 36 (IBC) | 10,986 | 1,517 | 1,010 | 791 | 7,668 |
| PA 40 (Cypress Village) | 613 | 300 | 156 | | 157 |
| PA 51 (Great Park Neighborhoods) | 15,772 | 2,645 | 2,189 | 1,948 | 8,990 |
| All Other PA (including UCI) | 8,903 | 0 | 0 | 2,864 | 23,479 |
| **Site Inventory** | **78,429** | **6,737** | **4,872** | **7,583** | **59,237** |
| ***Difference*** | *54,819* | *341* | *637* | *3,275* | *50,566* |

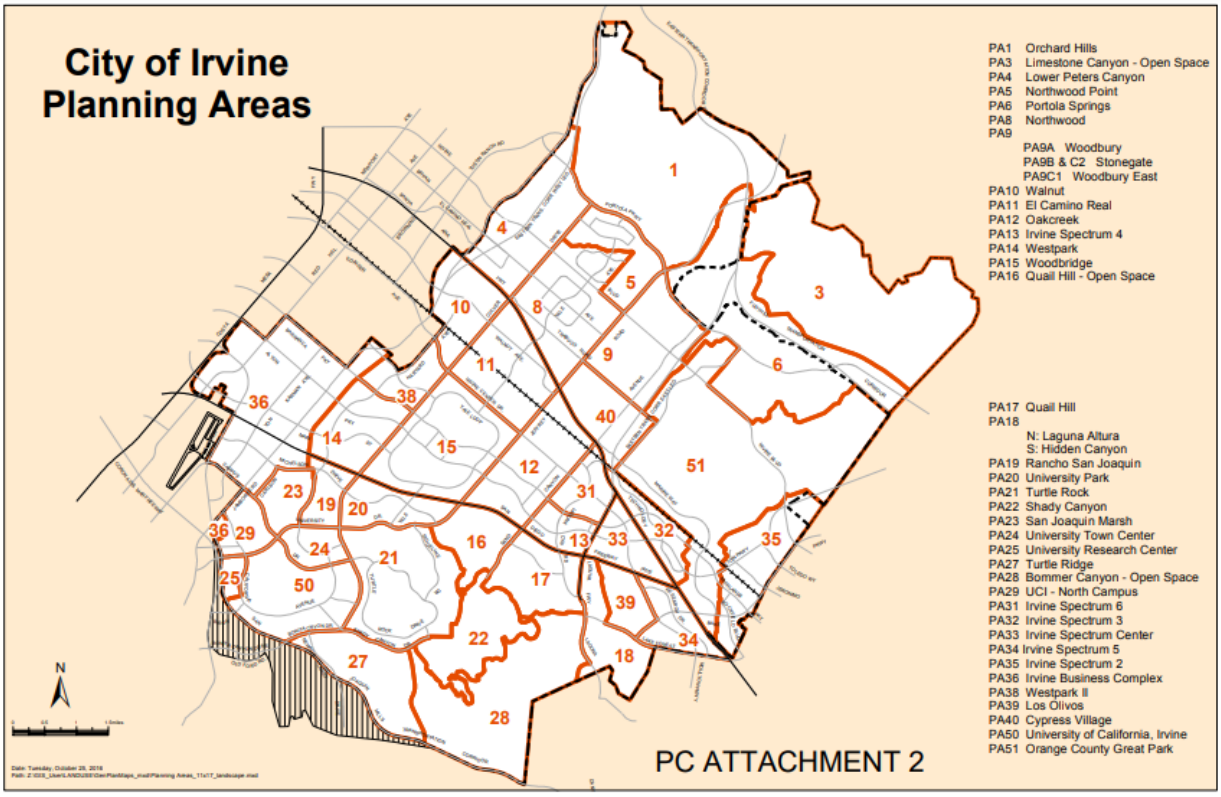





Planning Areas
Inventory Sites
Entitlements and Pending
Expiring Affordable
University Housing
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1
Miles
CITY OF IRVINE


Planning Areas
Inventory Sites
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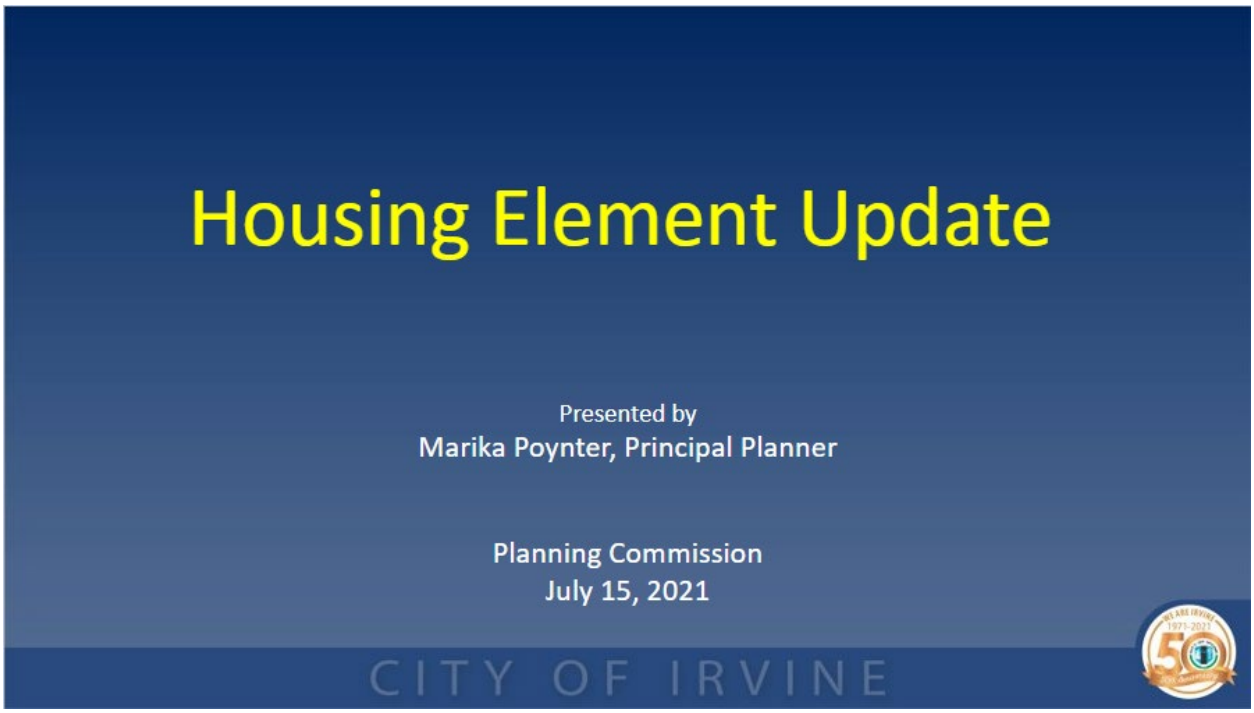


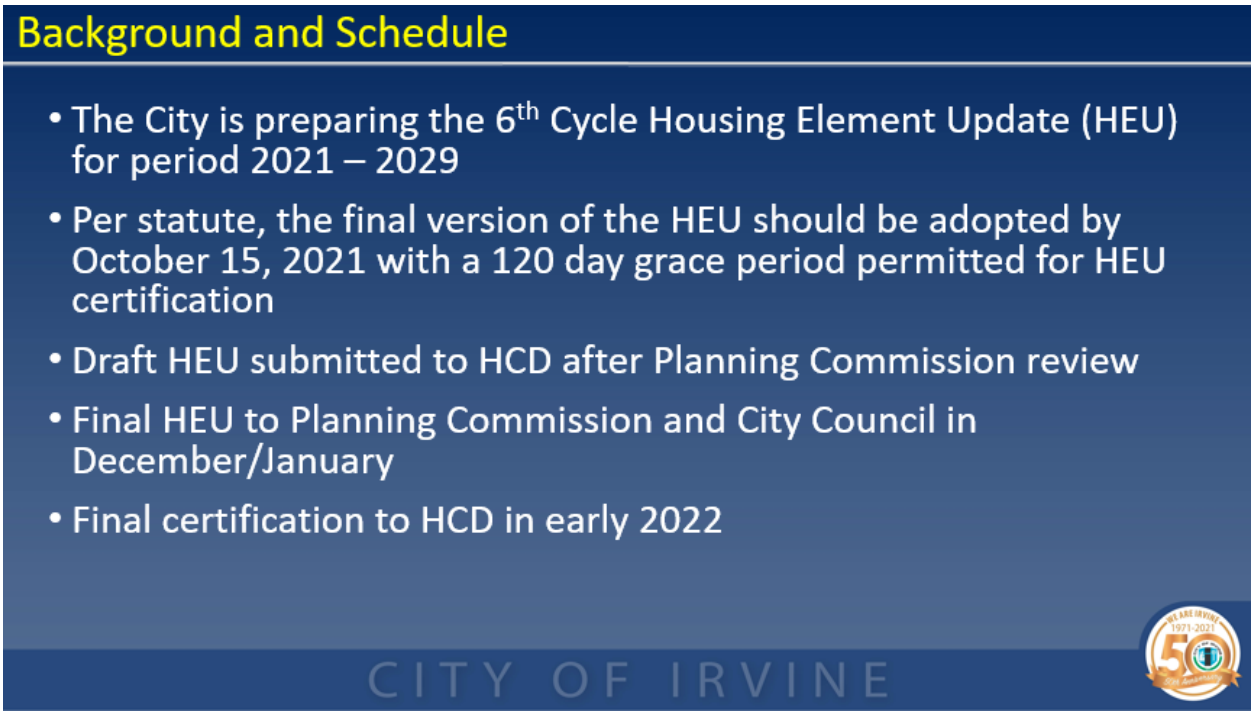




PC Attachment 3, Draft 6th Cycle Housing Element, is available here:

https://irvine.granicus.com/AgendaViewer.php?view_id=81&event_id=1831 or www.cityofirvine.org/HEUpdate.

## 3c. Presentation for July 15, 2021



## Housing Element Purpose

- The Housing Element is a state-mandated policy document that:
  - Provides direction for implementation of various programs to meet existing and future housing needs for all income levels in the City
  - Provides goals, policies, programs, and objectives that accommodate opportunities for the preservation of existing housing and development of new housing
  - Demonstrates how the City will accommodate its RHNA allocation

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## Regional Housing Needs Assessment

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,396 |
| Category 2 (51 – 80% AMI) | 4,235 |
| Category 3 (81 – 120% AMI) | 4,308 |
| Category 4 (120% AMI or above; considered "market rate") | 8,671 |
| **TOTAL** | **23,610** |

- Buffer for "no net loss" for Categories 1 and 2 – City will apply it for Categories 1, 2, and 3
- Actual number needed is anticipated to exceed allocation
- Affirmatively Furthering Fair Housing (AFFH)

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## Key Discussion Items

- Highlights of the Draft 6th Cycle Housing Element
  - Document Overview
- Site Inventory
- Policies and Programs
  - Enhancements to existing policies and programs
  - Proposed new policies and programs to facilitate and encourage housing production, and more specifically affordable housing

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## Draft 6th Cycle Housing Element

- Critical Chapters
  - **Adequate Site Inventory Analysis and Methodology:** Detailed description of the methodology and to identify specific housing sites (by Assessor Parcel Number or APN), the number of units for each site, the level of affordability for each site, and the methodology used to ensure that each site meets State law requirements
  - **Housing Plan:** The City's goals, policies, programs, and actions to provide and preserve housing opportunities in the community and quantified objectives for the 2021-2029 6th cycle planning period
  - **Appendix B: Affirmatively Furthering Fair Housing Analysis**

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## Constraints and Approach for Developing Site Inventory

- HCD or Statutory Constraints:
  - Inclusionary Housing: HCD will not permit inclusionary to be used on any future projects to meet the RHNA
  - Density Realism: City must show precedent for high density residential assumptions (nearby developments at similar density)
  - Parcel Size: HCD will scrutinize sites identified for affordable units on sites below 0.5 acres and more than 10 acres

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## Constraints and Approach for Developing Site Inventory

- City Constraints/Approach:
  - Preservation of Open Space/Natural Lands: The City did not include locally protected open space/natural lands in the site inventory.
  - Exclusion of Sensitive Sites: The City did not include any community sensitive sites such as the Racquet Club of Irvine and the Rancho San Joaquin Golf Course
  - Preservation of Neighborhood Core: The City focused the proposed draft site inventory to preserve the neighborhood core

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| | Very Low | Low | Moderate | Above Moderate | Total |
|---|---|---|---|---|---|
| RHNA | 6,396 | 4,235 | 4,308 | 8,671 | 23,610 |
| **Alternative Methods to Meet the RHNA (Credits)** | | | | | |
| Entitled or Proposed Projects | 478 | 44 | 36 | 3,102 | 3,660 |
| Accessory Dwelling Units | 20 | 34 | 24 | 2 | 80 |
| Preservation of At-Risk Units | 518 | 305 | 0 | 0 | 823 |
| University of California Housing (Existing) | 0 | 0 | 1,710 | 2,696 | 4,406 |
| Net RHNA (after credits are applied) | 5,380 | 3,852 | 2,538 | 2,871 | 14,641 |
| **Step #1 Determination of Adequate Sites (Sites with Existing Zoning to Accommodate RHNA)** | | | | | |
| | 4,195 | 2,797 | 1,877 | 16,851 | 25,720 |
| RHNA Surplus/(Shortfall) after Step #1 | (1,185) | (1,055) | (661) | 13,980 | 11,079 |
| **Step # 2 Adequate Sites Program (Sites Requiring Rezoning to Accommodate RHNA)** | | | | | |
| | 3,203 | 2,134 | 3,009 | 23,588 | 31,934 |
| Total Units from Step #1 and #2 | **7,398** | **4,931** | **4,886** | **40,439** | **57,654** |
| Net Surplus | 2,018 | 1,079 | | | |
| No-Net Loss Buffer per HCD (15%-30% | 32% | 25% | | | |



## Draft Policy Recommendations

- Update the Land Use Element and Zoning Ordinance (subsequent effort) to consider:
  - Overlays to promote residential and mixed use:
    - In Planning Area 32 at 50-70 units/acre
    - In the IBC at 50-70 units/acre
    - At targeted retail centers at 30-60 units/acre
    - At religious and school sites at 30-60 units/acre – focus on workforce housing
    - Allow conversion of hotel/motel to residential

## Draft Policy Recommendations

- Increased density with focus on transit-oriented development in Great Park Neighborhoods – adjacent to the Irvine Station – this is not to include the designated Orange County Great Park
- Target City, County, State, and certain privately owned sites for 100% affordable residential projects
- Consider increasing the inclusionary zoning ordinance to mandate 20% of new housing projects are at affordable price points instead of the existing 15%

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## Draft Policy Recommendations

- Extend the term of affordability on affordable housing units set to expire in the next Housing Element Cycle (2021-2029) – approximately 912 units
- Explore amending the existing in-lieu fee for affordable housing
- Consider ways to streamline the affordable housing development process
  - Expedite the entitlement process for affordable housing projects
  - Evaluate the costs and benefits of reducing or deferring development fees

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## Draft Policy Recommendations

- The City seeks to continue to strengthen its relationship with the Irvine Community Land Trust to collaborate and partner on efficiently and effectively maximizing affordable housing opportunities. Policy PP-F:2
  - Coordinate with the ICLT to actively pursue land acquisition opportunities for a range of affordable housing options, including rental apartments, ownership housing, transitional housing, supportive housing, and single-room occupancy housing.
  - Collaborate to determine feasibility of developing permanently affordable housing in partnership with the ICLT on publicly owned sites that may be designated as surplus property

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## Draft Policy Recommendations

- Assist the ICLT and developers to access public funding and financing and through new construction to increase supply of permanently affordable rental units with supportive services that target seniors and persons with disabilities and extremely low income households.
- Partner with the ICLT to seek legislative support for:
  - Public funding resources and prioritization of those sources to advance the development of permanently affordable rental and ownership housing at all affordable income levels.
  - Legislative changes that remove sunset provisions for affordable housing developments.

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## Follow-up from July 1, 2021 PC Meeting

- Workforce Housing Need: Workforce Housing in included in the Above Moderate Income category and was captured in the methodology prepared by SCAG. A separate study to extrapolate the "workforce housing" – 120%-150% could be requested prior to any update to the inclusionary zoning ordinance.
- Homelessness: Policies HE-I.1 – HE-I.5 identify policies to address homelessness. The City is in discussions with Tustin on shared facility opportunities.

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## Recommended Action

- Review and provide input on the key features of the Draft Housing Element Update
- Authorize transmittal of the Draft 6th Cycle Housing Element to HCD for the required 60 day review

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# 3d. Comments Summary and Analysis for July 15, 2021 PC

| Comments and Questions Received at July 15 PC Meeting | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| In terms of policies, some showing funding is coming from the General Fund<br><br>Encourage stronger relationship with ICLT.<br><br>Encourage modular units.<br><br>Consider decreasing or waiving developer fees. | Commissioner Knowland | Once HE adopted, staff would determine the exact funding mechanism (e.g., general fund, grants).<br><br>Approximately 4,800 affordable units currently in the City. ICLT has developed 457 units to date.<br><br>Mark Asturias with ICLT indicated ICLT is working with the Irvine Company on a new site and exploring feasiblity to develop site at higher density while ensure compatiblity with the areas. If presume 25 units per acre x 7 acre = 175 units. ICLT generally aims for extremely low and very low income units where the greatest need is.<br><br>In terms of modular units, refer to Proposed Program-G.2 that "encourage innovative design prototypes and/or construction…"<br><br>As part of Policy HE-B.2 in the draft Housing Plan, developer fees will be analyzed with the subsequent GPU/ZOA work effort or a separate financial study. |
| State not focusing on external factors such as drought.<br><br>Status of UCI housing counts? | Vice Chair Huang | GPU/ZOA EIR will analyze service levels and needs. State did not factor in drought.<br><br>City meeting with HCD was postponed indefinitely. City staff working with UCI staff to |

| | | |
|---|---|---|
| | | include units in University Hills (moderate income level) and Graduate Student housing (above moderate income level). |
| City lost RHNA appeal. Mayor letter to HCD regarding deadline extension was rejected.<br><br>What is the process if we don't agree with HCD's comments?<br><br>If we make major changes after HCD comments received, then we need to resubmit to HCD. Is the Planning Commission allowed to particpate in the back and forth with HCD?<br><br>In a sense, this is the "last bite of the apple" because City is under time constraints to meet deadline once the comments from HCD are received. | Chair Pierson;<br>Commissioner Knowland | At this time, the Governor has opted not to include a trailer bill to extend the HEU deadline (i.e. denying the extension request).<br><br>The purpose of tonight's meeting is to consider authorizing transmittal of the draft HE to HCD for review, not adoption of HE. Once comments are received from HCD, staff will address and bring forward revised document with IS/MND for adoption purposes.<br><br>If we don't adopt the HE within the allowed 120-day grace period then there are potential penalties as previously discussed.<br><br>If HCD provides significant comments, staff will share them with the Planning Commission prior to any revisions or further discussion with HCD. |
| Recommend specific language tonight. Add teeth by replacing conditonal language with definitive changes.<br><br>Determine if additional emergency meeting is needed.<br><br>Redline changes in Housing Plan to reinforce conditional language and specify schedule to complete and bring back to Commission for final review on August 5, 2021. Provide changes one week prior to August 5, 2021 meeting. | Commissioner Gaido:<br>Chair Pierson;<br>Commissioner Knowland<br>Vice Chair Huang | Refer to Chapter 8, Housing Plan, of the draft HE.<br><br>Staff will note any long-term cost impacts where further study might be required or if something we can do now. |

| | | |
|---|---|---|
| Believe significant changes to the draft Housing Plan are not required at this time, and document is ready to submit to HCD. Significant revisions would require separate sessions.<br>I'm working behind the scenes on affordable housing and willing to discuss in more detail during a separate session. | Commissioner Limb | Comment noted. |
| Concerned about CFD and Mello Roos on these properties per supplemental CFD report dated February 11, 2020. VL and L are not exempt from CFD for Great Park Neighborhood.<br><br>Per Mark Asturias, ICLT, affordable housing is not exempt from special taxes created prior to January 1, 2020 in accordance with AB 1743.<br><br>Who's going to pay? | Susan Sayre, Irvine resident | No response from City staff. Mark Asturias with ICLT responded:<br><br>Transfer of property taxes to individual units. All taxes, including special taxes, must be accounted for when you are pricing or renting affordable houisng. If special taxes, pricing is fixed under State regulatory program either (1) discount price of home to account for the taxes; or (2) pay off the special taxes.<br><br>Sage Park project under construction. ICLT paid off over $4MM in CFD and assessment district, so homeowner doesn't carry the burden. Special taxes for rental apartment projects are typically paid off through the bond financing. Must find a way to cover those costs because you can't pass those costs on to the owner or renter. |
| Studied RSJ, San Joaquin Marsh, UTC, University Park<br><br>Preserve zoning in the "residential core." Please consider PA 19, 23, and 24 as part of the residential core.<br><br>Similarly, preserve "South Irvine recreational" area with RSJ, Boomers, Adventure | Ford Fuji, Irvine resident | Comment noted. |

| | | |
|---|---|---|
| Playground in PA 20, San Joaquin Marsh, UCI Arboretum and Art Musuem, Mason Regional Park in PA 24, Barclay, New UCI Museum, and Bren Center. Keep recreational zoning in our area. | | |
| Recommendations:<br>1. Adjust site inventory map to retain the recreational zoned land<br>2. Streamline AH development<br>3. Provide dedicated staff for affordable housing projects…instead of explore providing dedicated staff<br>4. Eliminate fees if 100% affordable housing in perpetuity<br>5. Create own housing authority as Irvine's housing choice voucher program is through the County (for extremely low and very low)<br>6. Consider first right of refusal to ICLT for City-owned land<br>7. Developers to ccordinate with non-profits to provide supportive services for density bonus units<br>8. Include diversity and inclusionary goals into homeownership goals especially linguistically isolated groups | Commissioner Gaido | Refer to Chapter 8, Housing Plan, in the draft HE. All proposed revisions are subject to City Attorney review.<br><br>Note the IRWD site in the marsh is already allocated for 1,000 units in the GP and ZO.<br><br>Property owner for Boomers requested to be on the site inventory list.<br><br>Public review and comment period of the draft document is open until HEU adoption. |
| The subsequent GPU/ZOA work effort will allow further analysis.<br><br>Public comments may sway us during the iterative process once the draft HE is reviewed by HCD. | Chair Pierson | Comment noted.<br><br>Hypothetically, if the presumed overlays were determined not to be feasible and doesn't go through then City will have to amend the adopted HE. |

# 4a. Meeting Agenda for August 5, 2021

Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner

# AGENDA

## PLANNING COMMISSION
## REGULAR MEETING

**August 5, 2021**
**5:30 PM**
**CITY COUNCIL CHAMBER**
One Civic Center Plaza
Irvine, CA 92606

### PARTICIPATION AT PLANNING COMMISSION MEETINGS

MEETINGS ARE AVAILABLE TO ATTEND IN-PERSON IN THE CITY COUNCIL CHAMBER OR WATCHED LIVE THROUGH THE "ZOOM" APPLICATION. INFORMATION FOR "ZOOM" CAN BE FOUND ONLINE AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO THE PLANNING COMMISSION AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/PLANNINGCOMMISSION.

**REQUEST TO SPEAK IN PERSON:** IF YOU WOULD LIKE TO ADDRESS THE PLANNING COMMISSION ON A SCHEDULED AGENDA ITEM – INCLUDING A REGULAR BUSINESS ITEM, A PUBLIC HEARING ITEM, OR PUBLIC COMMENTS – PLEASE REGISTER BY COMPLETING THE ELECTRONIC FORM AVAILABLE ON THE KIOSK AT THE ENTRANCE TO THE CITY COUNCIL CHAMBER. PLEASE IDENTIFY ON THE FORM YOUR NAME AND THE ITEM ON WHICH YOU WOULD LIKE TO SPEAK. THE REQUEST TO SPEAK FORM ON THE KIOSK ASSISTS THE CHAIR IN ENSURING THAT ALL PERSONS WISHING TO ADDRESS THE PLANNING COMMISSION ARE RECOGNIZED. IT ALSO ENSURES THE ACCURATE IDENTIFICATION OF MEETING PARTICIPANTS IN THE PLANNING COMMISSION MINUTES. YOUR NAME WILL BE CALLED AT THE TIME THE MATTER IS HEARD BY THE PLANNING COMMISSION. CITY POLICY IS TO LIMIT PUBLIC TESTIMONY TO UP TO FIVE MINUTES PER SPEAKER ON AGENDIZED ITEMS, AND THREE MINUTES DURING GENERAL PUBLIC COMMENTS (UNLESS THE TIME LIMIT IS EXTENDED BY THE CHAIR), WHICH INCLUDES THE PRESENTATION OF ELECTRONIC OR AUDIO-VISUAL INFORMATION. SPEAKERS MAY NOT YIELD THEIR TIME TO OTHER PERSONS.

PLEASE TAKE NOTICE THAT THE ORDER OF SCHEDULED AGENDA ITEMS BELOW AND/OR THE TIME THEY ARE ACTUALLY HEARD, CONSIDERED AND DECIDED MAY BE MODIFIED BY THE CHAIR DURING THE COURSE OF THE MEETING, SO PLEASE STAY ALERT.

PLEASE NOTE: THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 949-724-6465, OR VIA EMAIL AT PLANNINGCOMMISSION@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

**CALL TO ORDER**

**ROLL CALL**

**PLEDGE OF ALLEGIANCE**

**INTRODUCTIONS**

**ADDITIONS AND DELETIONS TO THE AGENDA**

Additions to the agenda are limited by the California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda must be acted upon prior to the next Planning Commission meeting.

**PUBLIC COMMENTS**

**COMMISSION BUSINESS**

**1. MINUTES**

**RECOMMENDED ACTION:**
Adopt the minutes of the regular Planning Commission meeting held on July 1, 2021.

**2. GREAT PARK STATUS UPDATE**

**PUBLIC HEARINGS**

**3. TIME EXTENSION OF VESTING TENTATIVE TRACT MAP 18174 FOR A MIXED-USE DEVELOPMENT AT 18582 TELLER AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)**

**RECOMMENDED ACTION:**
1) Conduct the public hearing.

2) Adopt RESOLUTION NO. 21-3829 — A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A THREE-YEAR EXTENSION (00839733-PTT) OF VESTING TENTATIVE TRACT MAP 18174 FOR A MIXED-USE DEVELOPMENT AT 18582 TELLER AVENUE IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX).

**COMMISSION BUSINESS**

**4. GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE**

**RECOMMENDED ACTION:**

1) Review and provide further input on the key features of Chapter 8: Housing Plan of the Draft Housing Element Update.
2) Recommend transmittal of the Draft 2021-2029 Housing Element Update to the California Department of Housing and Community Development (HCD).

**STAFF REPORTS**

**PLANNING COMMISSION REPORTS**

**ADJOURNMENT**

**NOTICE TO THE PUBLIC**

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission

The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

## STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org/planningcommission* at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

## SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

## SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

### MEDIA TYPES AND GUIDELINES

1. Written Materials/Handouts: Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings: Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the

Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals: Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

## CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Planning Commission liaison at 949-724-6465.

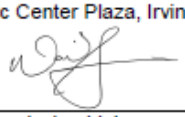
Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II).

## MEETING SCHEDULE

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on July 22, 2021 by 5 p.m. as well as on the City's web page.



Commission Liaison

# 4b. Staff Report for August 5, 2021

## REQUEST FOR PLANNING COMMISSION ACTION

**MEETING DATE:** AUGUST 5, 2021

**TITLE:** GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE

**For** Director of Community Development

**RECOMMENDED ACTION**

1. Review and provide further input on the key features of Chapter 8: Housing Plan of the Draft Housing Element Update.
2. Recommend transmittal of the Draft 2021-2029 Housing Element Update to the California Department of Housing and Community Development (HCD).

**EXECUTIVE SUMMARY**

At the July 15, 2021 meeting, the Planning Commission requested the review of the Draft 2021-2029 Housing Element Update be continued to the August 5, 2021 meeting to allow additional time to review and comment on Chapter 8: Housing Plan, prior to submittal to the California Department of Housing and Community Development (HCD) for its statutory review.

The Planning Commission specifically asked Community Development staff to strengthen policies and programs associated with the development of affordable housing. Where feasible and appropriate, staff has revised the policies and programs to include language that is more definitive, establishes more detailed timeframes for fee programs , and strengthens the support for services to renters and homeowners. The following proposed edits have been made to Chapter 8: Housing Plan:

- Revise second bullet in program PP-B.1 to read:
  - Within 12 months, the City will explore a program including a financial assessment that would eliminate or reduce, permitting fees for housing projects that are 100 percent affordable.
- Revise policy PP-B.5 to read: "**Dedicate Staff for Affordable Housing Entitlement, Permit, and Fee Processes**. To decrease the entitlement and construction process, following the adoption of the Housing Element the City will designate a dedicated planner, plan checker, and building inspector(s) to provide expedited processing for affordable housing projects.

- Revise policy PP-G.2 to include "modular units or other innovative building types" as an option to consider to ensure a diverse and affordable housing stock.
- Add "**PP-G.6**: **Irvine Housing Authority.** The City will explore creating an Irvine Housing Authority that has the ability to allocate Federal Housing Choice Vouchers."
- Add "**PP-G.7: Terms of Affordability.** The City will encourage affordable housing developers to consider extending the terms of affordability in perpetuity."
- Revise policy PP-I.4 to read: "The City will continue to make information about services for people experiencing homelessness available on the City's website and at City facilities. The City will continue to provide resources for non-profits that provide transitional housing, motel vouchers, food pantry, emergency rent and utility payment assistance, life skills counseling and clothing. The City will continue to provide CDBG grant funding to non-profits such a Families Forward, South County Outreach, Human Options, and Stand Up for Kids that provide these services. Information on these resources is included in the City's Affordable Housing Guide and the City's website.
- Add "**PP-J.3: Legal Assistance for Renters.** The City will continue to provide information in the Irvine Affordable Housing Guide available at City Hall and the City's website on landlord/tenant rights and mediation services through the Fair Housing Foundation, a non-profit the City contracts with to provide these services to residents. The City will also add information on the City's website and provide resources on non-profits such as Community Legal Aid SoCal and the Legal Aid Society of OC."
- Revise PP-K.1 to include: "Information on homeownership will be published in a variety of languages and will be provided to community organizations that work with different populations to ensure greater homeownership diversity."
- Add **"PP-M.3: Density Bonus Eligibility.** The City will encourage developers of projects with affordable density bonus units to coordinate efforts with local non-profits or community organizations to determine if the units could be set aside, where feasible, for special groups including, but not limited to, Veterans and special need adults."

Review Process

Following additional review by the Planning Commission, the Housing Element will be forwarded to HCD for a mandatory 60-day review for consistency with state law and provisional certification. The review by HCD must occur at least 90 days prior to the City Council taking final action on the Housing Element. Upon incorporation of state feedback, staff will present the final draft 2021-2029 Housing Element to the Planning Commission in the fall/winter 2021, followed by consideration, final review, and formal adoption by the City Council. The City will be taking advantage of the 120 day grace period following the October 15, 2021 deadline to adopt the final Housing Element. The entire 6$^{th}$ Cycle Housing Element has been delayed at several levels, including the six-month delay at SCAG for the adoption of the final RHNA (March 2021), the delayed release of the

Affirmatively Furthering Fair Housing (AFFH) guidelines by HCD (April 2021), and COVID. Upon submittal of the final Housing Element to HCD for certification, the state will have 90 days to confirm whether the Housing Element is consistent with HCD's provisional certification and thereby complies with state law.

**REPORT PREPARED BY**: Marika Poynter, Principal Planner

**PC ATTACHMENTS:**

1. Redline of Chapter 8: Housing Plan
2. July 15, 2021 Planning Commission Staff Report

# 8 HOUSING PLAN

## 8.1 Goals, Objectives, Policies, and Programs

### 8.1.1 Goal 1: Provide for safe and decent housing for all economic segments of the community.

#### 8.1.1.1 Objective A: Update the Land Use Element and Zoning Ordinance to achieve compliance with current State laws and to facilitate the development of diverse housing options.

**Policies**

- **HE-A.1:** Identify residential zones where allowable density can be increased for affordable housing, including for extremely low-income households.
- **HE-A.2:** Identify commercial and institutional zones where zoning can be changed to allow for mixed-use and/or higher-density residential development.
- **HE-A.3:** Ensure appropriate land use planning and developer mitigation/improvements are provided for adequate infrastructure, services, and facilities to serve existing and future residents.
- **HE-A.4:** Monitor residential construction and the use of residential and mixed-use designated lands. Ensure adequate residential sites are available to meet the City's housing needs.

**Proposed Programs/Activities/Actions**

- **PP-A.1: Maintain/Update the Site Inventory.** The City will provide adequate residential and mixed-use designated sites to accommodate the City's 6th Cycle RHNA of 23,610 units (6,396 very-low-, 4,235 low-, 4,308 moderate-, and 8,671 above-moderate-income units) through the following actions:
  - The City will maintain, a residential sites inventory of the City's RHNA and update this inventory, as projects are reviewed/approved/constructed to ensure sufficient residential capacity is maintained to accommodate the identified need. The inventory will be verified annually through the HCD Annual Progress Report work effort.

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PC ATTACHMENT 1

- Should a development approval result in a reduction of capacity below the residential capacity needed to accommodate the remaining need for lower-income households, the City will identify sufficient sites to accommodate the shortfall.
- Upon request by interested developers or the general public, the City will make the site inventory map and/or list available subject to reproduction costs.
- The City will continue to pursue alternative options for meeting the RHNA through preservation, legislative changes, and regional cooperation. The City will periodically evaluate its funding availability and opportunities to pursue acquisition/rehabilitation of affordable housing projects and preservation of at-risk housing.

- **PP-A.2: Update the City's General Plan (including Land Use Element) and Zoning Ordinance.** The City will incorporate changes in State law (particularly affordable housing, emergency shelters, and transitional/supportive housing) into the Land Use Element and Zoning Ordinance. This will involve allowing for increased densities in both residential and non-residential areas to adhere to RHNA requirements. Other General Plan elements will be updated to ensure consistency with the updated Housing and Land Use Elements, as well as the Zoning Ordinance.

- **PP-A.3**: **Residential Overlays in Non-Residential Areas:** The City will establish zoning overlays to allow for multifamily residential in nonresidential areas (which may include properties designated for religious institutions and schools) to provide flexibility in land use and development standards, including mixed-use developments. These flexible standards shall be directed toward meeting the physical, social, and economic needs of the community.

- **PP-A.4: Encourage the Subdivision of Sites that Are 10 or More Acres.** The City will encourage the subdivision of sites that are 10 acres or more to provide more opportunities for development of affordable housing, which the HCD has determined is more feasible on sites between 0.5 and 10 acres in size.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | General Fund |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Update Land Use Element and Zoning Ordinance by October 2024. All other programs will be completed annually. |

### 8.1.1.2 Objective B: Streamline the affordable development process.

#### Policies

- **HE-B.1:** Expedite the entitlement process for affordable housing developments.
- **HE-B.2:** Evaluate the costs and benefits of reducing, deferring, or waiving development fees and identifying opportunities to do so for affordable housing projects.

#### Proposed Programs/Activities/Actions

- **PP-B.1: Assist with Development of Lower-Income Housing.** To assist the development of housing for households with lower incomes on larger sites, the City will seek to amend the fee collection process for land divisions and lot line adjustments resulting in parcel sizes that facilitate multifamily developments affordable to households with lower incomes (including extremely low income) in light of State, Federal, and local financing programs (i.e., 2–10 acres). The City will also work with property owners and nonprofit developers to target and market the availability of sites with the best potential for development. In addition, the City will offer the following incentives for the development of affordable housing, including but not limited to the following:
  - Streamlining and expediting the approval process for land division for projects that include affordable housing units.
  - ~~Defer and/or reduce fees related to the subdivision for projects affordable to households with lower incomes.~~ Within 12 months, the City will explore a program, including a financial assessment, that would eliminate or reduce permitting fees for housing projects that are 100 percent affordable.
  - Technical assistance to developers on funding applications.
  - Modify development requirements where possible.
- **PP-B.2: Expedite Development.** The City will expedite development of housing projects for seniors, people with disabilities, and lower-income people and/or households.
- **PP-B.3: Review the City's Development Standards.** The City will review the current Development Standards and update as appropriate to encourage residential, mixed-use, and transit-oriented developments.
- **PP-B.4: Provide a Menu of Incentives/Concessions for Developers.** To expedite the process of finding resources and incentives, the City will post an overview of available incentives/concessions for developers on the City's website.



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- **PP-B.5: Dedicate Staff for Affordable Housing Entitlement, Permit, and Fee Processes.** To decrease the entitlement and construction process, following the adoption of the Housing Element the City will designate a dedicated planner, plan checker, and building inspector(s) to provide expedited processing for affordable housing projects.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | General Fund |
| Responsible Party: | City's Community Development and Public Works/Transportation Departments |
| Time Frame: | Complete review of City processes and potential for dedicated staff by October 2022. All other programs will be ongoing annually. |

## 8.1.2 Goal 2: Maximize land utilization for residential development.

### 8.1.2.1 Objective C: Encourage the proper utilization of the undeveloped/underdeveloped residential areas of the City.

#### Policies

- **HE-C.1:** Promote infill development in appropriate areas.
- **HE-C.2:** Promote residential development fully served by public services and utilities.

#### Proposed Programs/Activities/Actions

- **PP-C.1: Update the City's Zoning Ordinance to Allow for Higher Densities in Areas with Underdeveloped/Underutilized Property.** The City will update the current Zoning Ordinance to establish higher density in areas with underdeveloped/underutilized property, such as Planning Areas 32 (adjacent to the Irvine Station served by Amtrak/Metrolink passenger rail services and Orange County Transportation Authority bus services), 33, and 36 (a.k.a., Irvine Business Complex or "IBC" near John Wayne Airport). This update will maximize land utilization for residential development to accommodate RHNA requirements, including allowing residential overlays in commercial areas to allow for residential to be added to commercial areas or to allow existing underutilized commercial uses to be converted to residential (i.e., hotels).
- **PP-C.2: Establish ADU Policies to Comply with Changes in State Law.** Multiple State laws have been passed since 2019 establishing Statewide standards for local regulations governing ADU development. State law requires that ADUs be allowed in residential and mixed-use areas despite local ordinances or homeowner's association rules and requirements. Additionally, State law requires jurisdictions to develop a plan to encourage and incentivize ADUs in an effort to address the current California housing crisis.
- **PP-C.3: Remove Barriers for ADUs**. The City will work with the U.S. Postal Service and the Orange County Fire Authority to develop solutions for address, mail delivery, and



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public safety service/response issues that have surfaced through the processing of setting City ADU policies.

- **PP-C.4: Plan to Encourage and Incentivize ADUs.** Assembly Bill (AB) 671 requires local agencies' Housing Elements to include a plan that incentivizes and promotes the creation of ADUs that can offer affordable rents for households with very-low-, low-, or moderate-income households. As part of the ADU ordinance update (including public outreach), the City will also explore options to facilitate affordable housing options for ADUs. These options may include pre-approved ADU plans or kits or reduced or waived building permit fees for property owners who provide annual rent information.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | General Fund |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Complete Zoning Ordinance Update by October 2024. All other programs by January 2023. |

## 8.1.3 Goal 3: Preserve existing affordable housing.

### 8.1.3.1 Objective D: Use available resources to preserve affordable housing units at risk of conversion to market rate.

**Policies**

- **HE-D.1:** Monitor affordable rental units at risk of converting to market rents and proactively reach out to property owners to discuss options.
- **HE-D.2:** Monitor and participate in Federal, State, and local initiatives that address affordable housing preservation in conjunction with the Annual Progress Report to HCD.
- **HE-D.3:** Provide information to property owners on financial incentives and public funding assistance for improvements.
- **HE-D.4:** Work with property owners of existing assisted housing developments for lower-income households to determine methods to extend affordability covenants to preserve affordable units, including assistance from the City.
- **HE-D.5:** Work with nonprofit organizations that may acquire at-risk projects to extend affordability of existing assisted housing developments for lower-income households.
- **HE-D.6:** Identify new and innovative ways to maintain affordability, rehabilitate, and preserve properties that provide naturally affordable housing (i.e., existing housing with rents that fall in the moderate-income housing range according to HCD and HUD published rents and do not have affordability restrictions).

- **HE-D.7:** If preservation is not possible, ensure that tenants of at-risk units opting out of low-income use restrictions are properly noticed and informed of resources available to them for assistance.

## Proposed Programs/Activities/Actions

- **PP-D.1: Affordable Housing Preservation Program (including Financial Resources and In-Kind Services).** The City will provide financial and other available assistance to affordable housing property owners to preserve units. The committed assistance may consist of both financial and non-financial, in-kind services to incentivize the preservation of affordable units. The total number of units to be preserved are seven extremely low, 517 very low and 299 low-income units (Chapter 4, At-Risk Affordable Housing, of this Housing Element identifies the project name, level of affordability and address of all units).

It is important to note that California Government Code Section 65583.1 (c)(4) "committed assistance" means "that the city or county enters into a legally enforceable agreement during the period from the beginning of the projection period until the end of the third year of the planning period that obligates sufficient ***available funds or other in-kind services*** to provide the assistance necessary to make the identified units affordable and that requires that the units be made available for occupancy within two years of the execution of the agreement."

- **PP-D.2: Continue the Conservation and Monitoring of Existing and Future Affordable Units.** The City will continue to monitor and preserve the affordability of all publicly assisted housing units.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | State Grants, Federal funding, Inclusionary Housing In-Lieu Fees |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Ongoing |

## 8.1.4 Goal 4: Encourage more affordable housing units.

### 8.1.4.1 Objective E: Secure State, Federal, and local affordable housing funds and assist developers in finding funding sources for affordable project funding.

## Policies

- **HE-E.1:** Apply and leverage State and Federal grant and other funding sources.
- **HE-E.2:** Provide available funding information to the public/affordable housing developers.
- **HE-E.3:** Update inclusionary housing policies and in-lieu fees.

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## Proposed Programs/Activities/Actions

- **PP-E.1: Advertise Available Resources.** In addition to providing funding opportunities related to HUD programs on the City's website, funding opportunities will be disseminated via targeted email notifications and may also be posted on all City social media accounts and include information on vacant land currently owned by the City (i.e., location, size, and zoning).
- **PP-E.2: Monitor Grant Opportunities and Maximize Grant Applications.** The City will access information from HCD and other State agencies to identify grant application opportunities for affordable housing. When grant opportunities are known, the City will reach out to affordable developer stakeholders to identify projects and/or opportunities to include on grant applications.
- **PP-E.3: Inclusionary Housing Ordinance Update.** The City will retain a consultant to conduct a feasibility study to evaluate increasing the inclusionary housing requirement from 15% (5% very low, 5% low, and 5% moderate) to 20% (9% very low, 6% low, and 5% moderate). Updates to the Inclusionary Housing Ordinance will reflect the 20% requirement with corresponding updated in-lieu fee (paid if affordable units are not provided on-site) to reflect current land and construction costs, and other related updates.
- **PP-E.4: Explore Local Funding Options.** The City will analyze local funding options for affordable housing and monitor new funding and financing resources each year. This program will also include using State and Federal funding received by the City to partner with nonprofit organizations (such as the ICLT), as the commitment of City funding can enhance the scoring of 100% affordable projects to secure important funding sources, such as low income housing tax credits (LIHTCs) that have become highly competitive.
- **PP-E.5: Explore Establishing Programs and/or Public/Private Partnerships to Create Workforce Housing.** The City will analyze and explore State programs and/or potential public/private partnerships with major employers to acquire existing market rate housing units or develop new housing units to create moderate or workforce housing (available to households with incomes at 80% to 120% of AMI). Potential programs could include the California Statewide Communities Development Authority, concessions or incentives to large existing or future Irvine employers, and/or collaborations between employers and developers.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | City's General Fund, State and Federal funds |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Inclusionary Housing Ordinance update by October 2024 and remaining programs on an ongoing basis |

### 8.1.4.2 Objective F: Leverage publicly owned resources, such as vacant land and underutilized properties.

#### Policies

- **HE-F.1:** Leverage available resources, such as vacant land and underutilized properties, to incentivize new affordable housing development.

#### Proposed Programs/Activities/Actions

- **PP-F.1: Leverage City-Owned Land for the Development of 100% Affordable Housing Projects.** Explore options and work with the ICLT or other non-profit developers (including providing a land donation and/or long-term land lease) to facilitate the development of 100% affordable housing projects on vacant or underutilized City-owned sites. Activities could include requests for development proposals, contractual agreements with ICLT or other affordable housing developers, and other feasible activities.
- **PP-F.2: Irvine Community Land Trust.** The City seeks to continue to strengthen its relationship with the ICLT to collaborate and partner on efficiently and effectively maximizing affordable housing opportunities. To this end, the City will pursue the following:
  - Coordinate with the ICLT to actively pursue land acquisition opportunities for a range of affordable housing options, including rental apartments, ownership housing, transitional housing, supportive housing, and single-room occupancy housing.
  - Collaborate to determine feasibility of developing permanently affordable housing in partnership with the ICLT on publicly owned sites that may be designated as surplus property.
  - Assist the ICLT and developers to access public funding and financing and through new construction to increase supply of permanently affordable rental units with supportive services that target seniors and persons with disabilities and extremely low-income households.
  - Partner with the ICLT to seek legislative support for:
    - Public funding resources and prioritization of those sources to advance the development of permanently affordable rental and ownership housing at all affordable income levels.
    - Legislative changes that remove sunset provisions for affordable housing developments.

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- **PP-F.3: Collaborate with Public Agencies to Leverage Other Publicly Owned Land for the Development of Affordable Housing Projects through Master Planning and Disposition Efforts.** The City will coordinate with public agencies to facilitate the development of affordable housing projects on vacant and underutilized sites, including sites owned by the County of Orange, the State, and the Irvine Ranch Water District. Activities could include collaboration with public agencies on master-planning and disposition efforts for large vacant and underutilized sites. For instance, the County of Orange currently owns significant property near the Irvine Station. Under this program, the City would work with the County to develop affordable housing strategies for these properties.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | State Grants, CDBG, HOME, public and private grants |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Coordination with ICLT regarding City owned land beginning in fiscal years 2021-22 and 2022-23 with efforts to select a developer (or developers) for available lands (among other factors, this will be dependent on the availability of State funding to subsidize projects through the entire planning period).<br>Coordination with County of Orange, the State, and the Irvine Ranch Water District in connection with the Land Use Element Update and Zoning Ordinance amendment during 2022- 2024. |

### 8.1.4.3 Objective G: Promote various types of affordable housing.

#### Policies

- **HE-G.1:** Continue to provide density and regulatory incentives to facilitate permanent affordable housing development.
- **HE-G.2:** Encourage mixed-income developments accessible to lower-income residents Citywide, especially in resource-rich areas.
- **HE-G.3:** Seek and explore opportunities (including partnering with non-profit organizations) to encourage the development of the following types of affordable housing:
  - Acquisition/rehabilitation projects.
  - Affordable housing for seniors, large families and other special needs groups.
  - Affordable housing with reasonable accommodations and supportive services for people with disabilities.
  - Affordable owner-occupied housing types.
  - Mixed-use projects that have community-serving uses.

- **HE-G.4:** Promote and facilitate new partnerships with various organizations with different housing needs and between various entities with complementary housing objectives that include but are not limited to the following:
  - University of California, Irvine (including the UCI land trust).
  - Religious institutions.
  - School districts.
  - Community college districts.
  - Large employers.
  - Market-rate developer with affordable housing developer partnership.
- **HE-G.5:** Assist very low and low-income renters with securing affordable housing in the City by providing information regarding Housing Choice Vouchers through the Orange County Housing Authority (OCHA). Maintain on the City's website a link to the Housing Choice Vouchers information page on the OCHA website and notify Irvine residents if and when the waitlist is open. Should the Housing Choice Voucher waitlist open during the planning period, provide a link on the City's website to the application and make paper copies available at City Hall.

## Proposed Programs/Activities/Actions

- **PP-G.1: Continue to Apply "Additive" Intensity (under the Land Use Element) for Affordable Housing.** The City's Land Use Element allows for the entitlement of affordable housing units beyond the maximum unit counts established in the Zoning Ordinance, thus considered additive to the General Plan intensity thresholds, which allows additional units to be developed under the City's established land use designations. The City will continue implementing this policy. Approximately 1,300 affordable units in the City have been determined to be additive over the past eight years.
- **PP-G.2: Adopt Ordinances and Policies that Encourage a Diverse Housing Stock.** The City will amend the Inclusionary Housing Ordinance; encourage and incentivize ADUs; encourage innovative design prototypes and/or construction, such as smaller units with increased energy efficiency (i.e., sustainable designs and operations), modular units or other innovative building types; and streamline permitting to encourage a diverse housing stock. See other objectives for proposed activities regarding such topics.
- **PP-G.3: Zoning Changes.** TheCity will make appropriate zoning changes as part of the General Plan - Land Use Element Update and Zoning Ordinance Amendment. These changes will encourage the development of new affordable housing in resource-rich areas and provide more affordable housing options for Irvine residents. Furthermore, this



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update will allow these land uses in the City's residential zones and modify portions of the Municipal Code dealing with the location of and distance between these housing types and potentially other requirements and will ensure that the City uses only objective development standards to maintain compliance with current State requirements.

- **PP-G.4: UCI Housing Units.** City staff will increase and enhance coordination with UCI and the UCI land trust to capture and monitor residential units with tiered priorities that include the general public on campus. The City will meet with UCI staff on a quarterly basis to review information on existing units and new units planned.
- **PP-G.5: Housing Choice Vouchers.** The Federal Housing Choice Voucher Program extends rental subsidies to extremely low and very low-income households, including families, seniors and the disabled. The program offers a voucher that pays the difference between the current fair market rent as established by HUD and what a tenant can afford to pay (i.e., 30% to 40% of household income). The voucher allows a tenant to choose housing that costs above the payment standard, providing the tenant pays the extra cost. In Irvine, the program is administered by the OCHA. Given the continued need for rental assistance, the City supports and encourages the provision of additional subsidies through the Housing Choice Voucher Program. The City will continue to provide information to households and homeowners interested in participating in this program.
- **PP-G.6: Irvine Housing Authority.** The City will explore creating an Irvine Housing Authority with the ability to allocate Federal Housing Choice Vouchers.
- **PP-G.7: Terms of Affordability.** The City will encourage affordable housing developers to consider extending the terms of affordability in perpetuity.

### 8.1.4.4 Objective H: Address, remove, and/or mitigate existing or potential governmental constraints to housing production and affordability (to the extent legally and financially feasible).

#### Policies

- **HE-H.1:** Evaluate City policies, procedures, and regulations annually with the passage of new laws affecting housing.

#### Proposed Programs/Activities/Actions

- **PP-H.1:** The City will monitor legislative changes to ensure that City policies and regulations comply with State and Federal laws.

- **PP-H.2**: The City will monitor and adjust City fees, development standards, incentives, and development review processes, where legally and financially feasible, to ensure such requirements do not unduly constrain housing development.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | City's General Fund and OCHA (via HUD) |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Update/amend Inclusionary Housing Ordinance and complete Zoning Ordinance Update by October 2024. Monitoring laws and potential constraints will be ongoing. |

## 8.1.5 Goal 5: Maximize solutions for those experiencing or at risk of homelessness.

### 8.1.5.1 Objective I: Increase access to support services for people experiencing homelessness.

#### Policies

- **HE-I.1:** Amend the City's Zoning Ordinance to comply with current State laws regarding emergency shelters, transitional and supportive housing, group care facilities, and other housing types.
- **HE-I.2:** Leverage available State and Federal grant funding (e.g., PLHA grant funds) and local sources to fund housing solutions.
- **HE-I.3:** Coordinate with Orange County and surrounding cities to identify and fund long-term services and housing for those experiencing homelessness.
- **HE-I.4:** Continue to cooperate with nonprofit organizations to provide emergency shelter, transitional, and permanent supportive housing and associated services for residents experiencing homelessness.
- **HE-I.5:** Reduce barriers to the development of emergency, transitional, and permanent supportive housing.

#### Proposed Programs/Activities/Actions

- **PP-I.1: Update the City's Zoning Ordinance and Policies Related to Emergency Shelters, Low-Barrier Navigation Centers, Supportive Housing, and Group Care Facilities to Comply with Current Laws.** The City will update the Zoning Ordinance and related policies pertaining to emergency shelters, Low-Barrier Navigation Centers (LBNCs), supportive housing, and group care facilities to conform to State requirements, as established by AB 139, AB 2162, and Senate Bill 48. Generally, this update will allow these land uses in the City's residential zones and with fewer conditions, as well as



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updates to minimum parking requirements as necessary. Schedule of Actions: Completed by October 2024.

- **PP-I.2: Housing Options.** Many funding sources have specific eligibility criteria or other requirements that may not always align with potential projects in Irvine. The City will pursue relevant State and Federal funding sources to provide additional options for developers of lower-income housing that serve veterans, individual, and families at-risk of and currently experiencing homelessness in the City. The City will ensure that such housing options will include reasonable accommodations and supportive services for people with disabilities. Schedule of Action: Ongoing as funding is released and available.

- **PP-I.3: Leverage All Funding Options.** The City will explore the feasibility of joining the Orange County Housing Finance Trust (OCHFT), a joint power authority composed of many Orange County cities. The OCHFT can provide additional funding options for affordable housing developers. The City will ensure that housing options will include reasonable accommodations and supportive services for people with disabilities. Schedule of Actions: Explore by October 2023.

- **PP-I.4: Services for People Experiencing Homelessness.** The City will continue to make information about services for people experiencing homelessness available on the City's website and at City facilities. The City will continue to provide resources for non-profits that provide transitional housing, motel vouchers, food pantry, emergency rent and utility payment assistance, life-skills counseling and clothing. The City will continue to provide CDBG grant funding to non-profits such as Families Forward, South County Outreach, Human Options, and Stand Up for Kids that provide these services. Information on these resources is included in the City's Affordable Housing Guide and the City's website. Schedule of Actions: Ongoing.

- **PP-I.5: Crisis Response Protocol.** The City will explore establishing a crisis response protocol for local service providers to render rapid crisis support, including after-hour services for people experiencing or at risk of homelessness. Schedule of Actions: By October 2022.

- **PP-I.6: Shared Housing.** The City will reach out to other California cities currently implementing shared housing programs that help match individuals experiencing or at risk of homelessness and seniors for a mutually beneficial living situation. Individuals in need of housing can provide needed physical assistance around the home for seniors. Through these conversations and information sharing, The City will determine the efficacy of these programs and consider establishing a pilot program in the City. Schedule of Actions: Explore by October 2024.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | City's General Fund, State and Federal funding opportunities |



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| | |
|---|---|
| Responsible Party: | City's Community Development Department |
| Time Frame: | See above under each program. |

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### 8.1.5.2 Objective J: Increase tenant protections.

#### Policies

- **HE-J.1:** Work with local nonprofit organizations to identify people experiencing or at risk of homelessness in vulnerable subpopulations in the City to navigate specialized services.
- **HE-J.2: Evaluate opportunities to** leverage local, State, and Federal funding, as available, to maintain and continue rental assistance and financial assistance programs that were created to keep individuals housed and prevent homelessness during and following the COVID-19 pandemic.

#### Proposed Programs/Activities/Actions

- **PP-J.1: Cooperation with Community-Based Organizations.** Cooperate with community-based organizations that provide services or information about services to any special needs or linguistically isolated groups.
- **PP-J.2: Displacement Prevention.** Minimize the displacement of households with lower incomes and special needs whenever possible and where necessary to ensure that displacement is carried out in an equitable manner.
- **PP-J.3: Legal Assistance for Renters.** The City will continue to provide readily available information in the Irvine Affordable Housing Guide available at City Hall and the City's website on landlord/tenant rights and mediation services through the Fair Housing Foundation, a non-profit the City contracts with to provide these services to residents. The City will also add information on the City's website and provide resources on non-profits such as Community Legal Aid SoCal and the Legal Aid Society of OC.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | City's General Fund, State and Federal funding opportunities |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Ongoing |

## 8.1.6 Goal 6. Encourage and preserve homeownership.

### 8.1.6.1 Objective K: Increase the share of City residents who own the home where they live.

#### Policies

- **HE-K.1:** Promote existing nonprofit, County, State, and Federal educational programs and resources to increase homeownership education and opportunities.

- **HE-K.2:** Provide financial assistance to lower income homeowners for residential rehabilitation projects.

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## Proposed Programs/Activities/Actions

- **PP-K.1: Homeownership Education.** The City will encourage homeownership through education, sharing information, and links to existing nonprofit, County, State, and Federal resources on the City's website. Many residents lack the knowledge about mortgages in addition to having limited financial resources. Information on homeownership will be published in a variety of languages and will be provided to community organizations that work with different populations to ensure greater homeownership diversity.

- **PP-K.2: Residential Rehabilitation Program.** This existing program provides financial assistance to lower-income Irvine homeowners for critical home improvement projects. Financial assistance through the program includes low interest, deferred loans and emergency grants. This program assists homeowners in need of health and safety, building code and accessibility-related repairs. Only owner-occupied single-family family dwellings or manufactured homes located in the City of Irvine are eligible for this funding. Program information will be provided on the City website and at public counters, as well as through the city's Code Enforcement program on an ongoing basis.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | City's General Fund (Homeowner Education) and CDBG funding (Residential Rehabilitation Program) |
| Responsible Party: | City's Community Development Department |
| Time Frame: | Ongoing |

## 8.1.7 Goal 7: Improve quality of life and promote placemaking.

### 8.1.7.1 Objective L: Encourage developments that provide community benefits.

## Policies

- **HE-L.1:** Encourage placemaking and public spaces to serve residents of all incomes, interests, ages, physical abilities, and cultures.

- **HE-L.2:** Encourage infill development that includes capital improvements, such as sidewalk repair and lighting improvements.

- **HE-L.3:** Encourage development that includes active transportation infrastructure, such as new and wider sidewalks, trails, and protected bike lanes.

- **HE-L.4:** Continue to preserve existing open space in the City.

- **HE-L.5:** Encourage development that brings new community amenities and services like community meeting spaces, community health clinics, after school programs, and childcare.

- **HE-L.6:** Develop partnerships with existing community organizations to expand accessibility to community amenities, such as community centers, parks, trails and other recreational uses.
  - Such community organizations can include non-profits, local churches, and local businesses.
  - Partnerships can include providing assistance with outreach and securing space to host events.

## Proposed Programs/Activities/Actions

- **PP-L.1: Update and Implement the City's General Plan - Land Use Element/Amend Zoning Ordinance.** The City will update its Land Use Element and amend the Zoning Ordinance to encourage housing development to serve all income levels throughout the City, particularly in resource-advantaged areas, and encourage placemaking, public spaces, capital improvements, active transportation infrastructure, and community amenities.
- **PP-L.2: Implement the One Irvine program to support placemaking through its neighborhood revitalization efforts.** The City will continue implementation of its One Irvine program to revitalize individual neighborhoods through a work program uniquely developed with community input for each neighborhood. The program brings together multiple funding and educational resources to enhance public spaces and assist homeowners with residential and aesthetic improvements.

# 8.1.8 Goal 8: Affirmatively furthering fair housing.

## 8.1.8.1 Objective M: Ensure equal housing opportunities for all residents, regardless of their special characteristics as protected under State and Federal fair housing laws.

## Policies

- **HE-M.1:** Continue to support ongoing efforts of the State and Orange County to enforce fair housing laws.
- **HE-M.2:** Promote housing opportunities for all people regardless of race, color, sex, national origin, religion, sexual orientation, disability, family status, marital status, income, ancestry, or other barriers that can prevent access to housing.
- **HE-M.3:** Encourage the provision of housing to meet the needs of families of all sizes and ages.



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- **HE-M.4:** Facilitate increased participation among traditionally underrepresented and linguistically isolated groups in the public decision-making process.
- **HE-M.5:** Provide outreach and education for the broader community of residents, residential property owners, and operators regarding fair housing practices and requirements.

## Proposed Programs/Activities/Actions

- **PP- M.1: Provide Information and Education to Residents on the City's Website.** The City will provide links to Fair Housing Foundation (a nonprofit the City currently contracts with) to provide Irvine residents with information regarding fair housing law, tenant and landlord rights (including information on mediation services); Appendix B, Affirmatively Furthering Fair Housing Analysis, of this Housing Element; and information and resources for the reporting suspected violations and obtaining remedies on the City's website.
- **PP-M.2: Cooperation with Community Based Organizations.** The City will cooperate with community-based organizations that provide services or information about services to any special needs and linguistically isolated groups.
- **PP-M.3: Density Bonus Eligibility.** The City will encourage developers of projects with affordable density bonus units to coordinate efforts with local non-profits or community organizations to determine if the units could be set aside, where feasible, for special groups including but not limited to Veterans and special need adults.

| SCHEDULE OF ACTIONS | |
|---|---|
| Funding Source: | City's General Fund |
| Responsible Party: | City's Community Development Department |
| Time Frame: | City website modifications by May 2022. Coordination with Community Organizations will be ongoing. |

## 8.2 Quantified Objectives

California Government Code, Section 65583(b)(2), requires jurisdictions to identify the maximum number of housing units by income category (including extremely low income) that can be constructed, rehabilitated, and preserved over a five-year time period. The City has two sets of numerical housing goals:

- RHNA (as addressed and described in Chapter 7, Adequate Sites Inventory Analysis and Methodology, of this Housing Element).
- Quantified objectives for affordable housing production.

Irvine's RHNA requires adequate land resources to accommodate 23,610 new housing units, which includes 10,631 units affordable to very low and low-income. It is important to note that

the total housing need identified greatly exceeds available resources and the City's ability to satisfy this need.

State law recognizes that housing needs may (and do) exceed available resources and, therefore, does not require that the City's quantified objectives be identical to the identified housing needs (or RHNA). More specifically, the California Government Code, Section 65583(b)(2) states the following:

> *It is recognized that the total housing needs . . . may exceed available resources and the community's ability to satisfy this need within the content of the general plan requirements. . . . Under these circumstances, the quantified objectives need not be identical to the total housing needs. The quantified objectives shall establish the maximum number of housing units by income category, including extremely low income that can be constructed, rehabilitated, and conserved.*

The acknowledgment of the funding limitations is extremely important—cities and counties are required to prepare Housing Elements every eight years to identify needs and actions to provide for housing at all income levels and for all populations despite a severe shortage in local, State, and Federal funding that makes many of the actions needed and planned financially infeasible. It is important to recognize that State law requires cities to plan for housing, but almost all housing is developed by the private sector.

Although cities must establish quantified objectives for the actual creation of affordable housing opportunities and provision of other housing assistance (based on realistic assumptions), these objectives need not be identical to the total housing needs (i.e., RHNA). The quantified objectives, or number of affordable units that will realistically be created, as shown in Table 8-1, Quantified Objectives, provide a projection for the entire eight-year 6th Cycle Housing Element period.

**Table 8-1. Quantified Objectives**

| | Extremely Low | Very-Low | Low | Moderate | Above Moderate | TOTAL |
|---|---|---|---|---|---|---|
| RHNA Allocation | 6,396 | | 4,235 | 4,308 | 8,671 | **23,610** |
| New Construction | 25 | 879 | 515 | 382 | 13,119 | **14,041** |
| Rehabilitation | | | | | | **0** |
| Housing Conservation (At-Risk Housing) | 7 | 517 | 299 | 0 | 0 | **306** |
| TOTAL | **32** | **1,396** | **814** | **382** | **13,119** | **14,347** |
| **TOTAL AFFORDABLE UNITS** | **32** | **1,396** | **814** | **382** | | **2,624** |

This chapter of the Housing Element outlines policies and programs that range from streamlining development; leveraging State and Federal funding sources; collaborating with the ICLT; amending the City's Inclusionary Housing Ordinance, land use, and zoning changes to

accommodate the RHNA and adhere to State legal requirements; and maximizing solutions for those experiencing homeless. Some programs and policies in the Housing Plan are more qualitative (such as amending the City's Inclusionary Housing Ordinance), while other programs are quantitative (i.e., leveraging State and Federal funding sources as they become available). Regardless, given that affordable housing resources are scarce, while land and construction costs are high and expected to continue to rise, the number of affordable housing units can only be estimated.

Based the City's Housing Plan, a total of 2,624 affordable units will be created between 2021 and 2029, as summarized in Table 8-1. This number includes two Irvine Community Land Trust projects to be completed during the 6th Cycle projection period, existing entitlements, affordable units on City-owned vacant land, and units created through the City's Inclusionary Housing requirement.

It is important to note that this number has been conservatively estimated due to extremely limited State and Federal funding sources, such as LIHTCs (which provide the greatest amount of funding for affordable housing projects in California – the lack of this funding renders many potential projects as financially infeasible) that have become increasingly competitive in recent years with a significant portion of awards going to projects that provide permanent supportive housing. This lack of funding is the primary reason for the conservative estimate of affordable units during the 6th Cycle.

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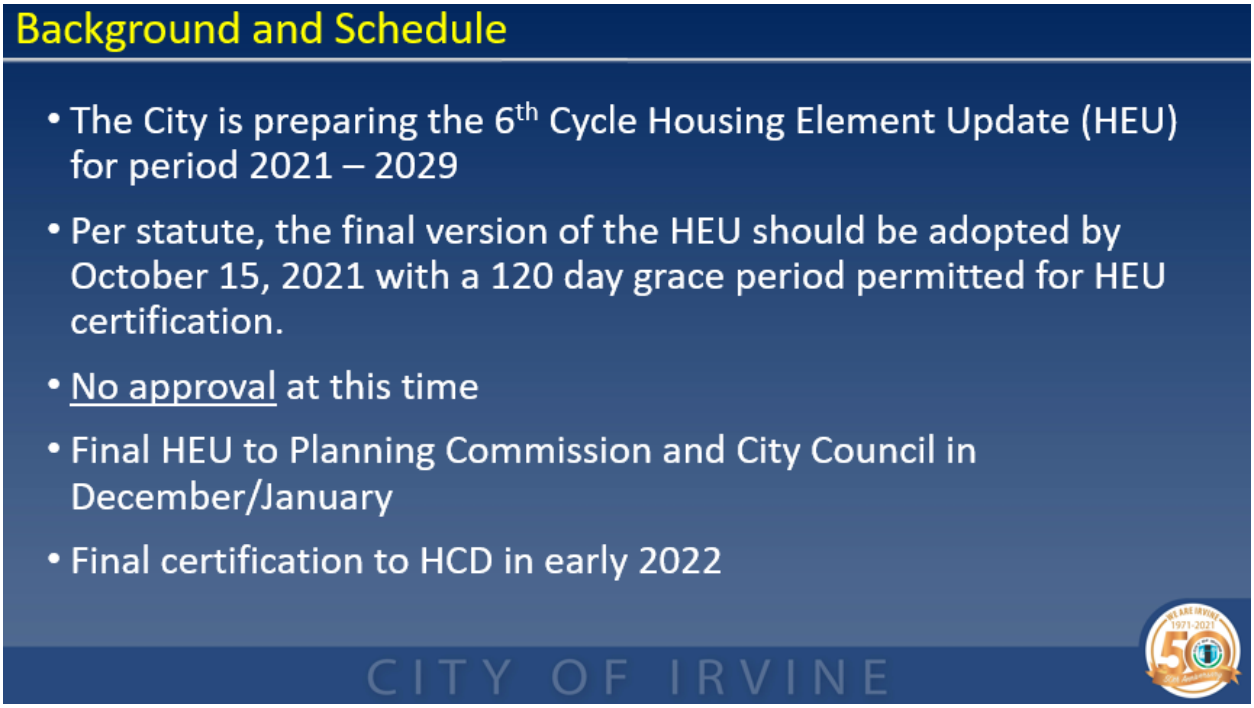
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For August 5, 2021 Staff Report PC Attachment 2, refer to Section 3b above.

## 4c. Presentation for August 5, 2021



## Planning Commission Recommendations

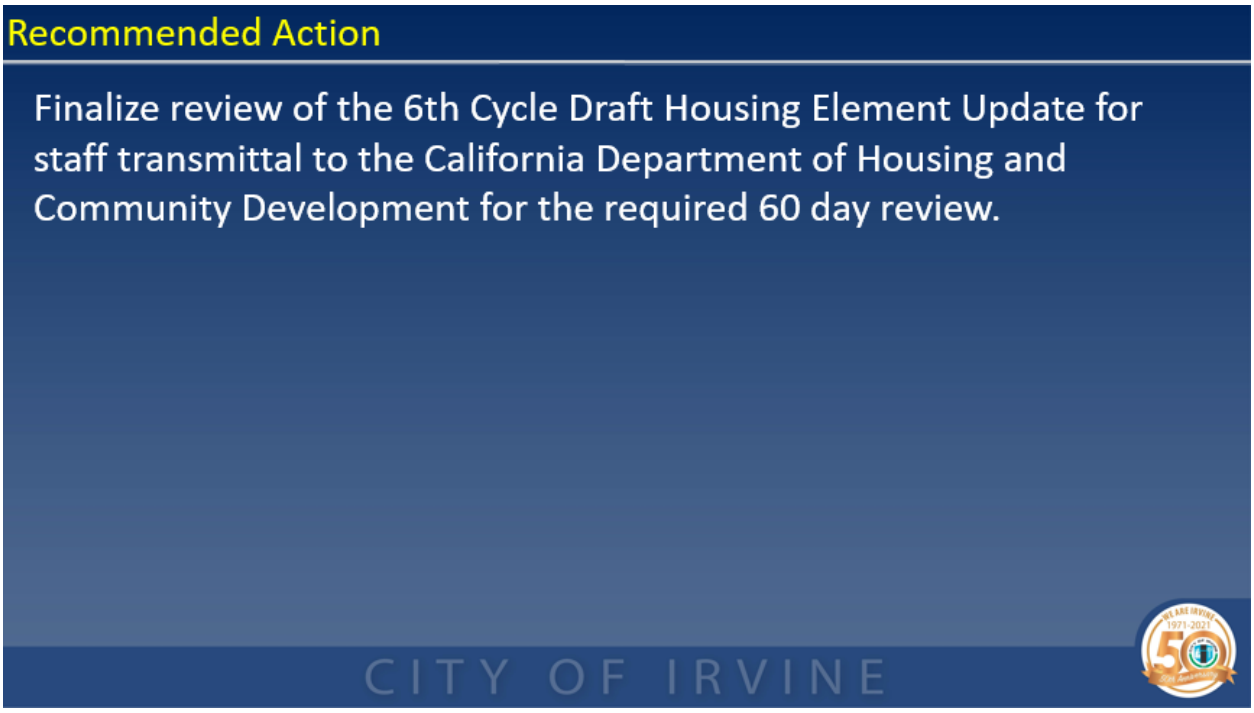
- At the July 15 meeting, Planning Commission requested Community Development staff to strengthen policies and programs associated with the development of affordable housing.

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## Proposed Revisions to Housing Plan

- Where feasible and appropriate, staff revised the policies and programs to:
  - Establish more detailed timeframes for the proposed fee assessment program (Policy PP-B.1)
  - Include more definitive language expediting the affordable housing entitlement processes (Policy PP-B.5)
  - Strengthen the support for services to renters and homeowners (Policies PP-I.4, PP-J.3)
  - Add new policies to encourage more affordable housing (Policies PP-G.2, PP-G.6, PP-G.7, PP-M.3)

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## 4d. Comment Summary and Analysis for August 5, 2021 PC

| Comments and Questions Received at August 5 PC Meeting | Who | Responses and/or How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Provided additional revisions to language in Chapter 8, Housing Plan, to make more active per handout. | Commissioner Gaido | All edits have been incorporated into Chapter 8, Housing Plan, of the draft HE. |
| Ensure all proposed changes have been appropriately reviewed by staff. . | Chair Pierson | All proposed changes have been reviewed and approved by the City Attorney's Office and City staff. |
| Consider offering a sliding scale of incentives or benefits commensurate with the % of affordable housing within a development if not 100% affordable. | Commissioner Knowland | This strategy can be analyzed in a future fee schedule assessment study. |
| One of the programs related to UCI housing units indicates conducting coordination meetings between UCI and COI staff. | Commisioner Knowland | Proposed Program PP-G.4 in Chapter 8, Housing Plan, of the Draft HE is a new procedure indicating that City management staff will meet quarterly with UCI |

| | | |
|---|---|---|
| | | representatives to coordinate development efforts.<br><br>Historically, project coordination meetings between City and UCI technical staff have been occurring on a regular basis. |
| Understand process to establish City's own housing authority to streamline housing voucher process.<br><br>City staff increased role in housing and ICLT has a role. Don't want duplication for voucher processing.<br><br>Is it really necessary to establish a separate entity? | Commissioner Knowland | Proposed Program PP-G.6 in Chapter 8, Housing Plan, explores creating an Irvine Housing Authority with the abililty to allocate Federal Housing Choice Vouchers.<br><br>Bill Ihrke with the City Attorney's Office responded:<br><br>Housing authorities are separate legal entities with their own governing board (could be City Council, but would require a Housing Commission as an advisory board). State law provides a process to establish one. The City Council must adopt a resolution satisfying specific findings pursuant to State law. . A housing authority can own property, administer programs and projects which could include the abiltity to issue Section 8 voucher (not guaranteed). Housing authorities are frequently staffed by City staff. |
| Support submitting draft Housing Element to HCD for review as the draft HE will return to the PC for review later.<br><br>Can figure out housing authority question later.<br><br>Support Commissioner Gaido's suggestions if the City Attorney is OK with the changes. | Vice Chair Huang | Comments noted.<br><br>Generally, workforce housing is considered to fall within 80% - 120% Area Median Income (AMI). |

| | | |
|---|---|---|
| How is “workforce” housing defined? | | |
| Have we reached critical mass to establish own housing authority? Is there certain size?<br><br>Are we getting more or less federal funding?<br><br>Seems like ICLT is somewhat like a proxy for a houisng authority or could be converted to a housing authority. | Commissioner Limb | Bill Ihrke with the City Attorney’s Office responsed:<br><br>Critical mass is not addressed in State law. However, certain factors are considered when the City Council would declare the need to establish and operate a housing authority including:<br><br>• Degree of overcrowding in housing<br>• Percentage of land coverage<br>• Light, air, space, and access available to inhabitats of such dwelling accomodations<br>• Size and arrangement of rooms, sanitary facilties, and the extent to which conditions exist in such buildings which endanger life or property by fire or other causes.<br><br>Housing authorities may administer Section 8 housing vouchers or other vouchers, can own and administer its own properties, obtain financing through participating in tax credit programs.<br><br>No, the City is not getting any less funding that may be otherwise be available to any other city in the county whether or not the City has a housing authority. |
| My interpretation re: housing authority is that it’s a good goal (outside the Planning | Chair Pierson; Commissioner Knowland; Commissioner Gaido; Vice Chair Huang | Proposed Program PP-G.6 in Chapter 8, Housing Plan, explores creating an Irvine |

| | | |
|---|---|---|
| Commission's purview) and actual policy will need to be set by the City Council.<br><br>City staff and consultants will analyze the housing authority question (duplication, cost and benefit, and role of ICLT) | | Housing Authority with the abililty to allocate Federal Housing Choice Vouchers. |
| Residents appreciate that the site inventory doesn't include Rancho San Joaquin Golf Course and Raquet Club Irvine.<br><br>Boomers contributing 48 units to category 3 and 434 units to category 4.<br><br>Encourage preserving Commercial Recreation in the Recreational Core.<br><br>South Irvine has a limited amount of recreational open space and once it is gone, it is gone forever. There are many other places to locate housing in other parts of Irvine.<br><br>We like to think that our Planning Areas (19, 23, and 24) are part of the "core" and we ask that Staff and Planning Commision take this into consideration.<br><br>Please keep the zoning for recreation in our "core" to preserve leisure activiteis in South and Central Irvine. | Ford Fuji, Irvine resident | Comment noted.<br><br>See Chapter 7, Adequate Sites Inventory Analysis and Methodology, and Appendix D, Site Inventory Form, of the draft HE. |
| Several requests for consideration:<br><br>• All income levels distributed throughout a planning area<br>• Make all density bonus units in perpetuity | Susan Sayre, Irvine resident | Bill Ihrke with the City Attorney's Office responded:<br><br>Generally, when assessments are levied to pay for a services, all units, whether affordable unit or not, are subject to the fees because the units benefit from assessments. |

| | | |
|---|---|---|
| • Affordable housing units constructed before market rate units<br>• All affordable housing units should be exempt from community facilties districts (CFDs), mello roos, special taxes<br>• If housing authority is established, then priority should be granted to seniors, vets, and disabled | | Per State law, costs are factored into affordable unit's rent or cost.<br><br>When a CFD is set up, the rate and method of apportionment is uniform, so that all units enjoy the benefit of the services provided by the CFD are paying for them equally. If a low income unit pays less than it needs to be made up by the market rate units.<br><br>State density bonus law specifies affordable rental units must remain affordable for 55 years minimum and 45 years minimum for affordable ownership units.<br><br>State law encourages longer affordabilty terms, but is not mandated. |
| Low wages of construction workers and incomplete access to healthcare benefits. | Boris Russley, Carpenters Contractors Cooperation Committee, a non-profit organization committed to the creation of good paying jobs, fair competiton, and high quality construction standards | Comment noted. |
| Watching very closely the site inventory list in the HEU<br><br>Interested in maintaining our prescence on this list and look forward to working with the Planning Commission and City as needed. | Wesley Hueler (with father John Hueler), managing officer/member of Irvine Recreation Park dba Irvine Lanes | Site remains in draft site invntory. See Chapter 7, Adequate Sites Inventory Analysis and Methodology, and Appendix D, Site Inventory Form, of the draft HE. |
| Review workforce aspect of HEU. Recommend projects should be reqiured to utilitize a local and skilled/trained workforce. | John Hanna, resident of Orange and former Irvine resident, Southwest Regional Council of Carpenters (six states) | Comment noted. |

| | | |
|---|---|---|
| Prioritize local workers resulting in better air quality –can have economic and environmental benefits. | | |
| Draft HE will come back to Planning Commission after HCD review. Needs to move forward with Commissioner Gaido's recommended edits. | Chair Pierson | Motion passed 5-0 to submit the draft HE to HCD for its 60-day review. |

# 5. Draft Housing Element Correspondence

## Anonymous Comment In-Box (July 1, 2021 through August 9, 2021):

| # | Submitted | User | IP address | Message |
|---|---|---|---|---|
| 9 | 07/07/2021 - 10:04pm | Anonymous (not verified) | 198.143.33.18 | I sent a snarky message earlier tonight for which I apologize. Please disregard. Having now read the existing July 2015 Housing Element Supplement 9 it is clear the City has put quality time, energy and well-informed thought into developing a Housing Element that serves the gamut of the City's population. |
| 8 | 07/07/2021 - 8:55pm | Anonymous (not verified) | 198.143.33.18 | Late to the HEU party. But I've been to similar parties over the years in a number of Pacific Coast cities and counties in various land use/transportation consulting and advisory staff roles. They ALL started with the existing HE. Where the heck is it?<br><br>OK, some time has passed and I found GP Supplement No. 9, which includes all approved GP amendments from 2012 through April 2015. The existing HE in the form of ONE MASSIVE PDF FILE is only available as a single download as far as I can tell. No hotlinks. No activated ToC. Suppose I should be grateful I only had to scroll to p. 11 to find the ToC. And hey, at least there IS a table of contents.<br><br>But it's 2021, and many municipalities have been actively using the internet for the better part of four decades. The City's HEU setup makes it appear as if Irvine is brand spankin' new to this whole World Wide Web thingamabob.<br><br>I do wonder if this is a deliberately amateurish HEU process. But why the secrecy? What's behind the curtain? |
| 7 | 07/04/2021 - 12:19am | Anonymous (not verified) | 198.143.33.19 | Late to the HEU party, generally familiar with the issue from spending 20+ years in transportation/land use consulting, spouse of 20+ years who is a mortgage underwriter but has been a RE and mort loan agent in the past, have been looking for place to buy in OC but it's ridiculous this year.<br><br>My question: WHY OH WHY is there no mention of MIXED USE anywhere in the HEU? If cost of parking is such a major hurdle for housing < 120% AMI, why not make some code tweaks to facilitate parking-compatible uses? |

## Additional correspondence starting July 1, 2021:

**From:** GPUpdate 2035
**To:** GPUpdate 2035; Sullivan, Greg @ Newport Beach
**Subject:** RE: RHNA "Opportunity Sites"
**Date:** Wednesday, July 7, 2021 11:29:50 AM

---

Hi Greg:

By the way, the HEU is on the July 15 Planning Commission agenda. See Commission Business Item #4. Attachment 1 is a preliminary site inventory map.

https://irvine.granicus.com/GeneratedAgendaViewer.php?view_id=81&event_id=1831

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

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**From:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Sent:** Wednesday, July 7, 2021 11:21 AM
**To:** Sullivan, Greg @ Newport Beach <Greg.Sullivan@cbre.com>; GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** RE: RHNA "Opportunity Sites"

Hi Greg:

We anticipate releasing the draft HE document with site inventory this Friday at the project webpage: www.cityofirvine.org/HEUpdate

For past meetings (i.e., presentations, staff reports, video recordings), go to https://www.cityofirvine.org/housing-element-update-community-development/housing-element-update-previous-meetings-workshops

The primary focus is near the Irvine Station (Planning Areas 32, 33), Irvine Business Complex (Planning Area 36), Great Park (Planning Area 51), and potentially a retail/church/ sites overlay.

What property address does your client have in mind?

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

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**From:** Sullivan, Greg @ Newport Beach <Greg.Sullivan@cbre.com>
**Sent:** Wednesday, July 7, 2021 9:32 AM

**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** RHNA "Opportunity Sites"

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi, just a quick inquiry on where the City is in identifying sites to meet RHNA numbers? I can't find anything online showing the City's vision on where these could go?

Also, if a stakeholder wants to be considered do we have any time to identify their property as potential rezone?

Thanks,
Greg

Greg Sullivan | First Vice President | Lic. 00920305
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**From:** GPUpdate 2035
**To:** Alexis Mondares; GPUpdate 2035
**Subject:** RE: Housing Element Draft Public Comment Deadline
**Date:** Monday, July 12, 2021 7:43:16 PM

Hi Alexis:

The Planning Commission will be discussing the draft Housing Element (HE) document at its July 15, 2021 meeting and determine if it is ready to submit to HCD. The meeting agenda is available at https://www.cityofirvine.org/community-development/planning-commission-agendas-minutes-0. The City Council will not be reviewing the draft HE document prior to submittal to HCD for the 60-day presubmittal review. The public comment period is open and we will be accepting comments through the adoption hearings. The HE adoption hearings at Planning Commission and City Council are anticipated in Winter 2021/2022.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Alexis Mondares <amondares@publiclawcenter.org>
**Sent:** Monday, July 12, 2021 11:24 AM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** Housing Element Draft Public Comment Deadline

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Good Morning,

On the City's housing element update website, I see that the full draft has been posted for public comment. However, there is also a Planning Commission meeting on July 15 to review some parts of the draft. From there, the draft would presumably go to City Council to review, then be submitted to HCD.

Is there a deadline for public comment before the City submits a draft to HCD?

Thank you,
Alexis

**Alexis Mondares** | Legal Fellow
(pronouns: She/her/hers)
Housing and Homelessness Prevention Unit

**Public Law Center**
601 Civic Center Drive West
Santa Ana, CA 92701
**Direct:** 714-541-1010, ext. 251
amondares@publiclawcenter.org |www.publiclawcenter.org

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**From:** Emily Yau
**To:** Melissa Chao
**Subject:** Re: 6th Cycle Draft Housing Element Released
**Date:** Thursday, July 15, 2021 9:10:04 AM

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Good morning, Melissa.

Thank you for clarifying our concern.

Have a nice day!

Emily Yau

On Wednesday, July 14, 2021, 04:50:32 PM PDT, Melissa Chao <mchao@cityofirvine.org> wrote:

Hi Emily:

Yes, that's correct. Your potential options as of today, are to develop per the current zoning (bearing in mind the IBC Development Intensity Value or "DIV" allocation for your property) or submit an development applications to "rezone" the parcel primarily for the purposes to increase the maximum number of units allowed in the Irvine Business Complex.

Please feel free to call me with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

---

**From:** Emily Yau <emilyyau2020@yahoo.com>
**Sent:** Wednesday, July 14, 2021 11:31 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re: 6th Cycle Draft Housing Element Released

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recognize the sender and know the content is safe.

Hi Melissa,

Thank you for your prompt feedbacks.

Just one more thing I would like to clarify. So either we wait for the final result (if residential development is permitted) or apply for rezone now (if approve), we still have option to decide either to keep the current zoning or proceed to do residential development through rezoning, correct?

Thank you,

Emily Yau

On Tuesday, July 13, 2021, 10:57:58 AM PDT, Melissa Chao <mchao@cityofirvine.org> wrote:

Hi Emily:

For Question 1:
2152 Dupont is included in the draft Site Inventory List (i.e., Appendix D of the draft Housing Element document) with assumed units by income levels consistent with State requirements. The assigned units are not a requirement, but represent a best effort to estimate units to demonstrate to the State that Irvine can meet its RHNA allocation by income level and spread affordable units throughout the City.

Technically, you could apply for a General Plan Amendment and Zoning Ordinance Amendment at this time, but would be proceeding at your own risk. As mentioned at the Future Housing Sites workshop, when the City Council eventually adopts the Housing Element, City staff (with consultant) will embark on a General Plan Update and Zoning Ordinance Amendment with anticipated residential overlays (i.e., rezoning). This is anticipated to be a 2.5-3 year process. If and when that GPU/ZOA is approved, then your property will have the option to develop residential uses via submittal of applicable development applications and associated environmental documentation.

For Question 2:
Unfortunately, it's a very technical document focused on how to meet the State's (HCD) complex set of Housing Element requirements. If you are interested in the details, I'd recommend focusing on:

- Chapter 7: Sites Inventory and Methodology (P. 171). This chapter covers the sites, densities, assumptions and methodology used to meet the RHNA

- Figure 7.1 Sites Inventory Map (P. 192). This shows a series of maps displaying all of the sites where residential is proposed to meet the RHNA

- Chapter 8: Housing Plan (P. 207). This chapter walks through the proposed objectives, goals, and policies to facilitate housing production.

- Appendix D: Sites Inventory Form (P. 1051). This is a full list of every site where residential is proposed to meet the RHNA

For Question 3:
The Planning Commission (PC) will be discussing the draft Housing Element document at its July 15, 2021 meeting and determine if it is ready to submit to HCD for the mandatory 60-day review of the draft document. If the PC determines they need more time to review, the item will be placed on the agenda again for a subsequent PC meeting.

The July 15 PC meeting agenda is available at https://www.cityofirvine.org/community-development/planning-commission-agendas-minutes-0. You may attend in-person or via Zoom (follow the instructions on the webpage).

Once received back from the State, the document will be finalized and brought back through the PC and City Council for final review and adoption, likely in the December 2021/January 2022 timeframe.

Please let me know if you have any further questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Emily Yau <emilyyau2020@yahoo.com>
**Sent:** Tuesday, July 13, 2021 9:54 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Fw: 6th Cycle Draft Housing Element Released

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Hi Melissa,

We received the 6th cycle draft of HEUpdate and would like to know how to understand the report correctly. Please assist to advise the following questions:

1. It shows our site is in inventory site. What does it mean? Does it mean we can apply for rezone to residential zoning?
2. Since the draft contains over a thousand pages, are there certain chapters that we should focus on based on our desirability to participate the possible rezone?
3. There is upcoming meeting on 7/15/2021 shown on the website. Is it open to public and how can we participate?

Thank you,

Emily Yau

2152 Dupont Dr., Irvine, CA 92612

----- Forwarded Message -----
**From:** City of Irvine <cityofirvine@public.govdelivery.com>
**To:** "emilyyau2020@yahoo.com" <emilyyau2020@yahoo.com>
**Sent:** Monday, July 12, 2021, 01:44:31 PM PDT
**Subject:** 6th Cycle Draft Housing Element Released

The City of Irvine has released its 6th Cycle draft Housing Element for the 2021-2029 planning period. The Housing Element is a mandatory part of the City's General Plan that requires periodic review and updating by the State of California.

Per statute, the 6th Cycle Housing Element should be adopted by October 15, 2021; however, a 120-day grace period is permitted.

The draft update accommodates the City's total 23,610-unit Regional Housing Needs Assessment (RHNA) allocation, a State mandate, and includes a comprehensive plan of housing goals, policies, and programs consistent with State Housing Element laws.

The Draft Housing Element is available on the City's Housing Element Update website at *cityofirvine.org/HEUpdate.* The City welcomes all residents, community stakeholders, and interested parties to review and comment on the document.

Please submit any comments and/or questions on the Draft Housing Element to the City of Irvine's Community Development Department at 1 Civic Center Irvine, CA 92606. Comments and questions may also be sent via email at GPUpdate@cityofirvine.org or phone at 949-724-6395.

For more information about Housing Element Update in the City of Irvine, please visit *cityofirvine.org/HEUpdate*.

City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
949-724-6000
*cityofirvine.org*

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**From:** Karen Martin
**To:** Melissa Chao
**Subject:** Re: May we still include another property for Housing Element consideration?
**Date:** Monday, July 19, 2021 12:19:41 PM

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Thank you Melissa. I appreciate your responsiveness.

Karen

On Mon, Jul 19, 2021, 12:06 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Karen:
>
> At this time the draft site inventory is complete. We might have the opportunity to include the site prior to adoption of the final version though.
>
> Thanks,
>
> **MELISSA CHAO | SENIOR PLANNER**
> P 949-724-6395 I F 949-724-6440
>
> mchao@cityofirvine.org
>
> ---
>
> **From:** Karen Martin <karen@pacificplanninggroup.com>
> **Sent:** Friday, July 16, 2021 2:12 PM
> **To:** Melissa Chao <MChao@cityofirvine.org>
> **Cc:** karen <karen@pacificplanninggroup.com>
> **Subject:** May we still include another property for Housing Element consideration?
>
> **CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
> > The location is 2424 McGaw in Irvine. 40,000 sf industrial building.

Hi Melissa,

Hope all is well with you and the housing team at the City. Another property owner reached out to me for 2424 McGaw. Is there still time to include this property?

Thank you,

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile

415.367.4286 x101 office

**From:** GPUpdate 2035
**To:** Brandon Young; GPUpdate 2035; gpupdate@cityofirvine.org
**Cc:** Mitchell Tsai; Greg Sonstein; Hind Baki
**Subject:** RE: 6th Cycle Draft Housing Element Released
**Date:** Monday, July 19, 2021 5:26:21 PM

---

Hi Brandon:

The Planning Commission (PC) discussed the draft Housing Element (HE) at its July 15, 2021 meeting and provided input. Staff will be presenting the requested revisions to the Housing Plan chapter at the August 5 PC meeting where the PC will determine if the draft HE is ready to submit to HCD. The City Council will not be reviewing the draft HE document prior to submittal to HCD for its mandatory 60-day pre-submittal review. PC meeting agendas and instructions on how to participate are available at https://www.cityofirvine.org/community-development/planning-commission-agendas-minutes-0.

The public comment period is open and we will be accepting comments through the adoption hearings. The HE adoption hearings at Planning Commission and City Council are anticipated in Winter 2021/2022.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Brandon Young <brandon@mitchtsailaw.com>
**Sent:** Thursday, July 15, 2021 3:20 PM
**To:** GPUpdate 2035 <GPUpdate2035@cityofirvine.org>; gpupdate@cityofirvine.org
**Cc:** Mitchell Tsai <mitch@mitchtsailaw.com>; Greg Sonstein <greg@mitchtsailaw.com>; Hind Baki <hind@mitchtsailaw.com>
**Subject:** Fwd: 6th Cycle Draft Housing Element Released

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Dear Community Development Department,

Our office is an interested party in the City's 6th Cycle Housing Element Update and received this notice of draft availability from the City of Irvine on Monday, July 12, 2021. Upon researching the City's agenda, we see that the Housing Element is scheduled to go before the Planning Commission today, July 15, 2021.

We would like to know when the next scheduled hearing or comment period will be for the 6th Cycle Housing Element Update, or when the HEU might see the City Council.

Thank you for your help regarding this matter,

**Brandon Young**
Office Manager
Mitchell M. Tsai, Attorney At Law
155 South El Molino Avenue
Suite 104
Pasadena, CA 91101
Office: (626) 381-9248
Fax: (626) 389-5414
Email: brandon@mitchtsailaw.com
Website: http://www.mitchtsailaw.com

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---------- Forwarded message ---------
From: **Public Information Officer** <pio@cityofirvine.org>
Date: Mon, Jul 12, 2021 at 2:14 PM
Subject: 6th Cycle Draft Housing Element Released
To: Public Information Officer <pio@cityofirvine.org>

City Hall Council Overlay



The City of Irvine has released its 6th Cycle draft Housing Element for the 2021-2029 planning period. The Housing Element is a mandatory part of the City's General Plan that requires periodic review and updating by the State of California.

Per statute, the 6th Cycle Housing Element should be adopted by October 15, 2021; however, a 120-day grace period is permitted.

The draft update accommodates the City's total 23,610-unit Regional Housing Needs Assessment (RHNA) allocation, a State mandate, and includes a comprehensive plan of housing goals, policies, and programs consistent with State Housing Element laws.

The Draft Housing Element is available on the City's Housing Element Update website at *cityofirvine.org/HEUpdate.* The City welcomes all residents, community stakeholders, and interested parties to review and comment on the document.

Please submit any comments and/or questions on the Draft Housing Element to the City of Irvine's Community Development Department at 1 Civic Center Irvine, CA 92606. Comments and questions may also be sent via email at *GPUpdate@cityofirvine.org* or phone at 949-724-6395.

For more information about Housing Element Update in the City of Irvine, please visit *cityofirvine.org/HEUpdate*.



| | |
|---|---|
| **From:** | Ross Johnson |
| **To:** | housingelements@hcd.ca.gov; GPUpdate 2035 |
| **Subject:** | Major Concerns with Draft Housing Element |
| **Date:** | Friday, July 23, 2021 5:19:07 PM |
| **Attachments:** | Irvine Letter.pdf |

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Hi Irvine and HCD,

Thank you so much for allowing the public to comment on Irvine's draft housing element. YIMBY Law has major concerns regarding Irvine's draft housing element.

A letter is attached outlining several parts of the housing element are not in compliance with state law.

We respectfully request that Irvine's housing element not be certified until they remedy the concerns mentioned in the letter.

All the best,
Ross Johnson
YIMBY Law

July 23, 2021

Irvine City Council
Irvine Civic Center
1 Civic Center Plaza
Irvine, CA 92606

Dear Irvine Councilmembers:

Thank you for the opportunity to comment on the process of updating the housing element of Irvine's general plan. I am writing on behalf of YIMBY Law regarding Irvine's 6th Cycle housing element update. YIMBY Law's mission is to make housing in California more accessible and affordable through enforcement of state housing law. We support more housing at all levels of affordability and reforms to land use and zoning codes, which are needed in order to make housing more affordable, improve access to jobs and transit, promote greater environmental sustainability, and advance racial and economic equity.

We have reviewed the City's draft Housing Element, **and have major concerns about the City of Irvine's ability to affirmatively further fair housing and meet its state-mandated RHNA targets.**

1. IRVINE PERPETUATES HOUSING SEGREGATION BY FAILING TO PLAN FOR MIXED INCOME HOUSING. THE CURRENT POLICY FAILS TO AFFIRMATIVELY FURTHER FAIR HOUSING

Irvine does not plan for moderate income or above moderate income units to be on the same sites as lower income units (See Appendix D, Table A). By segregating lower income housing and keeping it separate from moderate income housing, Irvine is failing to affirmatively further fair housing.

The California Fair Employment and Housing Act states "'Affirmatively furthering fair housing' means . . . **replacing segregated living patterns with truly integrated and balanced living patterns** . . . . The duty to affirmatively further fair housing extends to all of a [city's] activities and programs relating to housing and community development." Gov. Code, § 8899.50(a)(1).

When Irvine plans for all new lower income housing to be exclusively lower income, they are perpetuating segregation practices that concentrate poverty in certain areas and shut lower income residents off from accessing high opportunity areas.

We ask that Irvine comply with the letter and the spirit of The California Fair Employment and Housing Act and plan for mixed income developments.

2. SEVERAL LOWER INCOME SITES IDENTIFIED IN THE SITE CAPACITY ARE LOCATED ON MARSHLAND AND APPEARS UNLIKELY TO BE DEVELOPED.

Irvine claims that almost 1,000 units of lower income housing will be developed at the Southeast corner of Carlson Avenue. This is highly unlikely to be developed since the site is marshland, meaning development is prohibitively expensive.

Assembly Bill 1397 (2017) requires cities to provide an accurate assessment of realistic site capacity, including "the city's or county's past experience with converting existing uses to higher density residential development, the current demand for the existing use, and an analysis of existing leases or other contracts that would perpetuate the existing use or prevent redevelopment."

While California Housing Element Law does not expressly use the term "likelihood of development," AB 1397 (2017), when read in conjunction with other recent statutes, requires cities to discount sites' capacity by the sites' probability of development during the planning period. (Christopher S. Elmendorf et al., Making It Work: Legal Foundations for Administrative Reform of California's Housing Framework, SSRN Electronic Journal (2019)).

The legislature has also vested HCD with the authority to resolve ambiguities about the definition or calculation of site capacity. Specifically SB 6 (2019) authorizes HCD to promulgate, "standards, forms, and definitions," for the site inventory and associated assessment of site capacity and constraints. Providing an accurate assessment of the site inventory's realistic housing development rate and realistic housing capacity is necessary to ensure that this housing element is effective.

The housing element does not make any findings showing that it is economically feasible to develop any housing, much less lower income housing, on this site. The very fact that the site has not yet been developed only serves as evidence that the site is prohibitively expensive to develop.

We ask that Irvine make at least minimal findings that the Southeast corner of Carlson Avenue is likely to be developed. If the site is not developed, then Irvine's lower income site capacity will be lower than the state mandated Regional Housing Needs Allocation.

***

Irvine has a legal obligation to sufficiently plan to meet current and future residents' housing needs, in a way that guarantees access to opportunity for Californians of all racial and ethnic backgrounds. The issues that we've highlighted above suggest that Irvine is not on a path to fulfilling this legal obligation. We urge you to change course and actively embrace this opportunity to provide a variety of attainable housing options for the residents and workers of Irvine.

Finally, state law imposes penalties on jurisdictions that fail to adopt a compliant 6th Cycle housing element update by October 15, 2021. On that date, noncompliant jurisdictions will forfeit the right to deny residential projects on the basis of local zoning, so long as projects include at least a 20% set-aside for below market-rate units or are 100% moderate-rate projects. Noncompliant jurisdictions may also lose the ability to issue building permits, including permits for kitchen and bath renovations. Jurisdictions that want to maintain local control over new development and maintain the ability to permit kitchen and bath renovations should therefore plan to adopt a compliant housing element update on time.

Kind regards,

Ross Johnson
YIMBY Law

*YIMBY Law is a 501(c)(3) non-profit corporation. YIMBY Law is not a law firm. I am not a lawyer. Nothing in this letter should be construed as legal advice. Instead, I am a California resident reporting my concerns after reviewing publicly available information.

**From:** Melissa Chao
**To:** beverly.khosh@gmail.com
**Subject:** Irvine housing sites inquiry
**Date:** Tuesday, August 3, 2021 6:09:32 PM
**Attachments:** Letter - Beverly Khosh 16692 Hale Suite B received 8.2.21.pdf

---

Hi Beverly,

Your mailed letter (attached) was forwarded to me. Please note that Charles Kovac is no longer with Irvine.

You may review the draft Housing Element document and update process at www.cityofirvine.org/heupdate.

I added your email address to the project interest list.

Please feel free to contact me with any questions/concerns.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

microAdvantage
16692-B Hale Ave.
Irvine, CA 92606

SACRAMENTO CA 957
27 JUL 2021 PM 5 L




812
Amanda Andrew @

92606-520889

July 25, 2021

Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

(I tried to email this letter but it was rejected so I am mailing you a copy. Thank you.)

Original email:
**Subject: Irvine Housing Sites**
From - Beverly Khosh <beverly.khosh@gmail.com>
to CKovac

Mr. Kovac,

This letter is a bit late but I am writing to you regarding your letter of March 1, 2021 about potential future housing sites.

My husband and I own a commercial property at 16692 Hale Ave in the IBC. Currently we operate our business out of one half of the building and lease the other half. However, we are looking down the road at future options for selling or leasing and would be interested in the City of Irvine's plans for the area. As I'm sure you are aware, many of the adjacent properties have already been turned into apartments.

Thank you for your time and I would like to be kept in the loop regarding future updates for this area.

Regards,
Beverly Khosh
MicroAdvantage, Inc.
16692 Hale Ave, Ste. B
Irvine, CA 92606

**VIA E-MAIL**

August 5, 2021

Carl Petersen
City Clerk
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
Em: clerk@cityofirvine.org

Melinda Chao
Senior Planner
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
Em: mchao@cityofirvine.org

RE: City of Irvine 2021-2029 Draft Housing Element

Dear Mr. Petersen, Ms. Chao, and Community Development Department,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Southwest Carpenters**"), my Office is submitting these comments on the City of Irvine's ("**City**" or "**Lead Agency**") 2021-2029 update to the City's General Plan Housing Element ("**Project**").

The Southwest Carpenters is a labor union representing more than 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this

Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

The City should require the use of a local skilled and trained workforce to benefit the community's economic development and environment. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Local skilled and trained workforce requirements and policies have significant environmental benefits since they improve an area's jobs-housing balance, decreasing the amount of and length of job commutes and their associated greenhouse gas emissions. Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10

achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.

[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

[6] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

[7] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing." The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

Sincerely,

Mitchell M. Tsai
Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

# EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

## Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Minimum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

## Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 3,623 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

# EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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# *Paul Rosenfeld, Ph.D.*

**Chemical Fate and Transport & Air Dispersion Modeling**

*Principal Environmental Chemist*

**Risk Assessment & Remediation Specialist**

## Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

## Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex $H_2O$ Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

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Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D**. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D**. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E**., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D**. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

**Rosenfeld. P.E. (**October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E. (**2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

# EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Santa Monica, California 90401
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Email: mhagemann@swape.com

## Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization**
**Industrial Stormwater Compliance**
**Investigation and Remediation Strategies**
**Litigation Support and Testifying Expert**
**CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

**Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

**Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F**., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F**., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F**., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F**., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F**., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F**., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F**., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F**., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F**., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F**., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F**., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F**., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F**., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.**F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F**., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F**., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | Brandon Young; Clerk |
| **Cc:** | Mitchell Tsai; Greg Sonstein; Hind Baki; David Steinkraus; Kerwin Lau; Melissa Chao |
| **Subject:** | RE: SWRCC - [City of Irvine, 6th Cycle Housing Element Update] - 8/5/2021 CPC Comment Letter |
| **Date:** | Thursday, August 5, 2021 3:27:23 PM |

Hi Brandon,

This response is to confirm receipt of the email and its attachment.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Brandon Young <brandon@mitchtsailaw.com>
**Sent:** Thursday, August 5, 2021 3:08 PM
**To:** Clerk <clerk@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Mitchell Tsai <mitch@mitchtsailaw.com>; Greg Sonstein <greg@mitchtsailaw.com>; Hind Baki <hind@mitchtsailaw.com>
**Subject:** SWRCC - [City of Irvine, 6th Cycle Housing Element Update] - 8/5/2021 CPC Comment Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Petersen, Ms. Chao, and Community Development Department,

Please see the attached comment letter for City of Irvine's City Planning Commission meeting today, 8/5/2021 regarding the above referenced Project and confirm receipt of this email and its attachments.

Thank you,

**Brandon Young**
Office Manager
Mitchell M. Tsai, Attorney At Law
139 South Hudson Avenue, Suite 200
Pasadena, CA 91101
Office: (626) 381-9248
Fax: (626) 389-5414
Email: brandon@mitchtsailaw.com
Website: http://www.mitchtsailaw.com

*** Our Office Has Recently Moved. Please Note New Mailing Address ****

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**From:** Wesley Heuler
**To:** Melissa Chao
**Subject:** Re: Site Inventory for Irvine Housing Element Update
**Date:** Thursday, August 5, 2021 11:37:26 AM

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Melissa,

It was a pleasure speaking with you as well.

As you stated, we are very interested in staying on the draft site inventory list.

Thank you for the supplemental information.

Wesley Heuler
—
Managing Officer / CIO
Irvine Lanes
3415 Michelson Dr.
Irvine, CA 92612
949-337-1017

---

**From:** Melissa Chao <MChao@cityofirvine.org>
**Sent:** Thursday, August 5, 2021 11:23 AM
**To:** Wesley Heuler
**Subject:** Site Inventory for Irvine Housing Element Update

Hi Wesley,

It was nice speaking with you. Based on our conversation, my understanding is that as the owner you would like your Boomers/Irvine Lanes property to remain on the draft site inventory list for the 6th Cycle Housing Element Update (HEU). Please confirm.

Additional information on the HEU effort is available at www.cityofirvine.org/heupdate. Of particular interest for the draft HE may be:

- Chapter 7: Sites Inventory and Methodology - This chapter covers the sites, densities, assumptions, and methodology used to meet the RHNA and includes site inventory maps.
- Chapter 8: Housing Plan - This chapter walks through the proposed objectives, goals, and policies to facilitate housing production.
- Appendix D: Sites Inventory Form - This is a full list of every site where residential is proposed to meet the RHNA. See Table B.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Kerwin Lau
**To:** Melissa Chao
**Cc:** Hitta Mosesman; Justin Equina
**Subject:** FW: Updated Housing Elements and Zoning Codes
**Date:** Monday, August 9, 2021 11:01:20 AM
**Attachments:** The 200_RHNA_Irvine.pdf

---

-----Original Message-----
From: Pete Carmichael <PCarmichael@cityofirvine.org>
Sent: Monday, August 9, 2021 10:55 AM
To: Marika Poynter <mpoynter@cityofirvine.org>; Kerwin Lau <klau@cityofirvine.org>; Tim Gehrich <tgehrich@cityofirvine.org>
Subject: FW: Updated Housing Elements and Zoning Codes

For inclusion with our HEU comments.

Pete

-----Original Message-----
From: info@thetwohundred.org <info@thetwohundred.org>
Sent: Friday, August 6, 2021 4:48 PM
To: Farrah Khan Web <FarrahKhan@cityofirvine.org>; Pete Carmichael <PCarmichael@cityofirvine.org>
Subject: Updated Housing Elements and Zoning Codes

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

Please see attached correspondence from The 200, a civil rights homeownership advocacy group. Replies and future correspondence can be directed to our Vice-Chair, Robert Apodaca, at robert@thetwohundred.org.

Respectfully,

The 200 Coalition

August 6, 2021

Mayor Farrah N. Khan
The City of Irvine
Delivered via email to farrahkhan@cityofirvine.org

Mr. Peter Carmichael
Director of Community Development
The City of Irvine
Delivered via email to pcarmichael@cityofirvine.org

Re: Updated Housing Elements and Zoning Codes Must Meet Regional Housing Needs Allocation (RHNA) Targets **and Comply with Federal and State Housing Laws Including** Attainable Homeownership, Authorizing Housing That is Affordable by Design Without Reliance on Lottery Outcomes and Taxpayer Subsidies, Affirmatively Further Fair Housing, and Ending Residential Racial Segregation

Dear Mayor Khan and Mr. Carmichael,

The Two Hundred is a civil rights homeownership advocacy group that was founded and remains comprised of veteran civil rights leaders, former legislators and cabinet secretaries, retired judges, and other diverse housing advocacy leaders. Many of us worked for our entire careers to enact federal and state fair housing laws to end agency "redlining" practices such as denying communities of color access to insured home mortgages and veterans' loans, and promoting residential racial segregation through razing historic minority neighborhoods through "redevelopment" and siting freeways to protect "public harmony" by dividing our communities.

California's severe housing shortage, and astronomical (and still-rising) housing prices, have undone decades of civil rights progress. As confirmed by scholars at UC Berkeley, residential racial segregation is worse in the Bay Area than it was before the enactment of civil rights reforms in the 1960s – a pattern repeated in wealthier counties statewide. https://belonging.berkeley.edu/segregationinthebay As we explain in our *Redlining* video, minority homeownership rates, which in the early part of this century had finally started to attain parity with white families who had access to government programs like federally-insured low cost mortgages, plummeted during the Great Recession of 2009. With the full support of regulatory agencies, as of 2010 lenders engaged in more than a decade of predatory loans and foreclosures that wiped out trillions of dollars of the multi-generational wealth that our communities had finally accumulated through homeownership. Our communities now stagger from housing costs that are so high the US Census Bureau has confirmed that our state has the highest poverty rate in the country! When added to the other high costs of living in California, including the highest electricity and gasoline prices of any state other than California, almost

40% of our residents cannot reliably pay routine monthly expenses even after receiving public assistance to help buy food and medical care. United Ways of California - The Real Cost Measure in California 2019 (unitedwaysca.org) California leaders should not brag about creating Silicon Valley billionaires without also recognizing the crushing burdens of decades of hostility to starter homes and other housing needed by our communities, nor can California's leaders lawfully hide behind unfunded rhetorical commitments to fund 100% "affordable" rental housing and again force our communities into segregated rental housing "projects."

We write because you have been entrusted with the decade's most important housing task, which is assuring that your agency complies with civil rights housing laws and updates your General Plan and Zoning Code to accommodate your community's share of new homes in compliance with your Regional Housing Needs Assessment (RHNA).

Both federal and state civil rights laws, as well as United States Supreme Court decisions, have long prohibited agencies from directing new "affordable" housing for lower income residents to a limited geographic subarea, and instead require the dispersal of new housing at all affordability levels throughout the community. In 2018, the California Legislature strengthened this longstanding civil rights requirement in AB 686 (effective January 1, 2019) which requires all public agencies to "affirmatively further fair housing" (AFFH) in California. As explained by the Housing and Community Development (HCD) agency, quoting from the new law, **"[p]ublic agencies must now examine existing and future policies, plans, programs, rules, practices, and related activities and make proactive changes to promote more inclusive communities**." AFFH / Fair Housing (ca.gov)

Before the AFFH was enacted in 2018, and based on a complex set of planning, zoning, and environmental laws, policies and principles, most California cities and counties did in fact adopt "policies, plans, programs, rules, practices and related activities" that constrain housing supplies, and raise housing prices so high that our hard working families – the majority of which now include members in our communities of color – can no longer afford to buy, and in many neighborhoods cannot even afford to rent, a home. These status quo housing policies result in unlawful racial segregation, and violate the affirmatively furthering fair housing laws. Our families, many of which are led by the essential workers each community relies on such as teachers, first responders, workers in construction, health care, hospitality, small business employees, and laborers – cannot and should not be asked to wait to have their name drawn in an "affordable" housing lottery, or wait for "magic money" to appear from the repeal of Proposition 13 (or capitalism). State and local agency actions violate civil rights laws, including California's new AFFH, must stop – and housing production, of market-rate housing that can be purchased by median income families, must increase more than tenfold under the current RHNA cycle.

We hereby formally and respectfully request that these civil rights housing legal violations be corrected in your General Plan Housing Element and Zoning Code updates which feasibly, based on your median income families and your available funding resources today, plan for housing typologies and locations that meet your assigned RHNA targets. We identify below the worst offenders, and practical solutions, to assure that you do not adopt General Plan and Zoning Code updates that violate civil rights housing laws.

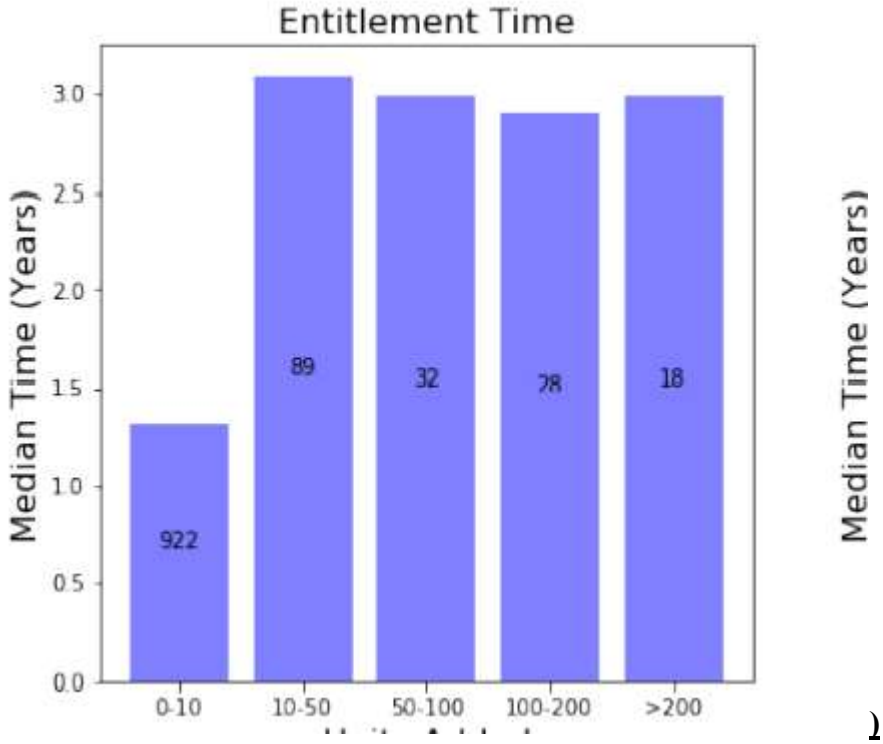
1. **Charging Country Club Initiation Fees for New Housing is Racist and Exclusionary.** Country clubs often charge initiation fees of $50,000 or more, with the express intent to select wealthier members and exclude "those people" who cannot afford steep fees. Many local agencies have imposed fees on new housing that wildly exceed even $50,000, such as San Francisco which has charged fees of $165,000 per apartment! While we appreciate that new homes need to pay for their "hard" infrastructure needs like water and sewage services, too many jurisdictions have allowed well-meaning special interests seeking additional funds for important local priorities like art, affordable housing, and recreational programs to pile these fees onto new housing rather than obtain funding (as or if needed by special assessments or taxes approved by existing residents) equitably, which means paid for equitably by the city's existing (not just future) residents. As documented by UCB, excessive and wildly different housing development fees increase housing costs and decrease housing production and affordability – and these fees are passed along to new residents. Development_Fees_Report_Final_2.pdf (berkeley.edu) Most cities and counties defend high fees on new housing with "nexus" studies, based on made-as-instructed reports prepared by consultants paid by cities. "Nexus" may pass constitutional muster, but violates civil rights housing laws by excluding housing – and "those people" (us) from your community.

   ***Civil Rights Compliant Solution to Exclusionary Fees:*** *Residents of new housing should pay no more in fees than existing taxpayers. For example, if a city has 50,000 existing homes and a RHNA obligation to produce 5,000 more homes, housing fees should be capped at the levels paid by taxpayers. If existing city residential households subsidize arts program with $500,000, residents of new housing should pay no more than the same share ($100 per new home). If existing city residents contribute nothing to build affordable housing, then neither should residents of new housing: existing policies created the affordable housing shortage and crisis, and solving this problem on the backs of those shut out of the housing market creates an unfair, unlawful and racially discriminatory burden on new residents. Stop imposing discriminatory fees on new residents.*

2. **Housing Delayed is Housing Denied**. While some jurisdictions have streamlined the housing project review and approval process, most have not. The two most commonly-identified delay factors in the housing project approval process are multi-step, multi-department review processes with no intra-agency deadlines or housing accountability production metrics, and the California Environmental Quality Act (CEQA) review process. As shown in Figure 1, in one recent study of the San Francisco entitlement process, all but the smallest (less than 10 units) took about three years to complete this combined bureaucratic and CEQA process.

**Figure 1: Housing Project Entitlement/CEQA Process Time in San Francisco (by Project Size/Unit Count)**

Measuring the Housing Permitting Process in San Francisco - Terner Center (berkeley.edu)




)

**A**. **End Bureaucratic Delays to Housing Approvals**. Also as explained by UCB, "[t]he most significant and pointless factor driving up production costs was the length of time it takes to for a project to get through the city permitting and development process" which in turn caused even higher costs as projects stuck in bureaucratic review proceedings were required to repeatedly modify their projects to deal with the "additional hoops and requirements" that "pop up" at various stages of the permitting and development process. San_Francisco_Construction_Cost_Brief_-_Terner_Center_January_2018.pdf (berkeley.edu), p. 2.

> ***Civil Rights Compliant Solution to Housing Delays Caused by Bureaucrats***. *This too has a simple solution: prescribe, disclose, enforce, and publish outcomes of housing review and approval deadlines on every city department (and responsible unit within each department), and hold responsible managers in each department accountable in performance evaluations and promotion decisions to meeting (or beating) deadlines. This is a housing production accountability metric that should be expressly added to General Plan Housing Element implementation mandates.*

B. **End Anti-Housing CEQA Abuse.** Before a misguided appellate court decision, issued without Legislative direction in 1984, CEQA did not apply to city and county approvals of housing that complied with General Plan and zoning ordinances. For several decades, however, increasingly fussy academics and planners insisted that zoning codes require a "conditional use

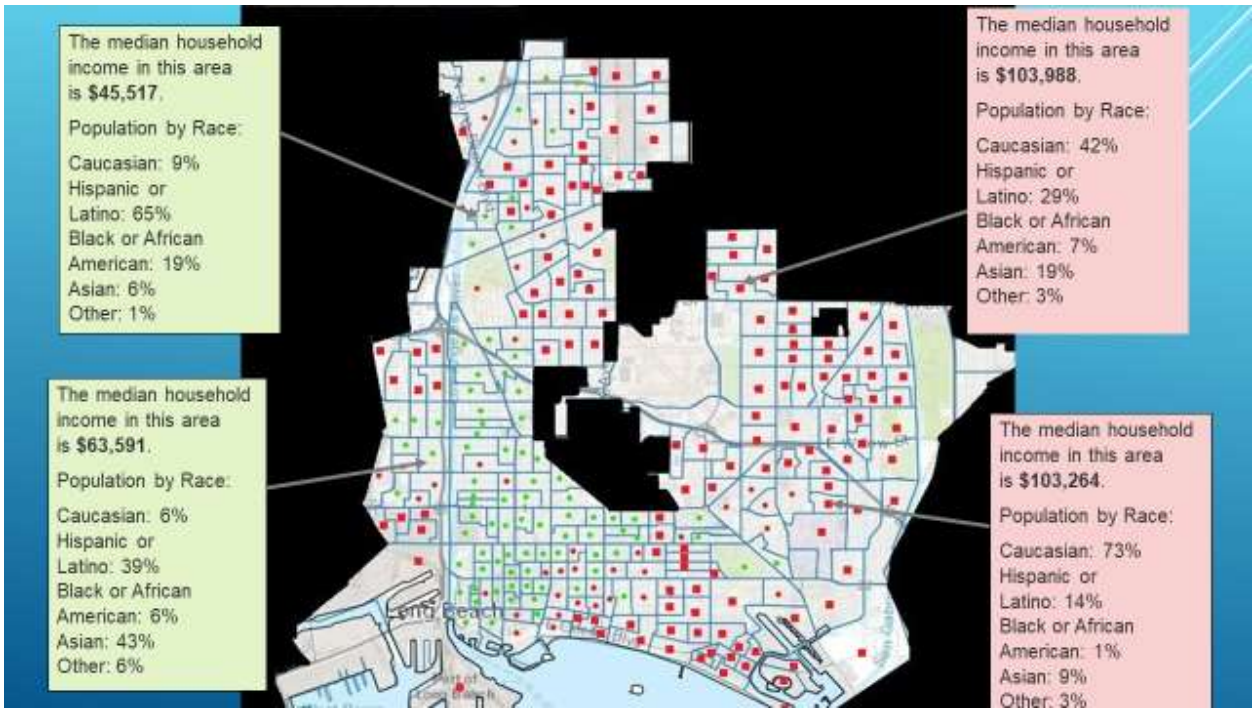
permit" (CUPs) even for code-compliant housing, to allow local agencies to apply a "we know it when we see it" open-ended level of discretion to allow, deny, or condition housing approvals – the same standard the Supreme Court applies to obscenity. In 1984, this CUP process – brought to us all by the same generation of planners that (obscenely) insisted on single-family only residential zoning and outlawed even duplexes that had previously been allowed and common throughout California – unleashed the full force of CEQA delays and lawsuits even on fully compliant housing in "infill" neighborhoods. Friends of Westwood, Inc. v. City of Los Angeles (1987) :: :: California Court of Appeal Decisions :: California Case Law :: California Law :: US Law :: Justia By 2008, housing had become the most frequent target of CEQA lawsuits – and the tool of choice for both those seeking to block housing and those seeking financial and other payoffs for threatening CEQA lawsuits. In one study of all anti-housing CEQA lawsuits in the Los Angeles region, for example, 14,000 housing units were targeted in CEQA lawsuits – 99% of which were located in existing urbanized areas (not "greenfields), 70% of which were located within ½ mile of transit, and 78% of which were located in the region's whiter, wealthier, and environmentally healthier communities. In the Name of the Environment Update: CEQA Litigation Update for SCAG Region (2013-2015) | Insights | Holland & Knight (hklaw.com) Instead of facilitating housing near jobs and transit, CEQA had been distorted into this generation's anti-housing, anti-"those people" (us) redlining tool of choice.

***Civil Rights Compliant Solution to Anti-Housing CEQA Abuse***. *Under the Housing Accountability Act, cities and counties no longer have the discretion to disallow housing, require fewer units, or impose fees and exactions that make housing projects infeasible. Local control determines the allowable location and density of housing, but these cannot be "paper housing" that is never actually approved (or approved with feasible conditions). Only housing that causes a demonstrable and specific significant adverse consequence to human health or safety can be downsized, delayed, or conditioned with costly obligations.* Housing Accountability Act Technical Assistance Advisory Housing Element implementation procedures should expressly acknowledge this state law as a prohibition on the local agency's exercise of its discretion on any issue other than a demonstrable and specific adverse health or safety risk caused by the proposed housing project, and eliminate or limit subsequent CEQA review under conforming zoning requirements to prescribed objective health and safety standards specifically caused by the proposed housing project. As determined recently by the California Supreme Court, local government may still preserve exterior architecture and design review processes that do not create discretionary authority to add new conditions addressing CEQA topics. McCorkle Eastside Neighborhood Group v. City of St. Helena :: 2019 :: California Courts of Appeal Decisions :: California Case Law :: California Law :: US Law :: Justia. Local General Plan and zoning codes following this recommendation avoid mandatory CEQA processing and litigation risks, and are a mandate – especially in the whiter, wealthier and healthier communities such as most of Marin County that have elevated their "no growth" environmentalism into open and flagrant racist conduct such as intentionally segregating its public schools by race. First desegregation order in 50 years hits Marin schools - Los Angeles Times (latimes.com)

3. **Avoid Exacerbating Racial Segregation with Special Interest Demands that Retard Housing Production and Increase Housing Costs**. Increased production of housing that is affordable that working families can purchase has been repeatedly blocked by many California's environmental organizations and their state agency allies. We and our families experience, and agree we should reduce, pollution – and we too enjoy and want to protect California's spectacular natural resources. We also support California's climate leadership, but do not agree that our working families and poor should be collateral damage in the state's war on climate. Much as California led the nation in past decades in the involuntarily sterilization aimed primarily at women of color in the name of discredited "science," and unleashed civic "redevelopment" schemes that wiped out once-thriving (and now forgotten) Black and Latino communities in the name of discredited economic theories, we now face demands that new housing consist of small rental apartments located near non-operating bus stops with rental rates of more than $4000 per month to reduce "Vehicle Miles Travelled" (VMT). California leads the nation in buying, supporting, and ultimately mandating electric vehicles – but VMT housing policy is redlining, pure and simple.

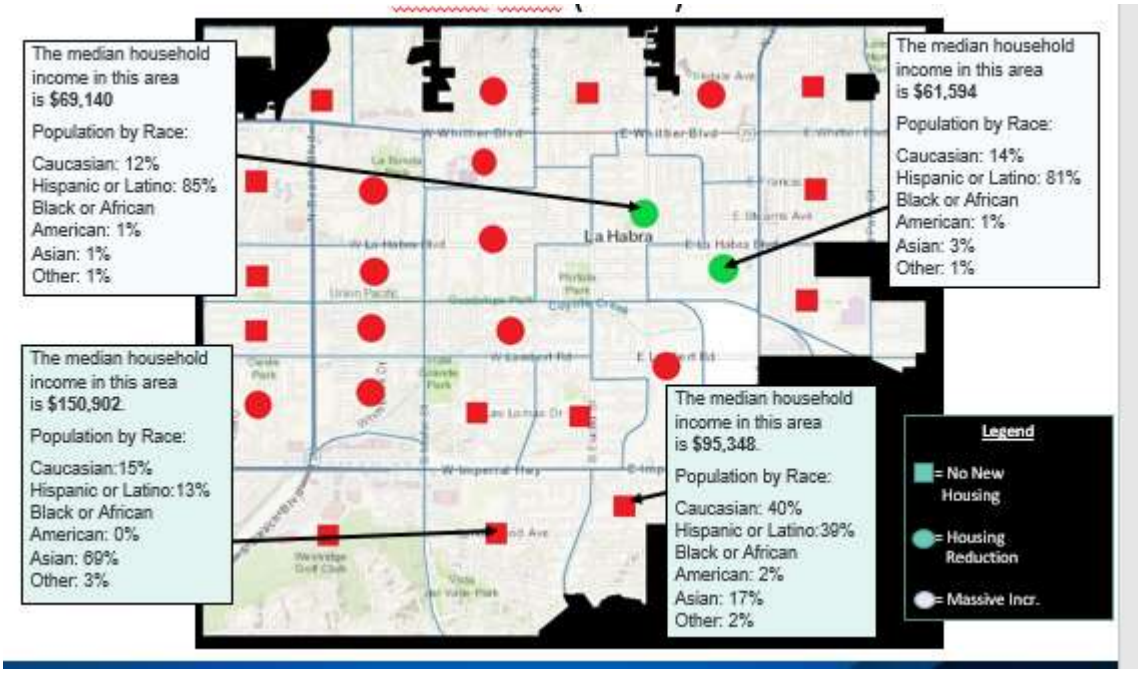
The Southern California Association of Governments (SCAG), which includes 197 cities an 6 counties where collectively the majority of Californians live, was on the verge in 2020 of adopting a VMT-centric regional housing plan that prioritized agency-decreed VMT reductions above all other laws, including federal and state anti-discrimination and housing laws. Under this plan, which conflicted with and undermined almost all city and county General Plans by assuming the massive demolition of existing residential and commercial neighborhoods and replacement with high density apartment housing near planned bus routes, historical and existing residential racial discrimination was intentionally worsened. Figure 2, for example, shows where new housing in Long Beach should be located – noted with green dots in polygons called "Traffic Analysis Zones" (TAZ), which includes many of the most densely-populated, poorest neighborhoods in Long Beach – communities of color highly vulnerable to displacement and gentrification. The TAZ maps showing "red" dots or squares are dominated by single family residences, where even "infill" housing such as townhomes on former strip malls is excluded from SCAG's VMT-reduction housing plan. The "no new housing" neighborhoods are far whiter, and far wealthier, than the neighborhoods slated to receive many thousands of new housing units in a haunting repeat of the "slum clearance" schemes that wiped out minority neighborhoods in years past.

**Figure 2: Long Beach VMT Reduction Housing Plan (SCAG 2020)**



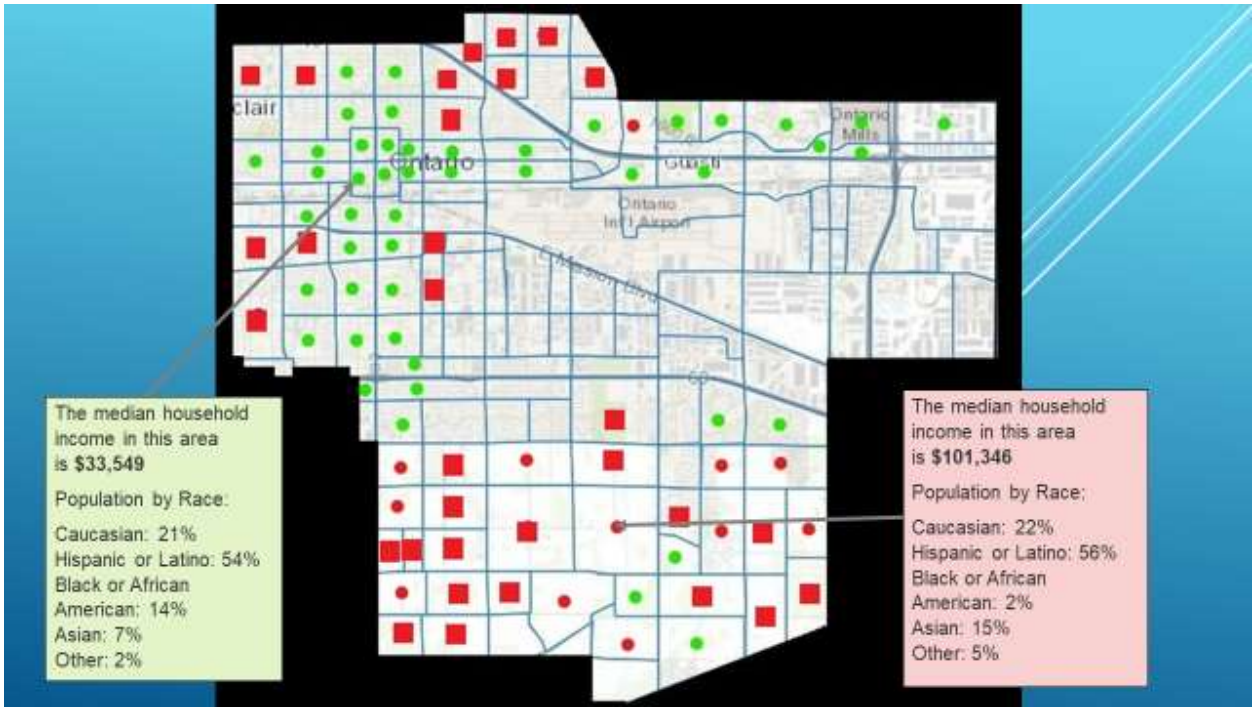

When applied to smaller communities, such as the small town of La Habra in Orange County, SCAG's VMT-reducing housing scheme was even more blatantly racist. As shown in Figure 3, SCAG decreed that housing belonged in the city's two poorest TAZ zone neighborhoods – majority Latino – and excluded from the adjacent "nice" homes in nearby hills occupied primarily by Whites and Asians.

**Figure 3: La Habra VMT Reduction Housing Plan (SCAG 2020)**




SCAG's VMT-based housing plan would also have created new obstacles under CEQA even to the buildout of approved housing. Figure 4 shows Ontario, with new housing planned along a heavily-commercial freeway corridor (Interstate-10) that also has an express bus route, and along another bus route through existing poorer parts of the city that are also near a bus route. (The bus was not operating in 2020, during COVID, and had consistently low ridership even pre-COVID.) The SCAG VMT-based housing plan wanted no more housing built in southern Ontario, which is actually the best selling new community in all of California – with an affordable price for new homes, and a majority Latino and other minority new home purchasers.

**Figure 4: Ontario VMT Reduction Housing Plan (SCAG 2020)**

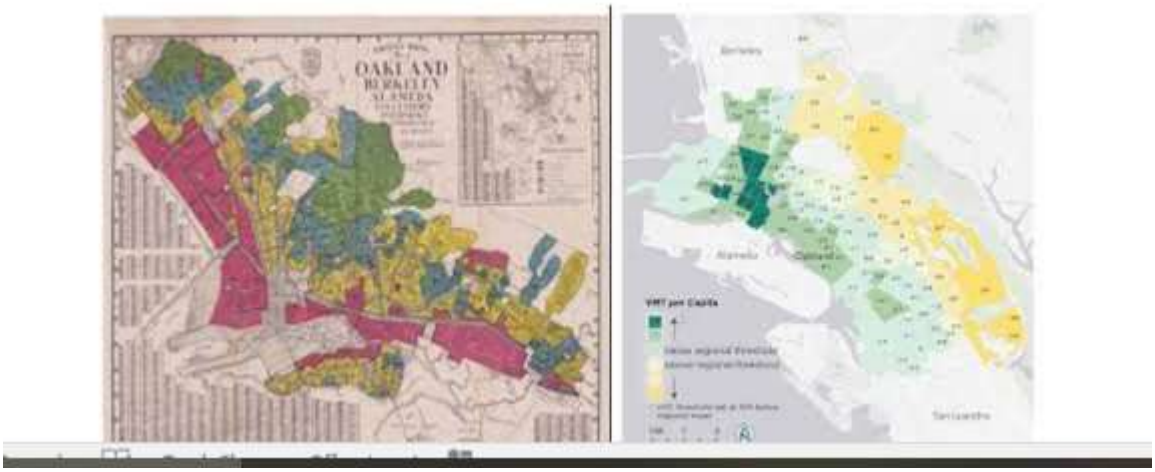



To its credit, when SCAG realized the redlining consequences of its VMT-reduction housing plan, it disavowed the plan and forbade its use in any context (including RHNA and CEQA) in a Regional Council approval Resolution that recognized the "conflict" between California's housing and climate goals. We can achieve climate goals without worsening racial segregation, demolishing disadvantaged communities (again), and ending attainable homeownership even within existing cities for the majority-minority families that have been shut out of the California homeownership market by catastrophic planning and policy decisions (many brought to us by the same advocates and bureaucrats who invented reducing VMT for electric cars as a "necessary" climate mandate) over the past two decades. In fact, the California Legislature has repeatedly declined to mandate reductions in VMT – and has repeatedly found that the housing crisis harms both existing California residents and exacerbates climate change by driving Californians to worse climate states like Texas to find a house they can afford to buy.

Although the VMT data is most accessible in the SCAG region of Southern California, it is critical that your agency recognize that this same discriminatory outcome occurs everywhere. In Figure 5, for example, we compare Oakland's historic "redlining" maps where federal bureaucrats refused to approve low cost loans in Black neighborhoods and other communities of color (colored red) with the majority white communities where low cost mortgages were available (colored green and yellow). Oakland's "low VMT" map (where housing is demanded by today's special interests based on claimed climate "science") is the redlined area of Oakland that has already lost much of its historic Black residents, businesses, and civic institutions – the remainder of which would be

wiped out by high density, transit-oriented housing near BART and bus lines. Oakland's "high VMT" map, where housing should not be built, is those lush, wealthy, white, and historically segregated hills.

**Figure 5: Oakland Redlining and VMT Map Comparison**




Both the future of work, and the future of transportation, are in flux. Even before COVID, however, more people were working from home in the SCAG region than riding fixed-route public transit – with bus ridership suffering the most substantial declines. Fixed-route transit ridership plunged during COVID, and has not recovered. VMT has increased over the past month with the re-opening of the state, although peak hour volumes (and trip durations) have diminished. From remote work, to the explosion of new electric technologies for short-distance localized trips, to the massive expansion of app-based rides and carpools, it's important to know what we don't know – which is the future – and what we do know, which as UCLA's transportation experts repeatedly confirmed, is that low income workers rely on low cost used personal vehicles instead of the bus: people can perform multiple trips (drop kids of at school before, carpool kids to soccer after school), and can reliably access more than twice as many jobs in less than half as much time. https://www.its.ucla.edu/publication/transit-blues-in-the-golden-state-analyzing-recent-california-ridership-trends/

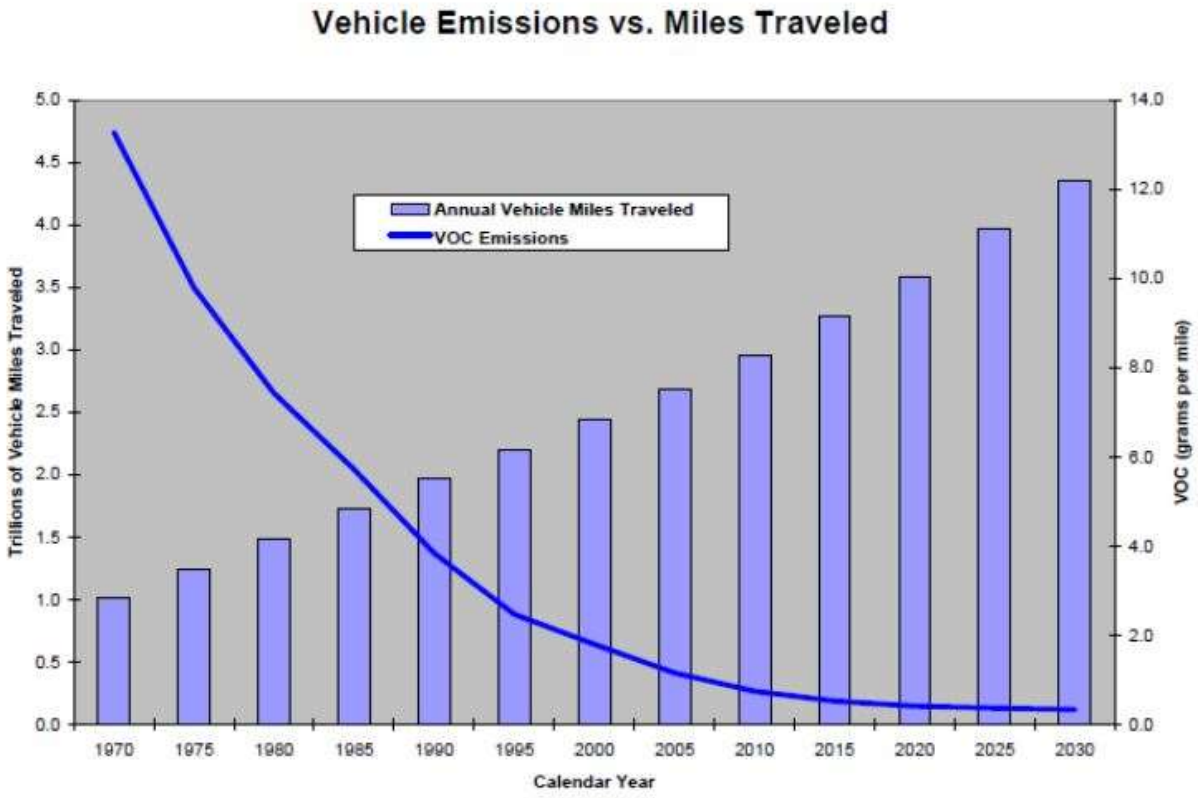
There are two other inconvenient truth about this VMT-based housing policy civil rights violation.

First, there are no proven, or effective, ways of "mitigating" VMT to "below the level of significance" demanded by the state's CEQA lead agency, the Office of Planning & Research (OPR), for unsubsidized housing bigger than about 10 units that is located in a suburban scale existing community not served by high frequency transit. Using the methodology demanded by OPR, San Diego County calculated that the majority of the housing they have approved over the past decade – which helped meet their RHNA housing goals, and had been approved by state climate agencies – would have had significant unmitigated VMT impacts. Again using OPR-endorsed "mitigation" methodologies, for which there is insufficient evidence of effectiveness, San Diego County determined that VMT mitigation fees alone would add $50,000 - $690,000 ***per housing unit***. San Diego County further acknowledged that it could not meet its RHNA

obligation if this VMT scheme was enforced as proposed by OPR.
https://bosagenda.sandiegocounty.gov/cob/cosd/cob/doc?id=0901127e80d032bb

Second, although the purported purpose of this VMT policy is to reduce greenhouse gases, there are many – many – alternatives to imposing a massive car tax on new housing that are more effective at reducing GHG without engaging in racially discriminatory housing policies. When smog was first identified as a problem in Los Angeles during World War II, initially scientists speculated it was a poison gas attack by the Japanese – only to later learn that smog was domestically produced by our own activities. When the Clean Air Act was passed in 1972, the same no growth special interests initially demanded that that cars and other smog sources be banned, but as shown in Figure 6 we instead banned lead in gas, and used catalytic converters and now clean engine/fuel mandates to cut vehicular emissions by more than 98% while VMT – cars driven by actual people to actual jobs etc. – rose steadily alongside population and employment, as reported by President Obama in 2016:

**Figure 6: Reduction in Tailpipe Emissions from Vehicles (line) v. Increase in Vehicle Miles Travelled from Population/Job Growth (bar columns)**




***Civil Rights Solution to Special Interest Exclusionary Housing VMT Scheme: Comply with Civil Rights Housing Laws including Affirmatively Furthering Fair Housing.*** *The current housing emergency, which disproportionately harms our communities, is not the appropriate forum to "experiment" with a housing density scheme dependent on fixed-route bus ridership and high density, high cost rental housing. Housing locations,*

*densities, and typologies need to match the needs of our communities, including respecting – not just paying lip service – to racial equity and housing civil rights laws we helped enact to create equitable access to the American Dream of homeownership. We have sued the state agencies responsible for this VMT scheme, and the state has been unsuccessful in dismissing our civil rights claims – while engaging in years-long stall tactics like forcing us to file a Public Records Act lawsuit for VMT documents they attempted to hide (a lawsuit we won). VMT is simply a measure of the transportation options – even of 100% clean vehicles – available in a community. It must now be studied under CEQA (at least until our lawsuit is resolved), but it should not distort your Housing Update to worsen residential racial segregation, shield majority-white wealthy neighborhoods from housing in violation of the AFFH laws, and again wipe out our communities in unfunded displacement schemes.*

4. **Paper Zoning for Economically Infeasible Housing is Illegal and Racist.** Partly in response to no growth anti-homeownership schemes like VMT, and partly because existing laws requiring that housing meet the actual needs of actual Californians alive today have become as routinely ignored by academics and bureaucrats as civil rights laws, some cities may be tempted to "solve" for RHNA allocations by assuming that mid-rise and high rise apartments costing in excess of $4000 in monthly rent for even for one-bedroom units are lawful housing compliance pathways under RHNA. In fact, because that rental rate – and other real life obstacles to lower cost condo development – are entirely unaffordable to median income households, a Housing Element update that assume high cost higher density product types that cost more than 2.5 times more to build than single family homes, duplexes and townhomes as even admitted by an overly-optimistic UCB study that demanded an "all-infill" higher density housing future for California is a violation of housing civil rights law. (https://www.next10.org/publications/right-housing ) The same study also acknowledged that to accommodate what has only grown to ever more severe housing unit shortfalls, "tens or even hundreds of thousands of single family homes" would need to be demolished to make way for the new high density units. We have seen these academic conclusions before, and we have seen the horrendous outcome of targeting the least expensive – aka neighborhoods housing people of color – and thus least costly/most profitable housing demolition/expensive new housing scheme. What is astounding is how often, whether in the name of openly racist segregation goals, or veiled "public harmony" goals, or "urban revitalization" double-speak, and now special interest NIMBY environmentalism, overwhelmingly white academics, bureaucrats, and hired gun consultant "experts," keep finding new ways to destroy our communities and deprive our people of the right to achieve the American Dream of homeownership.

These same "experts" have now inserted yet another poison pill into state housing law, which is that when property designated in a General Plan for housing includes economically infeasible higher densities – which in most communities includes even mid-rise six story structures over podium parking – is approved for lower density economically feasible housing types like townhomes, local governments must transfer the unbuilt infeasible units to a different property that must accept even higher densities than included in the General Plan Housing Element update. Because the impacts of that receiving site's additional spillover housing itself triggers CEQA, an applicant for an economically feasible housing project must also assume the cost, schedule, and litigation burdens of CEQA compliance for whatever unrelated receiving housing site is designated by the city – at an unknown point in the process – to add more density than

allowed in the General Plan Housing Element. Housing Elements that assume non-existent conditions (e.g., repeal of Proposition 13, end of capitalism, vast new tax revenues dedicated to missing middle housing to fund the millions of additional housing units, etc.) are illegal, as are Housing Elements that prescribe economically infeasible higher density housing and fail to plan for the vast majority of "missing middle" and "affordable" housing required by RHNA, are illegal. The San Francisco Bay Area has led the state in assuming that $4000 per month high rise apartments will be financially feasible in suburbs where median incomes can pay $1500 for housing – or $2000 per month for a mortgage. This "paper zoning" of high rise transit-oriented neighborhoods at every bus stop has resulted in a massive out-migration of higher paid Bay Area workers to Stockton and the Central Valley, Salinas and the South Bay, and Sacramento and beyond – which in turn results in unattainable housing prices for those with local jobs in those areas. This paper zoning academic fiction, pursued for more than two decades by some "woke" Bay Area "experts" alongside "urban limit lines" and "ecosystem service taxes" paid by urban residents to non-profit "stewards" of natural lands, is the modern day form of Jim Crow strategies to deprive the hard working families in our communities access to attainable homeownership.

> ***Civil Rights Solution to Paper Zoning for Infeasible Housing.*** *Just don't do it. Townhomes, stacked flats, quadplexes, garden clusters, and small lot homes are just some of the many examples of lower cost housing that once dominated the "starter" housing market before academics, planners, and special interest no-growthers decided they could intentionally create a housing crisis and nobody would notice because the people most harmed don't earn enough to donate to political campaigns. Housing densities, and locations, need to be designed for the people who need housing. "Move-up" housing for higher income families forced to rent or spend four times more for a home than they would spend in a neighboring state is also needed. General Plan Housing Element updates should include in the disadvantaged community/environmental justice analysis housing affordability criteria to designate housing typologies, densities, and locations, as well as expedited approval processes, to make new housing needed to meet RHNA targets "affordable by design" so that median income families without taxpayer subsidies or winning lottery tickets can buy a home. As recognized by the Legislature itself, solving the housing crisis will help achieve California's climate targets by keeping our families here, in new housing that is hugely more energy efficient, and climate friendly, than existing housing or housing built in our competitor states like Texas, Arizona and Nevada. The more new housing (and people) your agency plans for, the lower your per capita greenhouse gas emissions – a feasible, just, and civil rights compliant outcome that will actually help achieve California (and global) climate goals.*

When longtime civil rights champion Amos Brown was recently asked whether "the Bay Area is a safe haven for Black people and other people of color" he was unambiguous: "No. . . Since 1970, we have lost Black people who were pushed out of this city. The 70's Black population was between 15-16%. Well now it's down to about 4%. That didn't happen by accident and it wasn't just economics. This happened because of public policy."
https://www.sfchronicle.com/lift-every-voice/article/Amos-Brown-16219697.php

Beyond the COVID pandemic, 2020 brought us yet another year of race riots and yet another round of rhetoric about the need to "address" the new race avoidance buzzwords of

diversity and inclusion. The time for rhetoric around housing justice should have ended before it started, and we thought for sure was made illegal with the 1960s civil rights laws. We were wrong: as Mr. Brown reports, "public policy" keeps shoving our communities out of neighborhoods that become desirable to white families. Stop it. Just stop it. Comply with civil rights laws, comply with RHNA, and plan for housing that can be purchased by median income households – not just for low income and homeless families, and not just for the wealthy. Housing experts like to call us the "missing middle" – we aren't missing at all. We just aren't being seen by housing "experts" and bureaucrats and special interests who get paid by the wealthy to advocate full-time while members of our communities hold down the essential jobs that make communities work. In fact, some sneeringly dismiss us entirely by concluding the "ship has sailed" on homeownership – and yep, communities of color weren't allowed on the ship, and then got tossed off it with predatory foreclosures, but that's just too bad we should wait for our lottery ticket to come in and move back into the projects if or when they are ever built.

**Systemic discrimination doesn't happen by accident – it happens because of bad policy**

Come to your senses. Plan housing for people. Welcome us to your communities, not just to work but to live. Let's restore our common love for California and build those diverse and inclusive communities your agency, and its advisors and consultants, have been talking about since our country's racial reckoning last year. Do the right thing, and adopt the right Housing Element and Zoning Code updates.

Please contact me at robert@thetwohundred.org if you'd like to discuss any of this further. We can sue – and we have and will continue to sue to enforce civil rights housing laws – but doing right is by far the cheaper, faster, easier, and just pathway to doing your share to solve the housing crisis.

We look forward to hearing back from you at your earliest convenience.

Respectfully,



Robert Apodaca
Vice-Chair and Director of Public Policy
The Two Hundred
www.thetwohundred.org

**From:** Melissa Chao
**To:** Yoo, Lex
**Subject:** RE: Identify a potential opportuintiy site for residential development: 21 Auto Center Dr., Irvine, CA 92618
**Date:** Monday, August 16, 2021 9:56:25 AM
**Attachments:** image006.png
image007.png
image008.png
image009.png
image010.png

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Hi Lex,

Charles is no longer with the City Of Irvine.

21 Auto Center Drive is zoned 4.3 Vehicle Related Commercial. To see a list of permitted and conditionally permitted land uses (i.e., use requires a conditional use permit), please refer to https://library.municode.com/ca/irvine/codes/zoning?nodeId=ZOOR_DIV3GEDESTLAUSRE_CH3-37ZODILAUSREDEST_S3-37-214.3VELACO.

The City is not making any assumptions at this time regarding future residential at that location.

Please feel free to contact me with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Yoo, Lex <Lex.Yoo@marcusmillichap.com>
**Sent:** Thursday, August 12, 2021 11:47 PM
**To:** CKovac@cityofirvine.org
**Cc:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** RE: Identify a potential opportuintiy site for residential development: 21 Auto Center Dr., Irvine, CA 92618

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Charles,

This is Lex Yoo from Marcus & Millichap.
My client wants to purchase the property on 21 Auto Center Dr., Irvine, and we would like to check the land for future development opportunity.
Hope you find my email and give me your opinion.
Thank you.




**Lex Yoo**
*Vice President Investment*
*Director, National Office & Industrial Properties Group*

515 S. Flower Street, Suite 500, Los Angeles, CA 90071
O: (213) 943-1844 | C: (213) 537-9691
E: Lex.yoo@marcusmillichap.com

License: CA: 01879695 | NYSE: MMI

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Marcus & Millichap

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**From:** Melissa Chao
**To:** fgreenwalt@aaamanagementllc.com
**Cc:** Tim Gehrich; Kerwin Lau; Marika Poynter
**Subject:** Simpson Chevrolet: 21 Auto Center Dr, Irvine- Future Housing Opportunity
**Date:** Thursday, August 26, 2021 2:40:58 PM
**Attachments:** AAA Management - Development Portfolio.pdf
Future Housing Sites Owner Outreach Letter.pdf

---

Hi Forrest,

Due to COVID, City staff is primarily working from home, but if you leave a voicemail message at the number below I will return your call.

21 Auto Center Drive is zoned 4.3 Vehicle Related Commercial. To see a list of permitted and conditionally permitted land uses (i.e., use requires a conditional use permit), please refer to https://library.municode.com/ca/irvine/codes/zoning?nodeId=ZOOR_DIV3GEDESTLAUSRE_CH3-37ZODILAUSREDEST_S3-37-214.3VELACO. The City is not making any assumptions at this time regarding future residential at that location.

Note that the City is updating its Housing Element and the draft document is available at www.cityofirvine.org/HEUpdate. Draft Appendix D, Sites Inventory Form, and the associated sites map (pages 7-22 through 7-36 in the Housing Element) may be of particular interest to you as a developer.

Please feel free to contact me with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

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**From:** Forrest Greenwalt <fgreenwalt@aaamanagementllc.com>
**Sent:** Thursday, August 26, 2021 2:01 PM
**To:** Melissa Chao <MChao@cityofirvine.org>; CKovac@cityofirvine.org
**Subject:** Simpson Chevrolet: 21 Auto Center Dr, Irvine- Future Housing Opportunity

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Charles, Melissa,

I'm reaching out in response to the potential for the Simpson Chevrolet site at 21 Auto Center Dr. Irvine. I tried calling but couldn't reach your numbers- not sure if Covid has your teams out of the office. Our team is local real estate developers in Southern California and the Pacific Northwest. I've attached a few projects we have worked on and are currently under development on over 2,000 units right now.

We are eager to do a development in Irvine and came across this site and opportunity and would love to learn what you and the city have in mind for this site.

Let me know when you area available to hop on a call to discuss!

Thank you,
Forrest

Forrest Greenwalt
Acquisitions and Development Manager

**AAA Management, LLC**
1450 Frazee Road, Suite 409
San Diego, CA 92108
Tel: 619-278-0714 ext 122
Cell: 619-558-6054
Email: fgreenwalt@aaamanagementllc.com

# DEVELOPMENT PORTFOLIO

# SERENO APARTMENTS

930 3RD AVENUE SAN DIEGO, CALIFORNIA







| | |
|---|---|
| Location: | Chula Vista, CA |
| Completion Date: | October 2018 |
| Total Units | 120 (Market Rate) |
| Site Amenities: | Live/Work Apartments, Playground, Outdoor pools, Private park & track, BBQs, Lounge, Garage parking, Game room, Fitness center, fire pits |

# GEO APARTMENTS

| | |
|---|---|
| Location: | Shoreline, WA |
| Completion Date: | Summer 2020 |
| Total Units | 164 (Market/MFTE rate) |
| Site Amenities: | Co-work, BBQs, Lounge, Garage parking, Game room, Fitness center, Fire Pits |







# VAIL TWO APARTMENTS

| | |
|---|---|
| Location: | Shoreline, WA |
| Completion Date: | Summer 2022 |
| Total Units | 215 (Market/MFTE rate) |
| Site Amenities: | Co-work, BBQs, Dog Run, Lounge, Garage parking, Game room, Fitness Center, Fire Pits |





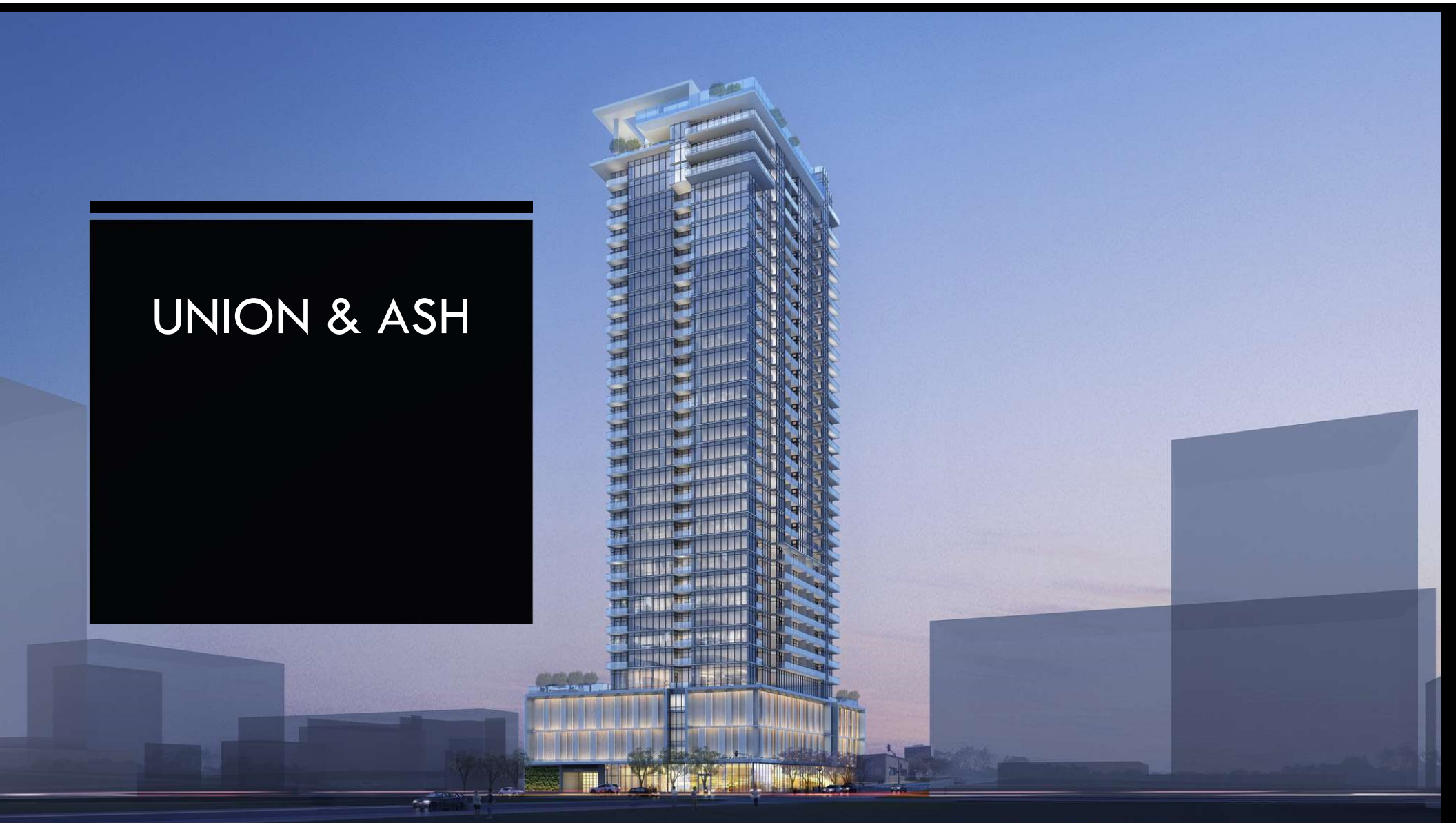
# INTERBAY APARTMENTS

Location: Seattle, WA
Completion Date: Summer 2022

Total Units 168 (Market/MFTE rate)
Site Amenities: Co-work, BBQs, Dog Run, Lounge, Garage parking, Game room, Fitness Center, Fire Pits






UNION & ASH

# UNION & ASH

| | |
|---|---|
| Location: | San Diego, CA |
| Completion Date: | Winter 2023 |
| Total Units | 389 (Market/MFTE rate) |
| Site Amenities: | Co-work, BBQs, Dog Run, Lounge, Garage parking, Game room, Fitness Center, Fire Pits, Swimming Pool, Spa |



# 7th and A

| | |
|---|---|
| Location: | San Diego, CA |
| Completion Date: | Spring 2024 |
| Total Units Site Amenities: | 417 (Market rate) Co-work, BBQs, Dog Run, Lounge, Garage parking, Game room, Fitness Center, Fire Pits, Swimming Pool, Spa |



Rendering of Yield Study.

Community Development cityofirvine.org

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 949-724-6000

March 1, 2021

**Subject: Irvine Housing Element Update – Future Housing Sites**

Dear Irvine Property Owner:

The City of Irvine is in the process of updating its Housing Element for the 2021-2029 planning period, which is also referred to as the 6th cycle Housing Element Update. Under state mandate, we must plan for a significant number of future housing units, including affordable housing. As part of the 6th cycle update, we are working to identify potential sites that may accommodate residential development in the future. For additional information about the Housing Element update efforts, please visit www.cityofirvine.org/housingelementupdate.

The City is not considering the acquisition of your property for conversion to housing. We are simply attempting to identify possible sites where residential development may be appropriate or feasible in the future regardless of current zoning. While no commitments or decisions have been made, we would like to gauge your interest. If you would like to discuss this potential opportunity in further detail, please contact us via email or phone at:

**CHARLES KOVAC**
Housing Administrator
CKovac@cityofirvine.org
949-724-7452

**MELISSA CHAO**
Senior Planner
mchao@cityofirvine.org
949-724-6395

Or via letter to:

Charles Kovac, Housing Administrator
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

We hope to hear back from you by March 25, 2021. If you are interested, please do not let this opportunity pass you by. Please contact us at your earliest convenience.

Thank you for your time and attention to this matter.

Respectfully,

Pete Carmichael (Feb 24, 2021 15:26 PST)

Pete Carmichael
Director of Community Development

| | |
|---|---|
| **From:** | GPUpdate 2035 |
| **To:** | Mildred Perez; Lee, Chelsea@HCD; Housing Elements@HCD |
| **Cc:** | McDougall, Paul@HCD; Cesar C; GPUpdate 2035 |
| **Subject:** | RE: Irvine Housing Element Comment Letter |
| **Date:** | Thursday, September 2, 2021 3:04:19 PM |

Hi Mildred,

The City of Irvine has received the Commission's comments regarding Irvine's draft housing element.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Mildred Perez <mildredp@kennedycommission.org>
**Sent:** Thursday, September 2, 2021 10:52 AM
**To:** Lee, Chelsea@HCD <Chelsea.lee@hcd.ca.gov>; Housing Elements@HCD <HousingElements@hcd.ca.gov>
**Cc:** McDougall, Paul@HCD <paul.mcdougall@hcd.ca.gov>; Cesar C <cesarc@kennedycommission.org>; GPUpdate 2035 <GPUpdate2035@cityofirvine.org>
**Subject:** Irvine Housing Element Comment Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning,

The Kennedy Commission is submitting the attached public comment letter in response to the Irvine Housing Element dated July 2021.

Thank you for your time and consideration,
--
**Mildred Perez**
Senior Project Manager
The Kennedy Commission
P:323.283.6983

THE Kennedy COMMISSION

www.kennedycommission.org
17701 Cowan Ave., Suite 200
Irvine, CA 92614
949 250 0909

September 1, 2021

Chelsea Lee, Housing Policy Manager, Housing Policy Development
Housing & Community Development
2020 W. El Camino Avenue, Suite 500, Sacramento, CA 95833

**RE: Initial Comments to Irvine Draft Housing Element dated July 2021**

Department of Housing and Community Development:

Thank you for the opportunity to review and comment on the City of Irvine's 2021-2029 initial draft Housing Element. We have reviewed the draft and are submitting this letter to provide public comments.

The Kennedy Commission (the Commission) is a broad-based coalition of residents and community organizations that advocates for the production of homes affordable for families earning less than $27,000 annually in Orange County. Formed in 2001, the Commission has been successful in partnering and working with Orange County jurisdictions to create effective housing and land-use policies that have led to the new construction of homes affordable to lower-income working families.

**Public Engagement**

Public engagement is a necessary component of the Housing Element process. As California Housing Element law states: "The local government shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element..."[1] Broad participation and true engagement of the public increase the likelihood that the community members involved in the discussion and planning processes will support new housing strategies and housing developments. Public engagement should include participation from residents of diverse communities, housing consumers, service providers, and advocates. We would like to commend the City of Irvine for its commitment to keeping residents engaged and involved in the Housing Element development process. With various outreach strategies, focus groups, stakeholder meetings, and public meetings, the City provided multiple opportunities for community members to participate and be a part of the dialogue. As the city moves forward with drafts and revisions, it needs to continue to engage community stakeholders and residents in the evaluation and creation of policies, goals, programs and sites for affordable housing development, especially low income and special needs residents who are the most vulnerable to the housing crisis.

**Community Needs**

According to SCAG's pre-certified housing data, there are a total of 50,263 renter households in Irvine, with 24,945 or 49.6% of those households spending thirty percent or more of gross income

[1] Gov. Code, § 65583, subd. (c)(9)

on housing costs.[2] Additionally, 13,285 or 26.4% renter households are extremely rent burdened and are paying fifty percent or more of gross income on housing costs. The City of Irvine should take into account its local economy and offer healthy and affordable housing options that the current market-rate housing development is not offering. Considering that the City of Irvine is a large regional employment center and that its daytime population almost doubles during the typical work week, the City must recognize that affordable housing is needed to support the local business economy to have more people living in the city versus commuting from cities in Orange County and nearby counties.

**5th Cycle RHNA Performance**

During the current 5th cycle planning period the City had a total Regional Housing Needs Assessment (RHNA) of 2,817 at very low-income, 2,034 at low-income, 2,239 at moderate and 5,059 at above moderate.

To date, the City has approved 12,998 units at moderate and 16,825 at above moderate.[3] At very-low income the City has approved 1,149 units and 37 at low-income. The City has not exceeded 5th Cycle targets for very low and low, and has supported an unbalanced production of moderate and above moderate units. The number of moderate and above moderate units approved in the last seven years was 25 times more than those at low and very low income. This unbalanced housing production identifies that affordable housing policies need to be strengthened and updated to prioritize affordable housing development along with market rate housing (see KC policy recommendation section).

5th Cycle Identified Opportunity Sites:

In the 5th cycle Housing Element, the City identified housing opportunity sites for very low and low exclusively in areas with densities of 30 or more units per acre. The sites were identified for lower incomes based primarily on the minimum density requirement of 30 units to the acre. The City's General Plan and zoning offers streamlined development, generous development standards at densities of over 30 units to the acre. These incentives have encouraged significant market rate development, but affordable housing has not been encouraged at a similar scale. Furthermore, the city's efforts to use the density bonus policy to include affordable housing by giving away generous development standards and high densities have not focused on affordable housing for lower incomes, instead they have largely focused on incentivizing moderate income housing. As indicated in the 2020 Housing Element Annual Progress Report, only 4% percent of the total units produced in the current 5th Cycle were affordable to lower income categories even with a significant number of high density developments throughout the planning period.

**Housing Policies to Increase Affordable Housing**

The City must "review the previous element to evaluate the appropriateness, effectiveness, and progress in implementation, and reflect the results of this review in the revised element."[4] While the

[2] SCAG Pre-Certified Housing Data for the City of Irvine, April 2021
[3] Irvine 2020 Housing Element Annual Progress Report, Table B
[4] Gov. Code § 65588 (a) and (b)

element includes a program-by-program review of implementation in the prior planning period, the review of past programs should also analyze the cumulative effectiveness of programs on addressing special housing needs over the previous planning period. This information provides the basis for developing more effective housing programs.

As the 5th Cycle Housing Element Annual Progress Report indicates, the City's housing policies have developed housing in an unbalanced way and prioritized market-rate housing. As the City reviews the proposed housing policies and opportunity sites, we recommend that it implement affordable housing policies that can be effective on proposed sites while considering all development standards, zoning and past development.

The City can not rely on the market to deliver affordable housing by identifying higher density sites for lower-income RHNA needs. As demonstrated in the 5th Cycle, this strategy has proven to be ineffective and has created an overproduction of luxury, market-rate housing that is unaffordable to most Irvine residents.

The Kennedy Commission recommends that the city strengthen its Inclusionary Ordinance to provide development incentives in exchange for a required 20% of the units to be affordable to extremely low, very low, and low income households.

In addition, we recommend that the city further analyze the effectiveness of its density bonus ordinance to develop affordable housing for lower income households. The city's 5th cycle RHNA progress demonstrates that moderate income housing production has outpaced lower income housing development by a 12 to 1 ratio. The city should prioritize affordable housing for lower income households in its update and implementation of density bonus. It is worth noting that rental developments can only use density bonus to incentive lower income units.

Realistic Program and Policy Goals:
To address the program requirements of Government Code section 65583, subdivisions (c)(1-6), and to facilitate implementation, several programs should be revised to include more discrete timing, rather than "continue to support" or "in process".

Incentivizing Affordable Housing:
To ensure that affordable housing is incentivized on these sites, the City needs to strengthen its programs and policies that will create affordable housing. We recommend that the City's Inclusionary Housing Ordinance be strengthened to address the unbalanced housing development and meet its lower income housing needs. We recommend that the Inclusionary Housing policy percentage be increased to 20% at extremely low, very low- and low-income categories. These are the categories that market-rate development is not addressing in Irvine. In addition, the Kennedy Commission provides a list of recommendations on housing policies and programs in the recommendations section below.

**Housing Element Opportunity Sites Inventory**

As part of the analysis of adequate sites, the City has reviewed potential housing sites citywide and has identified opportunity sites for lower-income households in Areas 4, 19, 23, 24, 33, 36, 40, and 51.

Identified Low Income Sites:
The sites identified for lower-income categories are predominantly identified based on default densities for lower income units of 30 dwelling units per acre. The identified Planning Areas have both unique opportunities and challenges. As mentioned previously, both the General Plan and current zoning offer streamlined development standards, generous development standards at high densities. The 5th Cycle Housing Element progress shows that an unbalanced production of luxury market-rate housing has been developed in the previously identified Planning Areas.

University Housing:
As the City considers crediting 4,406 of existing University of California, Irvine housing toward RHNA, it should also take into account that RHNA is credited when creating new housing opportunities, not for existing housing. Student housing is also not eligible for RHNA credit. Additionally, as stated in the Affirmatively Furthering Fair Housing Analysis, Irvine's three areas of racially and ethnically concentrated areas of poverty are all surrounding the University of California, Irvine.[5] With large concentrations of poverty in university housing areas, we also request more clarity and analysis on how low- and very low-income categories housing needs will be met.

Suitability of Non-vacant Sites:
The element must include an analysis demonstrating the potential for redevelopment of non-vacant sites. To address this requirement, the element describes 75 non-vacant sites selected for the inventory but must provide additional analysis on the likelihood of redevelopment in the planning period. For example, the element should describe and support the potential for additional development in the planning period and consider additional factors such as the age of structure, presence of expiring leases, condition of the structure, and expressed interest in development.

Traditional Funding for Affordable Housing:
In addition, identified affordable housing sites should also be evaluated for their viability to compete for traditional funding to create affordable housing. These funding sources prioritize development sites that promote access to community resources and services, such as schools, public transportation, medical services and access to parks.

No Net Loss:
The City will also have to consider No Net Loss when it identifies opportunity sites. It is crucial that affordable housing moves along with market-rate housing given the limited sites that are available. Considering the state's No Net Loss requirements, if the sites identified for affordable housing are developed for market-rate housing, the City will have to rezone new sites for the appropriate density.[6]

[5] 2021-2029 Irvine Housing Element Draft, Appendix B (B-7)
[6] Government Code § 65863

For the reasons stated above, the City needs to modify its current Inclusionary Housing policy percentage to require 20% of units be affordable at the extremely low, very low- and low-income categories. This will equitably facilitate and incorporate affordable housing at the extremely low-, very low- and low-income categories on these sites.

**ADUs**
Looking at the City's calculation for lower income ADUs, we believe that affordable housing opportunities in ADUs seem to be high and not supported by local housing costs for rentals and annual production.

The element notes many applications have been received for ADUs in recent years and concludes an assumption of 80 ADUs per year over the planning period. While the number of applications can be utilized as a relevant factor, ADU assumptions must be based on permitted units. The City has permitted an annual average of 7.7 ADUs per year. The element should either reduce the number of ADUs per year or include additional analysis and programs to support an assumption higher than 61 ADUs per year. In addition there is no monitoring program being proposed to track the creation and affordability of ADUs. The City must commit to a mid-cycle review if ADU production is not meeting projected targets.

**Affirmatively Furthering Fair Housing**
The City of Irvine has provided an adequate analysis of Fair housing issues in the City, but needs to strengthen its recommendations on how it will address the contributing factors to inequities City. Although there is an analysis and summary of fair housing issues utilizing available federal, state, and local data and knowledge, there was no information on trends and patterns within Irvine in comparison to the broader region. The policies and programs must include a schedule of actions with clear timelines and specific commitment to have a "beneficial impact" within the planning period to achieve the goals and objectives of addressing contributing factors to Fair housing issues.[7]

We ask that the City prioritize the housing needs of large families of low, very low and extremely low-income, who encounter difficulties in finding decent, affordable housing during the development of its new Housing Element.

**As the City moves forward with the draft Housing Element update, the Commission urges the City to support the development of affordable homes. The Commission has provided the following recommendations for the City to incorporate:**

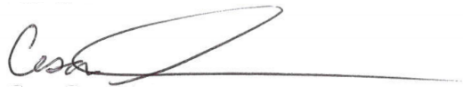
1. Strengthen the existing Inclusionary Housing Ordinance with a 20% requirement of affordable housing production at extremely low, very low- and low-income categories.
2. Prioritize affordable housing funding and programs to increase affordable housing options for families of lower incomes, especially at very low and extremely low-income.
3. Identify city-owned sites and prioritize these sites for the development of affordable housing in Irvine.
4. Ensure that development sites being identified and discussed in the initial drafts are realistic and available during the planning period.

[7] Gov. Code, § 65583, subd. (c)(10)(A)

5. Ensure opportunity sites are not simply upzoned or rezoned without including affordable housing policies that will capture the financial and land use incentives being given to property owners and market rate developers. An Affordable Housing program is also needed.
6. Update Density Bonus Law to prioritize affordable housing development for lower income households in rental developments.
7. Affirmatively Furthering Fair Housing – The City of Irvine should provide adequate recommendations on how the City will Affirmatively Further Fair Housing and promote the production of affordable housing in **all** communities.

The Commission looks forward to partnering with the City of Irvine to create opportunities to increase affordable homes for lower income households in the City. If you have any questions, please feel free to contact me at (949) 250-0909 or cesarc@kennedycommission.org.

Sincerely,



Cesar Covarrubias
Executive Director

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | sarah berg |
| **Cc:** | Bill Rodrigues |
| **Bcc:** | Melissa Chao |
| **Subject:** | RE: Irvine Housing Element Inventory sites |
| **Date:** | Wednesday, October 6, 2021 2:42:00 PM |

Hi Sarah,

I left a voicemail in response to your message yesterday.

You mentioned possibly being interested in a dozen sites. As mentioned. we would need to know the addresses and/or APNs to verify the existing zoning, maximum intensity cap allowed, and if there is any remaining development intensity left. You may want to submit a pre-application, so that various staff can research and respond accordingly to any questions you may have.

- Pre-application information sheet: https://irvineca.seamlessdocs.com/f/PreApplication
- To submit, go to www.irvineready.com (everything is completed on-line). For assistance, contact 949-724-6313.

If the site requires rezoning to allow residential uses, the proposed density is TBD and will be established through the subsequent General Plan Update (GPU) and associated Zoning Ordinance Amendment (ZOA) work effort after the Housing Element is adopted/certified. This subsequent work effort is anticipated to be completed by October 2024 or possibly sooner.

However, if you do not want to wait for the City's GPU/ZOA, you could choose to move forward independently and file all the applicable development applications needed for residential development such as:

- General Plan and Zoning Ordinance Amendment to increase intensity cap and/or change classifications (if necessary)
  https://irvineca.seamlessdocs.com/f/GeneralPlanAmendment
  https://irvineca.seamlessdocs.com/f/ZoneChange

- Conditional Use Permit and/or Master Plan (as required by the zoning requirements)
  https://irvineca.seamlessdocs.com/f/ConditionalUsePermit
  https://irvineca.seamlessdocs.com/f/MasterPlan

- Subdivision Map
  https://irvineca.seamlessdocs.com/f/TentativeTractParcelMap

- Park Plan for demonstrating minimum park dedication requirements are met
  https://irvineca.seamlessdocs.com/f/ParkPlan

- Park Design (can be processed concurrently with CUP and/or MP or deferred)
  https://irvineca.seamlessdocs.com/f/ParkDesign

- Affordable Housing Plan for meeting the City's 15% inclusionary housing ordinance
- Appropriate CEQA documentation with technical studies
- Note if the site is located in the Irvine Business Complex (Planning Area 36 or "IBC"), it is subject to a Development Intensity Value (DIV) system as further described here: https://irvineca.seamlessdocs.com/f/IrvineBusinessComplex

Bill is the co-principal of the Project Entitlement team. I could set-up a meeting between the three of us if you would like.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** sarah berg <bergenterprises@yahoo.com>
**Sent:** Wednesday, October 6, 2021 12:41 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Irvine Housing Element Inventory sites

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa:

You and I spoke a couple of weeks ago about several properties that are listed as Inventory sites in the Irvine Housing Element that is being updated.

I reviewed the latest HE link that you mentioned, and I see proposed suggested densities for different zoning areas in the city, but I'm wondering how I can determine proposed multifamily density on individual sites? Also, if someone wants to submit a development application now on one of these sites, what would the process and timeline be to obtain approvals?

If we can schedule a time to discuss these questions, I would greatly appreciate it!

**Sarah Berg**
**BERG ENTERPRISES, INC.**
**(805) 490-5937**
**bergenterprises@yahoo.com**

**From:** Karen Martin
**To:** Melissa Chao
**Cc:** Marika Poynter; Hitta Mosesman
**Subject:** Re: Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612
**Date:** Wednesday, October 13, 2021 1:27:02 PM
**Attachments:** image001.png
7 - Affordable Housing Plan Gillette.PDF

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Hi Melissa, attached is the housing plan that is currently part of the Planning Commission staff report.

On Wed, Oct 13, 2021 at 1:12 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Karen,
>
> Please forward the most recent version of the previously submitted housing program for the Gillette sites.
>
> Staff conducted Council briefings to share the initial draft site inventory to obtain feedback.
>
> Center Pointe is in the IBC 5.1 zone, but not in the existing IBC mixed-use residential overlay.
>
> Thanks.
>
> **MELISSA CHAO | SENIOR PLANNER**
> P 949-724-6395 I F 949-724-6440
>
> mchao@cityofirvine.org
>
> ---
>
> **From:** Karen Martin <karen@pacificplanninggroup.com>
> **Sent:** Wednesday, October 13, 2021 12:59 PM
> **To:** Melissa Chao <MChao@cityofirvine.org>
> **Cc:** Marika Poynter <mpoynter@cityofirvine.org>; Hitta Mosesman <hitta.mosesman@weareharris.com>
> **Subject:** Re: Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612
>
> **CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
> Hi Melissa,

Thank you for getting back to me so quickly.

Gillette - thanks for checking into this one - let me know if you need a copy of the previously submitted Housing program. I appreciate the information on the IBC, since this project does fall within this planning area. This project has already been submitted for the General Plan amendment and CUP and is currently in "continuance" it was heard at the Planning Commission in 2017 and continued. The project has 27 extremely low units with an MOA with Families Forward. We do have a way to move forward and would like to discuss it.

Racquet Club - thank you for letting me know. Was there a vote or some official meeting where they eliminated sites?

Center Pointe - I reviewed the IBC map and I don't think these parcels are within the IBC. However, I think the process would be similar to those projects, in that a rezone and general plan amendment would be required. I will relay your information to the property owners and agree that a pre-application would be a great first step.

Thank you again,

Karen

On Wed, Oct 13, 2021 at 12:46 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Karen,
>
> The Housing Element is in draft form and currently under review by the HCD. Based on HCD's feedback, we will make further refinements to the document before adopting/certifying. The unit allocations by income level are hypothetical, but I will discuss the Gillette sites assumptions with Marika and Hitta for no net loss implications and keep you posted.
>
> The Council did not choose to include the Racquet Club along with several other requested sites in the draft sites inventory.
>
> As you know, the IBC maximum unit cap has essentially been reached. Thus, the Centerpointe sites would require "rezoning" to allow residential uses where the proposed density is TBD and will be established through the subsequent General Plan Update (GPU) and associated Zoning Ordinance Amendment (ZOA) work effort after the Housing Element is adopted/certified. This subsequent work effort is anticipated to be completed by October 2024 or possibly sooner.
>
> However, if you do not want to wait for the City's GPU/ZOA, your client could choose to move forward independently

and file all the applicable development applications needed for residential development such as:

- General Plan and Zoning Ordinance Amendment to increase intensity cap and change classifications (if necessary), etc.

https://irvineca.seamlessdocs.com/f/GeneralPlanAmendment

https://irvineca.seamlessdocs.com/f/ZoneChange

- Conditional Use Permit and/or Master Plan (as required by the zoning requirements)

  https://irvineca.seamlessdocs.com/f/ConditionalUsePermit

  https://irvineca.seamlessdocs.com/f/MasterPlan

- Subdivision Map

https://irvineca.seamlessdocs.com/f/TentativeTractParcelMap

- Park Plan for demonstrating minimum park dedication requirements are met

https://irvineca.seamlessdocs.com/f/ParkPlan

- Park Design (can be processed concurrently with CUP and/or MP or deferred)

https://irvineca.seamlessdocs.com/f/ParkDesign

- Affordable Housing Plan for meeting the City's existing 15% inclusionary housing ordinance

- Appropriate CEQA documentation with technical studies

- Note if the site is located in the Irvine Business Complex (Planning Area 36 or "IBC"), it is subject to a Development Intensity Value (DIV) system as further described here:

https://irvineca.seamlessdocs.com/f/IrvineBusinessComplex

Centerpointe may also want to consider submitting a pre-application as a first exploratory step. A pre-application allows relevant staff to research and respond accordingly to any questions your client may have.

- Pre-application information sheet: https://irvineca.seamlessdocs.com/f/PreApplication

- To submit, go to www.irvineready.com (everything is completed on-line). For assistance, contact 949-724-6313.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

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**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Wednesday, October 13, 2021 12:27 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Marika Poynter <mpoynter@cityofirvine.org>
**Subject:** Re: Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612

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Sorry, also should we alert the state HCD that the table does not reflect the numbers correctly or will you do that? Just don't want to mess up the counts.

Thanks,

Karen

On Wed, Oct 13, 2021 at 12:22 PM Karen Martin <karen@pacificplanninggroup.com> wrote:

> Hi Melissa,
>
> How are you doing! Looks like the City is moving along with the Housing Element, great work from an outside perspective! Thank you.
>
> I writing because I reviewed the Site Inventory Appendix and saw an issue with the Gillette sites, perhaps I'm looking at the table incorrectly. But we this
>
> https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=33472

| | | |
|---|---|---|
| 17832 & 17840 Gillette Ave | 92614 | 435-111-30 |
| 17832 & 17840 Gillette Ave | 92614 | 435-111-27 |
| North of Gillette Ave | 92614 | 435-111-28 |
| North of Gillette Ave | 92614 | 435-111-31 |
| 2400 Barranca Pkwy | 92606 | 435-061-12 |

The table seems to indicate that the totality of the number of units 326 is indicated as all low income - this is contrary to the housing program submitted to the city with our application.

Also, I did not see the tennis club in the list - at least based on the 5 Ethel Coplen Way address - can you confirm?

The property owners at Center Pointe are interested in starting an application - any thoughts on this one?

Thank you again!

Karen

(949)874-2795

On Tue, May 11, 2021 at 3:19 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Karen:
>
> The Racquet Club is on the draft opportunity sites list.
>
> As with all the proposed sites, the City Council will make the final determination for whether a site will be included in the final site inventory submitted for State certification.
>
> Something to note that in the past several years, Rancho San Joaquin residents had very strong objections to a development application proposing additional residential uses in their neighborhood.
>
> Thanks,
>
> **MELISSA CHAO | SENIOR PLANNER**
> P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

---

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Tuesday, May 11, 2021 2:49 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re: Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank you for sending the list, previously I had understood that you had also included the following property. Is that still the case?

The third is the Racket Club -5 Ethel Coplen Way **Irvine**, CA 92612, I'm working with Greg Michaels who is partners with the Owner.

On Tue, May 11, 2021 at 1:08 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Karen:
>
> I've added 19742 MacArthur to the opportunity sites list for consideration.
>
> Below is a summary of the properties along with their acreages in the IBC that I have from you:
>
> Centerpointe:

| | | | | |
|---|---|---|---|---|
| 19762 MacArthur Blvd | 107/10-12 | 4 | 445-132-16 | 2.2 |
| 19712 MacArthur Blvd | 107/10-12 | 1 | 445-132-18 | 2.2 |
| 19722 & 19732 MacArthur Blvd | 107/10-12 | 7 | 445-132-19 | 2.68 |
| 19752 MacArthur Blvd | 107/10-12 | 3 | 445-132-09 | 1.05 |

| | | | | |
|---|---|---|---|---|
| 19742 MacArthur Blvd | 107/10-12 | 2 | 445-132-11 | 1.34 |
| 19722 MacArthur Blvd (19732 MacArthur is on same parcel) | 107/10-12 | 7 | 445-132-19 | 2.68 |
| 19782 MacArthur Blvd | 107/10-12 | 6 | 445-132-14 | 2.3 |

Other IBC properties:

| | | | | |
|---|---|---|---|---|
| 17832 & 17840 Gillette Ave | 99-213 | 2 | 435-111-30 | 1.56 |
| 17832 & 17840 Gillette Ave | 99-213 | 2 | 435-111-27 | 1.04 |
| ? | 99-213 | 3 | 435-111-28 | 2.3 |
| ? | 99-213 | 3 | 435-111-31 | 0.27 |

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

---

**From:** Karen Martin <karen@pacificplanninggroup.com>
**Sent:** Tuesday, May 11, 2021 12:10 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Final property as part of Centerpointe redevelopment 19742 MacArthur Blvd., Irvine, California 92612

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Melissa,

Thank you for your efforts, here is the final property in Centerpoint for inclusion in the Housing Element opportunity sites. Could you please confirm that you have received this request? And that is included with the other 7 parcels?

Thank you.

Please include the property in the list of properties

1. The property address is 19742 MacArthur Blvd., Irvine, California 92612

2. Property ownership: Bates Johnson Building, Ltd., a California Limited Partnership

3. Orange County Assessor's Parcel Number: 445-132-11

Please confirm we have been successfully added to the list of properties to be included in the planned amendment, and ask that we be added to any mailing list or other information transmittal relative to the City of Irvine's plans in this regard.

Thanks for your help!

Dale T. Falasco, Trustee

Dale T. Falasco Living Trust, General Partner

Bates Johnson Building, Ltd., Landlord

--

Karen Martin

Pacific Planning Group, Inc

Karen@pacificplanninggroup.com

949.874.2795 mobile

415.367.4286 x101 office

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415.367.4286 x101 office

# GHC Properties, LLC.
# Final Affordable Housing Plan
# 17832 & 17840 Gillette Avenue
# October 25, 2017

***Project Description and Affordability Level***

GHC Properties, LLC ("GHC") is developing a 326-unit residential complex, located at 17832 & 17840 Gillette Avenue on a 5.18 gross acre lot in Planning Area 36, north of the 405-Freeway and north east of the Main Street and MacArthur Boulevard intersection. With the provision of 11% Very Low-Income units, GHC is utilizing a 35 percent density bonus option consistent with Government Code Section 65915. The total of 326 residential units consists of 242 "base" residential units and 84 density bonus residential units. Of the 242 base units, 27 (11%) will be affordable to Very Low-Income households, as defined in California Health and Safe Code Section 50105.b. This will comply with both the provisions of Government Code Section 65915 applicable to a 35% Density Bonus and the City of Irvine ("City") affordable housing ordinance. Twelve (5%) units will be affordable to Moderate Income households, in compliance with the City affordable housing ordinance.

Following is the density bonus computation for the project per Government Code Section 65915:

**Table 1. Density Bonus Computation**

| | |
|---|---|
| Gross Acres | 5.18 |
| Assumed Allowable Density | 62.9 |
| Allowable Units Utilized Before Density Bonus | 242 |
| Density Bonus Utilized (35%) | 84 |
| Total Units | 326 |

GHC intends to operate the apartment project as a rental community and will meet the affordability requirements as outlined in Chapter 2-3 of the City's Zoning Ordinance (Affordable Housing Implementation Procedure). The 27 Very Low-Income units will remain rent-restricted for a minimum of 55 years, per Government Code Section 65915(c)(1). The 12 Moderate Income units will remain rent-restricted for a minimum of 30 years, consistent with the City's Inclusionary Zoning Ordinance.

The City's Zoning Ordinance requires that 5% of the units at the property be designated as affordable to Very Low-Income households, 5% to Low Income households, and 5% to Moderate Income households. Table 2a shown on the next page summarizes the requirements of the project based on the City's Zoning Code:

**Table 2a. Affordable Units Required**

| Income Level | Units Required |
|---|---|
| Very Low | 13 |
| Low | 12 |
| Moderate | 12 |

Section 2-3-4-B.2 of the City's Zoning Ordinance provides that to the extent that Very Low Income units are provided in excess of the 5% requirement, that a 2:1 credit will be attributed toward the achievement of the Low Income goal. Accordingly, the following table illustrates the adjustment of the credits which the property is utilizing to meet the 12 Low Income unit requirement as provided for in the City's Zoning Code:

**Table 2b. Credits Earned and Applied to City Zoning Ordinance Requirements**

| Income Level | Units Required | Units Provided | Credits Earned[1] | Credits Applied[1] |
|---|---|---|---|---|
| Very Low | 13 | 27 | 14 | |
| Low | 12 | 0 | | (6) |
| Moderate | 12 | 12 | | |

Based on the tables above, GHC has met the City of Irvine affordable housing ordinance requirements for Very Low and Low-Income units by providing 27 Very Low-Income units, 14 of those 27 units (5 percent) count 2:1 against the Low-Income requirement. This is in addition to the 12 Moderate Income units provided for a total of 39. While the exact location of each of the affordable units within the project site has yet to be determined, the affordable units will be evenly distributed throughout the complex to avoid an undue concentration of affordable units in any given area. As shown in Table 3 below, the affordable units will be designated in roughly the same proportions as the overall unit mix for the project.

**Table 3. Affordable Units by Floor Plan Type**

| Unit Type | Total Units | Very Low-Income Unit Mix | Low Income Mix | Moderate Income Unit Mix | Total Affordable Units |
|---|---|---|---|---|---|
| Studio | 62 | 5 | 0 | 3 | 8 |
| 1 Bedroom | 148 | 12 | 0 | 5 | 17 |
| 2 Bedroom | 116 | 10 | 0 | 4 | 14 |
| **Total** | **326** | **27** | **0** | **12** | **39** |

The affordable unit shall be rented at an affordable rate calculated in accordance with the provision of Section 50053 of the California Health and Safety Code. Very Low-Income Households are

[1] Pursuant to Section 2-3-4-B.2 of the City's Inclusionary Housing Ordinance, the Low-Income requirement of twelve units is being met through the provision of six additional Very Low-Income units which are credited on a 2:1 basis against the Low Income requirement.

defined as households whose gross income does not exceed 50% of area median income, adjusted for household size and Moderate-Income Households are defined as households whose gross income does not exceed 120% of area median income, adjusted for household size. Table 4 below shows the maximum income levels as determined by the U.S. Department of Housing and Urban Development as adjusted by the California Department of Housing and Community Development ("HCD") for Very Low Income and Moderate-Income Households adjusted for household size.

**Table 4. 2017 Maximum Gross Income for Affordable Households**

| Household Size | Very Low-Income Units Annual Maximum Income | Median Income Level | Moderate Income Units Annual Maximum Income |
|---|---|---|---|
| 1 | $36,550 | $61,600 | $73,900 |
| 2 | $41,750 | $70,400 | $84,500 |
| 3 | $46,950 | $79,200 | $95,050 |
| 4 | $52,150 | $88,000 | $105,600 |
| 5 | $56,350 | $95,050 | $114,050 |

Section 50053 of the Health and Safety Code limits affordable rent to 30% of total income, as calculated in Table 5 on the next page. That section also requires that the rent for a studio unit assumes a one-person household, a one-bedroom unit assumes a two-person household, and a two-bedroom unit assumes a three-person household. The rents calculated are then adjusted by a utility allowance as determined by the County of Orange Housing & Community Services Department. As of October 1, 2016, the reduction for the utility allowance is $84 per month for a studio unit, $103 per month for a one-bedroom unit, and $116 per month for a two-bedroom unit. The utility allowance utilized includes: Gas Cooking, Heat & Water; Basic Electric, Water, Trash/ Sewer which will be paid by the tenant.

**Table 5. Maximum Affordable Rent (2017 Income Limits)**

| Income Level and Unit Type | Gross Monthly Rent | Utility Allowance | Net Monthly Rent |
|---|---|---|---|
| ***Very Low*** | | | |
| Studio | $770.00 | $84.00 | $686.00 |
| 1 Bedroom | $880.00 | $103.00 | $777.00 |
| 2 Bedroom | $990.00 | $116.00 | $874.00 |
| ***Moderate*** | | | |
| Studio | $1,694.00 | $84.00 | $1,610.00 |
| 1 Bedroom | $1,936.00 | $103.00 | $1,833.00 |
| 2 Bedroom | $2,178.00 | $116.00 | $2,062.00 |

GHC Properties, LLC. will enter into a density bonus agreement and a regulatory agreement with the City prior to obtaining the first building permit for a residential unit. These agreements will guarantee that the maximum rents will be calculated using the methods shown in Table 5. The rental rates may be adjusted annually to reflect the annual updates to median income levels, utility allowances, and any changes in applicable regulations and statutes.

***Requested City of Irvine Assistance***

**Financial Assistance**

The applicant does not request any direct financial assistance from the City of Irvine for this project. The applicant will not be utilizing the reduced parking ratios which are allowed by Government Code Section 65915 (p).

**Reduced Park Acreage Dedication Requirement for Affordable Units**

As stated in Irvine Code Section 5-5-1004G, the developer of new units affordable to Income Levels II, III or IV households may be allowed to reduce the dedication standard to a minimum of three and one-half acres per 1,000 population, upon review of the Community Services Commission and approval by the Planning Commission during the approval of the park plan. In addition to this affordable housing plan, a park plan has been submitted which demonstrates the park requirement calculations including the allowable reduction from five acres per 1,000 of population to three and one-half acres per 1,000 of population on the affordable units only.

***Requested Density Bonus Incentives***

As stated in Government Code Section 65915(d)(2), an applicant is entitled to request two incentives or concessions for projects that include at least 10 percent for Very Low-Income households. Although entitled to two concessions, GHC has elected to not use any of their concessions.

## Melissa Chao

**From:** Melissa Chao
**Sent:** Monday, October 18, 2021 11:56 AM
**To:** dougstuman@me.com
**Subject:** Irvine Lanes/Boomers inquiry

Hi Doug,

To follow-up on our call this morning. As you know, the Housing Element is in draft form. Based on HCD's feedback, we will make further refinements to the document before adopting/certifying. The unit allocations by income level are estimates, based on HCD's "realistic" development capacity methodology.

Draft Site Inventory Form – go to Table B on PDF 5 then refer to line items 4 & 5 for assumptions re: Irvine Lanes/Boomers:
https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=33472
Go to Chapter 7 here: https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=33468 to see the site inventory analysis and methodology used.
The City's HEU webpage is www.cityofirivne.org/HEUpdate.

The Boomers sites would require "rezoning" to allow residential uses where the proposed intensity/density is TBD and will be established through the subsequent General Plan Update (GPU) and associated Zoning Ordinance Amendment (ZOA) work effort after the Housing Element is adopted/certified. This subsequent work effort is anticipated to be completed by October 2024 or possibly sooner.

However, if you do not want to wait for the City's GPU/ZOA, your client could choose to move forward independently and file all the applicable development applications needed for residential development such as:

- General Plan and Zoning Ordinance Amendment to increase intensity cap and/or change classifications (if necessary)
  https://irvineca.seamlessdocs.com/f/GeneralPlanAmendment
  https://irvineca.seamlessdocs.com/f/ZoneChange

- Conditional Use Permit and/or Master Plan (as required by the zoning requirements)
  https://irvineca.seamlessdocs.com/f/ConditionalUsePermit
  https://irvineca.seamlessdocs.com/f/MasterPlan

- Subdivision Map
  https://irvineca.seamlessdocs.com/f/TentativeTractParcelMap

- Park Plan for demonstrating minimum park dedication requirements are met
  https://irvineca.seamlessdocs.com/f/ParkPlan

- Park Design (can be processed concurrently with CUP and/or MP or deferred)
  https://irvineca.seamlessdocs.com/f/ParkDesign

- Affordable Housing Plan for meeting the City's 15% inclusionary housing ordinance

- Appropriate CEQA documentation with technical studies

- Note if the site is located in the Irvine Business Complex (Planning Area 36 or "IBC"), it is subject to a Development Intensity Value (DIV) system as further described here: https://irvineca.seamlessdocs.com/f/IrvineBusinessComplex
  (this is not the case with Boomers)

You may want to consider submitting a pre-application, so that various staff can research and respond accordingly to any questions you may have.

- Pre-application information sheet: https://irvineca.seamlessdocs.com/f/PreApplication
- To submit, go to www.irvineready.com (everything is completed on-line). For assistance, contact 949-724-6313.

Please feel free to contact me with any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development
1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

## Melissa Chao

**From:** Mike Wang <mwang@venquest.com>
**Sent:** Thursday, October 28, 2021 5:27 PM
**To:** Melissa Chao
**Cc:** John Wang
**Subject:** Re: Opportunity Site for 18700 MacArthur Blvd - Housing development

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you Melissa! We will contact you if we have any questions.

Michael Wang

> On Oct 28, 2021, at 3:51 PM, Melissa Chao <MChao@cityofirvine.org> wrote:
>
> Hi Mike,
>
> 18700 MacArthur is included in the draft Sites Inventory Form here: https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Flegacy.cityofirvine.org%2Fcivica%2Ffilebank%2Fblobdload.asp%3FBlobID%3D33472&data=04%7C01%7CMChao%40cityofirvine.org%7Ca921475abfc74d20d5c908d99a72f29b%7C47feb367af81451994d7caab1dfa1872%7C0%7C0%7C637710640751756217%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=PhnnmLLkgKsU8MsgzTFN3%2FQrq%2FN4LX0JDqCwJDtLIzI%3D&reserved=0
>
> Go to PDF 3 out of 6. 18700 MacArthur is the 25 line item (white) from the bottom of that page (or about 4/5 down from the top of the page).
>
> Just in case, here's the project webpage: https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.cityofirvine.org%2FHEUpdate&data=04%7C01%7CMChao%40cityofirvine.org%7Ca921475abfc74d20d5c908d99a72f29b%7C47feb367af81451994d7caab1dfa1872%7C0%7C0%7C637710640751756217%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=FC%2BDDsiTfhIR6cE%2B8Ty%2BAfCLXy%2BscFaTXygWIl4kGKs%3D&reserved=0
>
> Please let me know if you have any questions.
>
> Thanks,
>
> MELISSA CHAO | SENIOR PLANNER
> P 949-724-6395 | F 949-724-6440
> mchao@cityofirvine.org
>
> -----Original Message-----
> From: Mike Wang <mwang@venquest.com>

> Sent: Thursday, October 28, 2021 8:13 AM
> To: Melissa Chao <MChao@cityofirvine.org>
> Subject: Opportunity Site for 18700 MacArthur Blvd - Housing development
>
> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
>
> Hi Melissa Chao,
>
> Hope you are doing well. I am a partner at Atrium Hotel - 18700 MacArthur Blvd. Back in April, 2021, I requested to be included in the " opportunity site" list for the City of Irvine new housing development mandate. Can you please check if our property is included in the opportunity site? Thank you very much.
>
> Sincerely,
>
> Michael Wang
> Atrium Hotel
>
> mwang@venquest.com
> 949)374-7797

# 6. Notice of Intent to adopt IS/ND

# NOTICE OF INTENT TO ADOPT AN INITIAL STUDY/NEGATIVE DECLARATION

**NOTICE IS HEREBY GIVEN** that the City of Irvine is considering a recommendation that the project herein identified will have no significant environmental impact in compliance with Section 15070 of the California Environmental Quality Act (CEQA) Guidelines. Copies of the **PROPOSED NEGATIVE DECLARATION (ND)** and **INITIAL STUDY (IS)**, which support the proposed findings, are on file at the City of Irvine.

**State Clearinghouse No.:** (if applicable) N/A

**Project Title and File No.:** City of Irvine General Plan Housing Element 2021–2029 Update
File No. 00832121-PGA

**Project Applicant:** City of Irvine Community Development Department
1 Civic Center Plaza
Irvine, California 92606

**Project Location:** Citywide

**Project Description:** The City of Irvine Community Development Department is currently preparing a 6th Cycle update of its Housing Element for the 2021–2029 planning period pursuant to state requirements. The Housing Element Update includes a comprehensive analysis of the community's current and future housing needs and includes policies and actions to help facilitate the preservation, improvement, and development of housing to accommodate the City's share of the state-mandated Regional Housing Needs Assessment (RHNA) allocation by income levels. Although the City does not build the housing, the City's Housing Element creates a plan and regulatory framework, which provide opportunities for the private sector to do so where market conditions determine when and where housing is built.

**Information Available:** Copies of the **Draft ND** are available for your review at the Community Development Department, 1 Civic Center Plaza, Irvine (City Hall), during normal work hours. In addition, the IS/ND and other project information is accessible online at **www.cityofirvine.org/HEUpdate**.

**Citizen Involvement:** The Draft IS/ND is being circulated for a 30-day public review period as follows: **beginning on November 15, 2021, and ending on December 15, 2021.** All written comments on the Draft IS/ND must be received by the close of business on December 15, 2021, and can be emailed and/or mailed to:

**Melissa Chao, Senior Planner**
**City of Irvine, Community Development Department**
**1 Civic Center Plaza**
**Irvine, CA 92606**
**mchao@cityofirvine.org**

Following the close of the public review period, the Community Development Department will incorporate responses to comments received and prepare a Final IS/ND. The Final IS/ND and the Housing Element Update will be considered by the Planning Commission and City Council at noticed public hearings in the coming months.

**City Contact:** Melissa Chao, Senior Planner
(949) 724-6395; mchao@cityofirvine.org

**Notice Date:** November 12, 2021

| **HEU Draft IS/ND Certified Mailing List 11/15/21** | | | | |
|---|---|---|---|---|
| **Name** | **Association** | **Address** | **City State** | **Zip** |
| Lea U. Choum, Executive Officer | Airport Land Use Commission for Orange County | 3160 Airway Avenue | Costa Mesa, CA | 92626 |
| Rhonda Johnson, President AT&T California | AT&T California | 430 Bush Street, 5th Floor | San Francisco, CA | 94108 |
| Ed Pert | California Department of Fish and Wildlife | 3883 Ruffin Road | San Diego, CA | 92123 |
| Maureen El Harake, Chief, Regional-Community Transit Planning | California Department of Transportation - District 12 | 1750 East 4th Street, Suite 100 | Santa Ana, CA | 92705 |
| Glen Robertson | California Regional Water Quality Control Board - Santa Ana Region | 3737 Main Street, Suite 550 | Riverside, CA | 92501 |
| Lisa Mangat, Director | California State Parks | 1416 9th Street | Sacramento, CA | 95814 |
| Jennifer Le, Economic & Development Services Director | City of Costa Mesa | 77 Fair Drive | Costa Mesa, CA | 92626 |
| Marc Wiener, Director of Community Development | City of Laguna Beach | 505 Forest Avenue | Laguna Beach, CA | 92651 |
| David Chantarangsu, Community Development Director | City of Laguna Hills | 24035 El Toro Road | Laguna Hills, CA | 92653 |
| Rebecca Pennington, Management Analyst | City of Laguna Woods | 24264 El Toro Road | Laguna Woods, CA | 92637 |
| Gayle Ackerman, Director of Community Development | City of Lake Forest | 25550 Commerce Center Drive, Suite 100 | Lake Forest, CA | 92630 |
| James Campbell, Deputy Community Development Director | City of Newport Beach | 100 Civic Center Drive | Newport Beach, CA | 92660 |
| Minh Thai, Executive Director of Planning and Building | City of Santa Ana | 20 Civic Center Plaza, Ross Annex | Santa Ana, CA | 92702 |
| Justina Willkom, Director of Community Development | City of Tustin | 300 Centennial Way | Tustin, CA | 92780 |
| Orange County Clerk/Recorder | County of Orange | PO Box 238 | Santa Ana, CA | 92702 |

| | | | | |
|---|---|---|---|---|
| Richard Vuong, Division Manager, Planning | County of Orange Planning & Development Services | PO Box 4048 | Santa Ana, CA | 92702 |
| Orange County, CA Environmental Review | Cox Communications | 6205-B Peachtree Dunwoody Road NE | Atlanta, GA | 30328 |
| Francesca Negri, Chief Deputy Director | Department of Toxic Substances Control | 1001 Street | Sacarmento, CA | 95814 |
| Andrew Salas, Chairman | Gabrieleno Band of Mission Indians - Kizh Nation | PO Box 393 | Covina, CA | 91723 |
| Sam Dunlap | Gabrielino Tongva Nation | PO Box 86908 | Los Angeles, CA | 90086 |
| Anthony Morales | Gabrielino/Tongva San Gabriel Band of Mission Indians | PO Box 693 | San Gabriel, CA | 91778 |
| Secretary of Housing and Urban Development | HUD (Federal Office) | 451 7th Street S.W. | Washington, DC | 20410 |
| Wayne Sauseda, Deputy Regional Administrator | HUD (Office of the Regional Administrator) | 1 Sansome Street, Suite 1200 | San Francisco, CA | 94104 |
| Ray Brewer, Field Office Director | HUD (Santa Ana Federal Building - Field Office) | 34 Civic Center Plaza | Santa Ana, CA | 92701 |
| Jeff Arbour, Environmental Services Manager | OC Waste & Recycling | 601 N. Ross Street, Suite 500 | Santa Ana, CA | 92701 |
| Kelvin Okino, Executive Director of Facilities Planning & Construction | Irvine Unified School District | 5050 Barranca Parkway | Irvine, CA | 92604 |
| Fiona Sanchez | Irvine Water Ranch District | 15600 Sand Canyon Avenue | Irvine, CA | 92618 |
| Barry Rondinella, Executive Director | John Wayne Airport | Eddie Martin Administration Building, 3159 Airway Avenue | Costa Mesa, CA | 92626 |
| Sonia Johnston | Juaneno Band of Mission Indians | PO Box 25628 | Santa Ana, CA | 92799 |
| Anthony Rivera | Juaneno Band of Mission Indians - Acjachemen Nation | 31411-A La Matanza Street | San Juan Capistrano, CA | 92675 |
| David Belardes | Juaneno Band of Mission Indians - Acjachemen Nation | 32161 Avenida Los Amigos | San Juan Capistrano, CA | 92675 |
| Joyce Stanfield Perry, Tribal Manager | Juaneno Band of Mission Indians - Acjachemen Nation | 4955 Paseo Segovia | Irvine, CA | 92603 |

| | | | | |
|---|---|---|---|---|
| Elisa Konove, Deputy Chief Executive Officer | Metrolink | 900 Wilshire, Suite 1500 | Los Angeles, CA | 90012 |
| Gayle Totton | Native American Heritage Commission | 1550 Harbor Blvd., Suite 100 | West Sacramento, CA | 95691 |
| Marilee Freville, Management Assistant | Orange County Fire Authority | 1 Fire Authority Road | Irvine, CA | 92602 |
| Jess Carbajal, Director | Orange County Flood Control District | 300 North Flower, 7th floor | Santa Ana, CA | 92703 |
| Carolyn Emery, Executive Officer | Orange County Local Agency Formation Commission | 2677 N. Main Street, Suite 1050 | Santa Ana, CA | 92705 |
| Jacky Cordero, Parks Division Manager | Orange County Parks | 13042 Old Myford Road | Irvine CA | 92602 |
| Lori Donchak, Chair | Orange County Transportation Authority - Environmental Review | 550 S Main Street | Orange, CA | 92868 |
| Rosa Munoz, Utilities Engineer | Public Utilities Commission | 320 West 4th Street, Suite 500 | Los Angeles, CA | 90013 |
| Connie Cavanaugh, Asst Superintendent | Saddleback Valley Unified School District | 25631 Peter A. Hartman Way | Mission Viejo | 92691 |
| Joseph Ontiveros, Cultural Resource Director | Soboba Band of Luiseno Indians | PO Box 487 | San Jacinto, CA | 92581 |
| Lijin Sun, Program Supervisor, CEQA IGR | South Coast Air Quality Management District | 21865 Copley Drive | Diamond Bar, CA | 91765 |
| Hasan Ikharta, Executive Director | Southern California Association of Governments | 900 Wilshire Blvd., Suite 1700 | Los Angeles, CA | 90017 |
| Christopher Thompson, Local Public Affairs | Southern California Edison Company | 1325 S. Grand Avenue | Santa Ana, CA | 92705 |
| Third Party Environmental Review | Southern California Edison Company | 2244 Walnut Grove Avenue, GO-1, Quad 2C | Rosemead, CA | 91770 |
| Ben Gordon, Technical Operations Management | Southern California Gas Company | 1919 State College Boulevard | Anaheim, CA | 92806 |
| Ron Mathieu, Senior Public Projects Specialist | Southern California Regional Rail Authority (SCRRA) | 1 Gateway Plaza, Floor 12 | Los Angeles, CA | 90012 |
| Scott Morgan, State Clearinghouse Director | State Clearinghouse - Office of Planning and Research | PO Box 3044 | Sacramento, CA | 95812 |

| | | | | |
|---|---|---|---|---|
| Eric Gillies, Acting Chief - Environmental Planning & Management | State Lands Commission | 100 Howe Avenue, Suite 100 South | Sacramento, CA | 95825 |
| Virginia Gomez | Transportation Corridor Agencies | 125 Pacifica, Suite 100 | Irvine, CA | 92618 |
| Aaron Barta | U.S. Army Corps of Engineers - LA District | 915 Wilshire Boulevard, Suite 980 | Los Angeles, CA | 90017 |
| Jim Bartel, Field Supervisor | U.S. Fish and Wildlife Service | 2177 Salk Avenue, Suite 250 | Carlsbad, CA | 92008 |
| Richard Demerjian, Assistant Vice Chancellor | UCI - Environmental Planning and Sustainability | 380 University Tower | Irvine, CA | 92697 |
| Richard Drury | Lozeau Drury LLP on behalf of Supporters Alliance for Environmental Responsibility | 1939 Harrison Street, Suite 150 | Oakland, CA | 94612 |
| Komalpreet Toor | Lozeau Drury LLP on behalf of Supporters Alliance for Environmental Responsibility | 1939 Harrison Street, Suite 150 | Oakland, CA | 94612 |
| Stacey Oborne | Lozeau Drury LLP on behalf of Supporters Alliance for Environmental Responsibility | 1939 Harrison Street, Suite 150 | Oakland, CA | 94612 |
| Jeremy Cogan, Director of Facilties and Planning | Santa Ana Unified School District | 1601 E Chestnut Ave | Santa Ana, CA | 92701 |
| Jose Contreras, Manager of Facilities & Planning | Tustin Unified School District | 300 South C St. | Tustin, CA | **92780** |
| John Bercaw | | 1715 Bayadere Terrace | Corona del Mar, CA | 92625 |

# AFFIDAVIT OF POSTING
NOTICE OF INTENT TO ADOPT AN INITIAL STUDY/
NEGATIVE DECLARATION

**STATE OF CALIFORNIA )**
**COUNTY OF ORANGE )**
**CITY OF IRVINE )**

I, Melissa Chao, Senior Planner with the City of Irvine, HEREBY DO CERTIFY that on the **12th of November, 2021**, I caused to be posted the foregoing true and correct copy of the Notice of Intent to Adopt an Initial Study/Negative Declaration for the General Plan 6th Cycle Housing Element Update (00832121-PGA) for the City of Irvine in the following public places in the City:

1. Bulletin Board in Walnut Village Shopping Center
   - Culver Drive and Walnut Avenue

2. Bulletin Board in University Park Shopping Center
   - Culver Drive and Michelson Drive

3. Bulletin Board in Northwood Shopping Center
   - Yale Avenue and Irvine Boulevard

4. Bulletin Board and Public Safety Department Lobby at City Hall
   - Harvard Avenue and Alton Parkway

IN WITNESS WHEREOF, I have hereunto set my hand this **12th day of November, 2021.**

CITY OF IRVINE

Posted by: Melissa Chao

Date posted: **November 12, 2021**

## Melissa Chao

**From:** City of Irvine <CityofIrvine@public.govdelivery.com>
**Sent:** Monday, November 15, 2021 9:02 AM
**To:** Melissa Chao
**Subject:** Notice of Intent to Adopt Initial Study for 6th Cycle Housing Element Update




**Notice of Intent to Adopt an Initial Study/Negative Declaration for Irvine's Proposed 6th Cycle Housing Element Update**

Pursuant to the California Environmental Quality Act (CEQA), a Draft Initial Study/Negative Declaration (IS/ND) was prepared for the proposed 6th Cycle Housing Element Update and is being circulated for a 30-day public review period as follows: November 15, 2021 and ends on December 15, 2021. All written comments on the Draft IS/ND must be received by the close of business December 15, 2021, and can be emailed and/or mailed to:

Melissa Chao, Senior Planner
City of Irvine, Community Development Department
1 Civic Center Plaza
Irvine, CA 92606
*mchao@cityofirvine.org*

Please refer to the attached Notice of Intent to Adopt an Initial Study/Negative Declaration for additional details.

Following the close of the public review period, the Community Development Department will incorporate responses to comments received and prepare a Final IS/ND. The Final IS/ND and the Housing Element Update will be considered by the Planning Commission and City Council at noticed public hearings in the coming months (anticipated in December 2021 and January 2022).

For more information about the Housing Element Update in the City of Irvine, please visit *cityofirvine.org/HEUpdate*.

- HEU IS-ND NOI final 11.11.21_CLEAN.pdf

*Since its incorporation in 1971, Irvine has become a nationally recognized city, with a population of 307,670 that spans 66 square miles and is recognized as one of America's safest and most successful master-planned urban communities. Top-rated educational institutions, an enterprising business atmosphere, sound environmental stewardship, and respect for diversity all contribute to Irvine's enviable quality of life. This family-friendly city features more than 16,000 acres of parks, sports fields and dedicated open space and is the home of Great Park. For more information, please visit cityofirvine.org.*

# # #

برای کسب اطلاعات به‌زبان فارسی، لطفاً با شمارهٔ 949-724-6395 تماس بگیرید.
한국어로된 정보를 원하시면 949-724-6395 로 연락 바랍니다 .
如需中文資訊，請致電 949-724-6395。
有关中文信息，请致电 949-724-6395。
日本語で情報を共有する場合、電話番号949-724-6395までご連絡ください
Para obtener información en español, llame al 949-724-6395.
Để biết thêm thông tin bằng tiếng Việt, xin vui lòng gọi đến số 949-724-6395.
للحصول على المعلومات باللغة العربية، اتصل بالرقم 949-724-6395.




City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
949-724-6000
cityofirvine.org




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This email was sent to mchao@cityofirvine.org using GovDelivery Communications Cloud on behalf of: City of Irvine · 1 Civic Center Plaza · Irvine, California 92623-9575

GOVDELIVERY

| | |
|---|---|
| **From:** | Esther Daigneault |
| **To:** | Melissa Chao |
| **Subject:** | FW: [External]SCH Number 2021110203 |
| **Date:** | Tuesday, November 16, 2021 11:27:18 AM |
| **Attachments:** | image001.png |

**CAUTION:** EXTERNAL EMAIL

Here you go!

Esther

Esther Daigneault | Environmental Analyst, Environmental Planning & Compliance

Harris & Associates

cell: 301-379-3546

www.WeAreHarris.com

**From:** Meng Heu <Meng.Heu@OPR.CA.GOV>
**Sent:** Monday, November 15, 2021 8:30 AM
**To:** Esther Daigneault <esther.daigneault@weareharris.com>
**Subject:** [External]SCH Number 2021110203

Your project is published and is available for review. Please note the review 'start' and 'end' period.

You can use the "navigation" and select "published document" to view your project and any attachments on CEQAnet.

Closing Letters: The State Clearinghouse (SCH) would like to inform you that at this time, our office has transitioned from providing close of review period acknowledgement on your CEQA environmental document. During the phase of not receiving notice on the close of review period, comments submitted by state agencies at the close of review period (and after) are available on CEQAnet.

Please visit: https://ceqanet.opr.ca.gov/Search/Advanced

- Type in the SCH# of your project
  - If filtering by "Lead Agency"
    - Select the correct project
  - Only State Agency comments will be available in the "attachments" section. Note: Refer to the bold and highlighted agencies.

*Meng Heu*
Office of Planning and Research (OPR)
State Clearing House

To view your submission, use the following link.
https://ceqasubmit.opr.ca.gov/Document/Index/274131/1

## Public Engagement

## Appendix A-R: Airport Land Use Commission Review

## Table of Contents

1. ALUC Meeting Agenda - *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*
2. Staff Report - *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*
3. Presentation - *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*
4. ALUC Letter

1. Meeting Agenda
2. Staff Report
3. Presentation

# 4. ALUC Letter

AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY
3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

April 30, 2021

Pete Carmichael, Community Development Director
City of Irvine
1 Civic Center Plaza
Irvine, CA 92623-9575

Dear Mr. Carmichael:

We are aware that cities in Orange County are in the process of updating their respective Housing Elements in accordance with state law. Please be aware that portions of your city are within the Planning Area for John Wayne Airport, as shown on the attached exhibit. Pursuant to California Public Utilities Code Section 21676(b):

> "Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission."

As such, please incorporate ALUC review into your schedule for the Housing Element Update process. We request that items be referred to ALUC after consideration/approval by your city's Planning Commission. The ALUC meets the third Thursday of each month at 4:00 p.m. In the Airport Commission meeting room at 3160 Airway Avenue, Costa Mesa. For additional submittal information please see Section 4.7 of the AELUP which can be found here:

https://www.ocair.com/about/administration/airport-governance/commissions/airport-land-use-commission/.

If you have any questions, feel free to contact me at lchoum@ocair.com, or Julie Fitch at jfitch@ocair.com. You may also contact us by phone at (949) 252-5170.

Thank you.

Lea U. Choum

Lea U. Choum
Executive Officer

Attachment: JWA Planning Area

# Public Engagement

# Appendix A-S: 6th Cycle Housing Element Adoption Hearings

## Table of Contents


1. Department of Housing and Community Development (HCD) Preliminary Findings Letter for Draft Housing Element Update (version dated August 19, 2021) – October 18, 2021

2. Email Notification of Revised Draft HEU Re-release – November 19, 2021

3. Draft Housing Element Correspondence - *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*

4. Draft IS/ND Public Comment Letters

5. Planning Commission – December 2, 2021
   a. Meeting Agenda
   b. Staff Report
   c. Presentation
   d. Comment Summary and Analysis
   e. Public Notice
   f. Affidavit of Publication

6. Planning Commission – December 16, 2021
   a. Meeting Agenda
   b. Staff Report
   c. Presentation
   d. Comment Summary and Analysis

7. City Council – January 11, 2022 – *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*
    a. Meeting Agenda
    b. Staff Report
    c. Presentation
    d. Public Notice
    e. Affidavit of Publication

8. City Council – January 25, 2022 – TBD IF NEEDED. *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*

    a. Meeting Agenda
    b. Staff Report
    c. Presentation

# 1. HCD Preliminary Findings Letter for Draft HEU (version dated August 19, 2021)

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

**DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT**
**DIVISION OF HOUSING POLICY DEVELOPMENT**
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

October 18, 2021

Pete Carmichael, Director
Community Development Department
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

Dear Pete Carmichael:

**RE: City of Irvine's 6th Cycle (2021-2029) Draft Housing Element**

Thank you for submitting the City of Irvine's (City) draft housing element received for review on August 19, 2021. Pursuant to Government Code section 65585, subdivision (b), the California Department of Housing and Community Development (HCD) is reporting the results of its review. Our review was facilitated by a telephone conversation on September 27, 2021, with you and your staff, Marika Poynter, Melissa Chao, Justin Equina, Tim Gehrich, Lisa Varon, Kerwin Lau, and consultants Hitta Mosesman and Jordan Perez. In addition, HCD considered comments from YIMBY Law and the Kennedy Commission pursuant to Government Code section 65585, subdivision (c).

The draft element addresses many statutory requirements; however, revisions will be necessary to comply with State Housing Element Law (Article 10.6 of the Gov. Code). The enclosed Appendix describes the revisions needed to comply with State Housing Element Law.

The City's statutory deadline to adopt a housing element is October 15, 2021. For your information, pursuant to Assembly Bill 1398 (Chapter 358, Statutes of 2021), if a local government fails to adopt a compliant housing element within 120 days of this statutory deadline, then any rezoning to accommodate the regional housing needs allocation (RHNA), including for lower-income households, shall be completed no later than one year from the statutory deadline. Otherwise, the local government's housing element will no longer comply with State Housing Element Law, and HCD may revoke its finding of substantial compliance pursuant to Government Code section 65585, subdivision (i).

Pursuant to Government Code section 65583.3, subdivision (b), the City must utilize standards, forms, and definitions adopted by HCD when preparing the sites inventory. Please see HCD's housing element webpage at https://www.hcd.ca.gov/community-development/housing-element/index.shtml for a copy of the form and instructions. The City can reach out to HCD at sitesinventory@hcd.ca.gov for technical assistance.

Upon adoption of the housing element, the City must submit an electronic version of the sites inventory with its adopted housing element to sitesinventory@hcd.ca.gov.

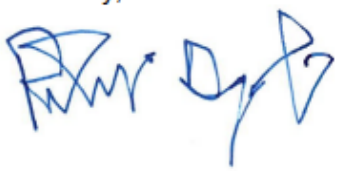
Public participation in the development, adoption and implementation of the housing element is essential to effective housing planning. Throughout the housing element process, the City should continue to engage the community, including organizations that represent lower-income and special needs households, by making information regularly available and considering and incorporating comments where appropriate. Specifically, the City must proactively make future revisions available to the public, including any commenters, prior to submitting any revisions to HCD and diligently consider and address comments, including making revisions to the document where appropriate. HCD's future review will consider the extent to which the revised element documents how the City solicited, considered, and addressed public comments in the element.

For your information, some general plan element updates are triggered by housing element adoption. HCD reminds the City to consider timing provisions and welcomes the opportunity to provide assistance. For information, please see the Technical Advisories issued by the Governor's Office of Planning and Research at: http://opr.ca.gov/docs/OPR_Appendix_C_final.pdf and http://opr.ca.gov/docs/Final_6.26.15.pdf.

Several federal, state, and regional funding programs consider housing element compliance as an eligibility or ranking criteria. For example, the CalTrans Senate Bill (SB) 1 Sustainable Communities grant; the Strategic Growth Council and HCD's Affordable Housing and Sustainable Communities programs; and HCD's Permanent Local Housing Allocation consider housing element compliance and/or annual reporting requirements pursuant to Government Code section 65400. With a compliant housing element, the City will meet housing element requirements for these and other funding sources.

HCD is committed to assisting the City of Irvine in addressing all statutory requirements of housing element law and appreciates the efforts of your team in the preparation of your draft element. If you have any questions or need additional technical assistance, please contact Chelsea Lee at Chelsea.Lee@hcd.ca.gov.

Sincerely,



Paul McDougall

Enclosure

**APPENDIX**
**CITY OF IRVINE**

The following changes are necessary to bring the City's housing element into compliance with Article 10.6 of the Government Code. Accompanying each recommended change, we cite the supporting section of the Government Code.

Housing element technical assistance information is available on HCD's website at http://www.hcd.ca.gov/community-development/housing-element/housing-element-memos.shtml. Among other resources, the housing element section contains HCD's latest technical assistance tool, Building Blocks for Effective Housing Elements (Building Blocks), available at http://www.hcd.ca.gov/community-development/building-blocks/index.shtml and includes the Government Code addressing State Housing Element Law and other resources.

## A. Review and Revision

*Review the previous element to evaluate the appropriateness, effectiveness, and progress in implementation, and reflect the results of this review in the revised element. (Gov. Code, § 65588 (a) and (b).)*

The review requirement is one of the most important features of the element update. The review of past programs should analyze the City's accomplishments over the previous planning period. This information provides the basis for developing a more effective housing program.

A thorough program-by-program review is necessary to evaluate City's performance in addressing housing goals. As part of the evaluation of programs in the past cycle (Table 3-1), the element should provide additional information that expands upon the effectiveness of program activities for Programs 1 (Housing Rehabilitation), 2 (Preservation of At-Risk Units), and 8 (Universal Design).

## B. Housing Needs, Resources, and Constraints

1. *Include an analysis and documentation of household characteristics, including level of payment compared to ability to pay, housing characteristics, including overcrowding, and housing stock condition. (Gov. Code, § 65583, subd. (a)(2).)*

   Overpayment: Although the element indicates the total number of lower-income households who are cost burdened, it must quantify and analyze these households by tenure (renter and owner).

   Extremely Low-Income Households (ELI): The element indicates the total number of existing ELI households, but it must also quantify and analyze these households by tenure (renter and owner).

   Housing Conditions: The element identifies the age of the housing stock on page 2-15. However, it must also include analysis of the condition of the existing housing stock and

estimate the number of units in need of rehabilitation and replacement. For example, the analysis could include estimates from a recent windshield survey or sampling, estimates from the code enforcement agency, or information from knowledgeable builders/developers, including non-profit housing developers or organizations.

For additional information, see the *Building Blocks* at http://www.hcd.ca.gov/community-development/building-blocks/housing-needs/housing-stock-characteristics.shtml.

Housing Costs: The element identifies median home sales prices for existing homes on pages 2-17 to 2-18, but it should also include analysis on rental prices in the City.

2. *Affirmatively further[ing] fair housing in accordance with Chapter 15 (commencing with Section 8899.50) of Division 1 of Title 2…shall include an assessment of fair housing in the jurisdiction. (Gov. Code, § 65583, subd. (c)(10)(A).)*

   The element includes information in Appendix B on affirmatively furthering fair housing (AFFH). However, additional information is required as follows:

   Public Outreach: The element provides a discussion of community outreach conducted on page B-2 but generally does not address AFFH requirements. While AFFH outreach can be conducted with the other portions of the housing element, it must also be specific to AFFH. For example, the outreach could specifically target fair housing organizations or neighborhoods with relatively concentrated poverty for input related to housing and community development needs and access to opportunities such as education and transportation.

   Fair Housing Enforcement and Outreach: The element notes the City currently contracts with the Fair Housing Foundation (FHF) for fair housing education and direct client services and provides data on reported housing discrimination cases. However, the element does not clearly describe whether this information is local or regional data for the County of Orange. The analysis should be revised to include most recent local data and analyze the data for any patterns or trends by community area or census tract and include additional local knowledge, relevant factors, and a conclusion of summary of issues. Additionally, the element must also describe compliance with existing fair housing laws and regulations.

   Local Data and Knowledge and Other Relevant Factors: The element contains some analysis that addresses this requirement; however, additional information is needed. The City's analysis for each of these areas must also be informed by regional and local data and knowledge from stakeholders within the City. In several areas, either local or regional knowledge for the following areas is missing or insufficient: Fair Housing Enforcement and Capacity, Segregation and Integration, Racially/Ethnically Concentrated Areas of Poverty (R/ECAPs), Access to Opportunity, and Disproportionate Housing Needs and Displacement Risk. The analysis could incorporate local and regional knowledge through surveys, interviews, etc. from local non-profit organizations, advocacy groups and even the City. In addition, the element must include other relevant factors that contribute to fair housing issues in the jurisdiction. For instance, the element

can analyze historical governmental and nongovernmental land use, zoning and investment practices (e.g., infrastructure) or other information and demographic trends.

Sites Inventory: The element includes some general discussion and conclusions on pages B-22 to B-24 that indicates sites for lower-income households are concentrated in areas of the City with moderate to high resource opportunity and that no concentration of sites for lower-income households exist. However, the analysis must also include discussion of all regional housing need allocation (RHNA) categories, including above moderate-income households in relation to areas with a higher proportion of white residents and higher median incomes. In addition, the element should include analysis to support these conclusions, including the number of units per site by income group for each of the AFFH categories relative to the impacts on patterns of disproportionate housing needs (e.g., overpayment, overcrowding, displacement).

Contributing Factors: The element identifies several contributing factors to fair housing issues in the City but should also prioritize them (e.g., low, medium, high).

Goals, Priorities, Metrics, and Milestones: The element addresses some of these requirements but must be revised to add or modify goals and actions based on the outcomes of a complete analysis. Goals and actions must specifically respond to the analysis and to the identified and prioritized contributing factors to fair housing issues and must be significant and meaningful enough to overcome identified patterns and trends. Actions must have metrics and milestones as appropriate and must address housing mobility enhancement, new housing choices and affordability in high opportunity areas, place-based strategies for community preservation and revitalization and displacement protection.

3. *An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites. (Gov. Code, § 65583, subd. (a)(3).)*

   The City has a (RHNA) of 23,610 housing units, of which 10,631 are for lower-income households. To address this need, the element relies on vacant residential sites, mixed-use sites, and ADUs. To demonstrate the adequacy of these sites and strategies to accommodate the City's RHNA, the element must include complete analyses:

   RHNA Progress: The element identifies one pending high-density residential project in Planning Area 40 with 175 permitted units indicating they are affordable to lower-income households, but it must also demonstrate how the units are affordable. The element must include an analysis to demonstrate the affordability of these units based on actual or projected sales prices, rent levels, or other mechanisms establishing affordability in the planning period. (Gov. Code, § *65583.1, subd. (d).)*

University Housing: The element credits 4,406 of existing faculty and graduate school housing on the University of California, Irvine campus. Please be aware, pursuant to Government Code 65583.1, subdivision (d), the element can only credit units constructed since the beginning of the projection period (June 30, 2021). HCD researched the issue related to how other university housing was counted in previous planning cycles and reviewed housing elements (4th cycle and 5th cycle housing elements) for the cities and counties of Santa Cruz and Santa Barbara referenced on page 7-14. These elements did not include crediting existing units from the University of California, Santa Cruz and University of California, Santa Barbara. In addition, HCD consulted with the California Department of Finance (DOF). DOF creates the population projections used in the RHNA, which includes both households and group quarters and verified that these units would have been accounted for in the number of existing occupied units used in in the development of the RHNA for the Southern California Association of Governments (SCAG).

However, the City can credit family and faculty housing that is proposed to be developed with in the planning period. Sites controlled by exempt entities can be credited towards the RHNA when documentation is provided that demonstrates the likelihood that the planned housing will be developed within the current RHNA/housing element cycle. Sites located on land controlled by exempt entities are analyzed differently because the jurisdiction may not have control over the planning, permitting, and decision-making processes of land owned by another public entity. While adequate documentation can vary due to differences in planning processes on land controlled by exempt entities, the following examples of documentation demonstrate the likelihood of housing being developed on sites outside the control of a local government:

- Agreement with the entity controlling the land that grants the jurisdiction authority regarding approving, permitting, certifying occupancy, and/or reporting new units to DOF.
- Documentation from the entity controlling the land that demonstrates planned housing has been approved to be built within the current RHNA cycle.
- Data pertaining to the timing of the project construction and unit affordability by household income category.

Please note, while none of the projects identified in the element appear to be exclusively college and university student housing, this type of housing may be considered noninstitutional group quarters and not a housing unit for purposes of meeting the RHNA. Residents typically enter "by the bed" leases (i.e., single-liability leases). Another distinguishing factor is that the unit is not available for rent to non-students. For further information on whether university housing meets the definition of a housing unit, please contact DOF at (916) 323-4086.

Adequate Site Alternative: Table 7-2 indicates the City is crediting the preservation of 823 units affordable to lower income households towards its RHNA. To credit the preservation of these units toward the City's housing need, the element must demonstrate compliance with all the statutory requirements. (Gov. Code, § 65583.1.) For example, the element must demonstrate the units were determined that the affordability will be maintained for at least 55 years, are located within an assisted housing

development, and will be affordable to very low and low-income households at the time the units were identified for preservation, among other things

For additional information and an Alternative Adequate Sites Checklist, see the Building Blocks at https://www.hcd.ca.gov/community-development/building-blocks/site-inventory-analysis/adequate-sites-alternatives/docs/adequate_site_alt_checklist.pdf.

City-Owned Sites: The sites inventory lists certain sites as owned by the City. The housing element must include a description of whether there are any plans and schedule to sell or lease the property during the planning period and how the jurisdiction will comply with the Surplus Land Act Article 8 (commencing with Section 54220) of Chapter 5 of Part 1 of Division 2 of Title 5.

Suitability of Nonvacant Sites: The element must also analyze the extent to which existing uses may impede additional residential development and include an analysis of any existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development. (Gov. Code, § 65583.2, subd. (g)(1).) Specifically, the site inventory contains several sites described as apartments in Tables A and B of Appendix C. Sites with existing uses should include additional analysis on the factors that led to selecting these sites for inclusion in the inventory. Trends related to experience with converting existing uses to higher density residential development or the current market demand should relate to the sites listed in the inventory.

In addition, specific analysis and actions are necessary if the housing element relies upon nonvacant sites to accommodate more than 50 percent of the RHNA for lower-income households. For your information, the housing element must demonstrate existing uses are not an impediment to additional residential development and will likely discontinue in the planning period. (Gov. Code, § 65583.2, subd. (g)(2).) Absent findings (e.g., adoption resolution) based on substantial evidence, the existing uses will be presumed to impede additional residential development and will not be utilized toward demonstrating adequate sites to accommodate the RHNA.

Realistic Capacity: The element indicates on page 7-8 that realistic capacity assumptions were determined to be 70% for vacant and nonvacant sites. However, it must demonstrate how the likelihood of nonresidential development (e.g., commercial) was considered for mixed use and nonresidential zones in the City was factored into realistic capacity assumptions. The estimate must also account for land use controls such as allowing 100 percent nonresidential uses. To demonstrate the likelihood for residential development in nonresidential zones, the element could describe any performance standards mandating a specified portion of residential and any factors increasing the potential for residential development such as incentives for residential use, and residential development trends in the same nonresidential zoning districts.

Large Sites: The element identifies six publicly owned sites that are large parcels greater than ten acres that will be used to accommodate the City's housing need for lower-income households (p. 7-15). Sites larger than 10 acres in size are deemed inadequate

to accommodate housing for lower-income housing unless it is demonstrated that sites of equivalent size were successfully developed during the prior planning period for an equivalent number of lower-income housing units as projected for the site or unless the housing element describes other evidence to HCD that the site is adequate to accommodate lower-income housing. (Gov. Code, § 65583.2, subd. (c)(2)(A).) For example, a site with a proposed and approved housing development that contains units affordable to lower income households would be an appropriate site to accommodate housing for lower-income households. (Gov. Code, § 65583.2, subd. (c)(2)(C).)

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Suitability and Availability of Infrastructure: The element provides a general overview of water and sewer infrastructure on pages 7-20 to 7-21, but it must also clarify sufficient dry utilities capacity to meet the RHNA.

Environmental Constraints: While the element generally describes several environmental conditions within the City (pp. 5-4 to 5-7), it must also describe any known environmental constraints or other conditions on identified sites that could impact housing development in the planning period. For example, the element should specifically address potential development constraints related to marshland on the Irvine Ranch Water District sites. For additional information and sample analysis, see the Building Blocks at http://www.hcd.ca.gov/communitydevelopment/building-blocks/site-inventory-analysis/analysis-of-sites-andzoning.shtml#environmental.

Accessory Dwelling Units (ADUs): The element projects 80 ADUs over the planning period or approximately 10 ADUs per year over the eight-year planning period. According to HCD records, one unit was permitted in 2018, 0 were permitted in 2019, and 0 were permitted in 2020. These trends do not support an assumption of 10 ADUs per year. To support assumptions for ADUs in the planning period, the element should reconcile trends with HCD records, adjust assumptions as appropriate and include additional information such as more recent permitted units and inquiries, resources and incentives, other relevant factors and modify policies and programs as appropriate, including monitoring and addressing the production and affordability of ADUs.

Water and Sewer Priority: For your information, water and sewer service providers must establish specific procedures to grant priority water and sewer service to developments with units affordable to lower-income households. (Gov. Code, § 65589.7.) Local governments are required to immediately deliver the housing element to water and sewer service providers. HCD recommends including a cover memo describing the City's housing element, including the City's housing needs and regional housing need. For additional information and sample cover memo, see the *Building Blocks* at http://www.hcd.ca.gov/community-development/building-blocks/other-requirements/priority-for-water-sewer.shtml.

Zoning for a Variety of Housing Types: The element must demonstrate zoning to encourage and facilitate a variety of housing types, as follows:

*Employee Housing:* The element must demonstrate zoning is consistent with the Employee Housing Act (Health and Safety Code, § 17000 et seq.), specifically, sections 17021.5 and 17021.6 or add or modify programs as appropriate. Section 17021.5 requires employee housing for six or fewer employees to be treated as a single-family structure and permitted in the same manner as other dwellings of the same type in the same zone. Section 17021.6 requires employee housing consisting of no more than 12 units or 36 beds to be permitted in the same manner as other agricultural uses in the same zone. For additional information and sample analysis, see the *Building Blocks* at http://www.hcd.ca.gov/community-development/building-blocks/housing-needs/farmworkers.shtml.

*Emergency Shelters:* The element provides information on zoning for emergency shelters but must be revised to ensure parking standards are consistent with AB 139, which only allows parking for staff. The element notes on page 5-43 that current parking requirements for emergency shelters in the City are one space per four beds, plus one pace per employee which is inconsistent with state law.

*Transitional and Supportive Housing*: The element provides some information on pages 5-44 and 5-45 regarding transitional and supportive housing but must demonstrate these housing types are permitted as a residential use in all zones allowing residential uses and only subject to those restrictions that apply to other residential dwellings of the same type in the same zone in compliance with Government Code section 65583, subdivision (c)(3).

*Accessory Dwelling Units (ADUs):* Table 5-11 indicates ADUs are prohibited in the IBC Residential and Multi-Use Zones. However, ADUs must be ministerially approved in all residential and mixed-use zones. In addition, page 5-18 indicates that ADUs with one or more bedrooms requires an additional parking space. These constraints must be addressed, and a program(s) must be included to update the City's Zoning Ordinance to comply with State ADU Law. In addition, per conversations with staff, it is HCD's understanding that the City is defaulting to permit and processing procedures for approval of ADU's. The element must explicitly state how ADU's are currently allowed, including applicable development standards.

4. *An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the types of housing identified in paragraph (1) of subdivision (c), and for persons with disabilities as identified in the analysis pursuant to paragraph (7), including land-use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures. (Gov. Code, § 65583, subd. (a)(5).)*

   Land-Use Controls: The element must identify and analyze all relevant land-use controls impacts as potential constraints on a variety of housing types. The element indicates on page 5-17 that Districts 5.0 (IBC Mixed Use), 5.1 (IBC Multi-Use), and 5.3 (IBC Residential) are subject to height limits, as determined by the Federal Aviation Administration (FAA). The analysis should address the ability to achieve maximum

densities given these restrictions and include programs as necessary to address identified constraints.

Fees and Exactions: The element must describe all required fees for single family and multifamily housing development, including impact fees, and analyze their impact as potential constraints on housing supply and affordability. In particular, the City should include additional comparative analysis from similar cities on the cost of its Environmental Impact Report (EIR) fee to examine whether the EIR poses a potential constraint to housing development.

SB 35 Streamlined Ministerial Approval Process: The element must clarify whether there are written procedures for the SB 35 (Chapter 366, Statutes of 2017) Streamlined Ministerial Approval Process and add a program as necessary to address these requirements.

Processing and Permit Procedures: The element must describe and analyze the design review, guidelines and process, including approval procedures and decision-making criteria, for their impact as potential constraints on housing supply, affordability, timing and approval certainty. For example, the analysis could describe required findings and discuss whether objective standards and guidelines improve development certainty and mitigate cost impacts. The element must demonstrate this process is not a constraint or it must include a program to address this permitting requirement, as appropriate.

In addition, the element indicates multifamily development in zones intended for permitting multifamily development (Multi-Use, Medium-Density Residential, and Medium-High Density Residential on page 5-42) are subject to a conditional use permit (CUP). The element must analyze the CUP process as a potential constraint on housing supply and affordability. The analysis should identify findings of approval for the CUP and their potential impact on development approval certainty, timing, and cost. The element must demonstrate this process is not a constraint or it must include a program to address and remove or mitigate the CUP requirement.

Zoning and Fees Transparency: The element must clarify its compliance with new transparency requirements for posting all zoning and development standards for each parcel on the jurisdiction's website pursuant to Government Code section 65940.1, subdivision (a)(1).

Constraints on Housing for Persons with Disabilities: The element includes some analysis of zoning, development standards, building codes, and process and permit procedures as potential constraints on housing for persons with disabilities. However, more information is required. Specifically, the element notes the City has established reasonable accommodation procedures in the Building Code (pp. 5-38 to 5-39) but it does not provide a description of the procedure or analysis on whether such procedures present constraints for persons with disabilities. In addition, the element currently details that residential care facilities serving six or fewer persons are permitted in all residential zones. However, residential care facilities serving seven or more persons are conditionally permitted in the Estate Density, Low Density, Medium-High Density, High Density, and Multi-Use zones. The element should analyze the process as a potential

constraint on housing for persons with disabilities and add or modify programs as appropriate to ensure zoning permits group homes objectively with approval certainty.

5. *An analysis of potential and actual nongovernmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the availability of financing, the price of land, the cost of construction, the requests to develop housing at densities below those anticipated in the analysis required by subdivision (c) of Government Code section 65583.2, and the length of time between receiving approval for a housing development and submittal of an application for building permits for that housing development that hinder the construction of a locality's share of the regional housing need in accordance with Government Code section 65584. (Gov. Code, § 65583, subd. (a)(6).)*

   The element includes some analysis on pages 5-2 to 5-3 of nongovernmental constraints, including the availability of financing and the length of time between project approval and request for a building permit. However, the element must also address requests to develop housing at densities below those anticipated in the sites inventory. Depending on the outcomes of that analysis, a program(s) must be added that identify local efforts to address nongovernmental constraints that create a gap in the jurisdiction's ability to meet its RHNA by income category.

6. *Analyze any special housing needs such as elderly; persons with disabilities, including a developmental disability; large families; farmworkers; families with female-heads of households; and families and persons in need of emergency shelter. (Gov. Code, § 65583, subd. (a)(7).)*

   The element indicates on page 2-45 that there are 158 farmworkers employed in the agricultural industry within the City. However, the analysis does not specify whether regional contexts were taken into consideration. Farmworkers from the broader area and those employed seasonally may have housing needs that are not currently reflected in the analysis. As a result, the element should at least acknowledge the housing needs of permanent and seasonal farmworkers at a county-level (e.g., USDA county-level farmworker data) and include programs as appropriate.

7. *Analyze existing assisted housing developments that are eligible to change to non-low-income housing uses during the next 10 years due to termination of subsidy contracts, mortgage prepayment, or expiration of use restrictions. (Gov. Code, § 65583, subd. (a)(9) through 65583, subd. (a)(9)(D).)*

   The element currently provides a general overview of assisted housing projects at-risk of converting to non-low income uses (Table 4-1). However, the element should include an assessment of risk (e.g., low, moderate, high) for each of the housing developments and identify any at-risk units as a result of termination of local funding or regulatory agreements (e.g., inclusionary agreements, redevelopment funds, or density bonus).

## C. Housing Programs

1. *Include a program which sets forth a schedule of actions during the planning period, each with a timeline for implementation, which may recognize that certain programs are*

*ongoing, such that there will be beneficial impacts of the programs within the planning period, that the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the housing element through the administration of land use and development controls, the provision of regulatory concessions and incentives, and the utilization of appropriate federal and state financing and subsidy programs when available. The program shall include an identification of the agencies and officials responsible for the implementation of the various actions. (Gov. Code, § 65583, subd. (c).)*

To have a beneficial impact in the planning period and address the goals of the housing element, the following programs must be modified to include specific and clear commitments (ex. beyond "exploring," "reviewing," or "initiating"): Programs C.4 (Plan to Encourage and Incentivize ADUs), D.2 (Continue the Conservation and Monitoring of Existing and Future Affordable Units), G.3 (Zoning Changes), J.1 (Cooperating with Community-Based Organizations), J.2 (Displacement Prevention), L.1 (Update and Implement the City's General Plan – Land Use Element/Amend Zoning Ordinance), L.2 (Implement the One Irvine Program to Support Placemaking Through its Neighborhood Revitalization Efforts), M.2 (Cooperation with Community Based Organizations) and M.3 (Density Bonus Eligibility).

In addition, the following programs must be revised with discrete timelines: Programs A.3 (Residential Overlays in Nonresidential Areas), B.1 (Assist with Development of Lower-Income Housing), B.3 (Review the City's Development Standards), B.4 (Provide a Menu of Incentives/Concessions to Developers, C.4 (Plan to Encourage and Incentivize ADUs), D.2 (Continue the Conservation and Monitoring of Existing and Future Affordable Units), G.2 (Adopt Ordinances and Policies that Encourage a Diverse Housing Stock), G.3 (Zoning Changes), G.6 (Irvine Housing Authority), G.7 (Terms of Affordability) J.3 (Legal Assistance for Renters), K.1 (Homeownership Education), K.2 (Residential Rehabilitation Program), L.1 (Update and Implement the City's General Plan – Land Use Element/ Amend Zoning Ordinance), and L.2 (Implement the One Irvine Program to Support Placemaking Through its Neighborhood Revitalization Efforts).

2. *Identify actions that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services and facilities to accommodate that portion of the city's or county's share of the regional housing need for each income level that could not be accommodated on sites identified in the inventory completed pursuant to paragraph (3) of subdivision (a) without rezoning, and to comply with the requirements of Government Code section 65584.09. Sites shall be identified as needed to facilitate and encourage the development of a variety of types of housing for all income levels, including multifamily rental housing, factory-built housing, mobilehomes, housing for agricultural employees, supportive housing, single-room occupancy units, emergency shelters, and transitional housing. (*Gov. Code, § *65583, subd. (c)(1).)*

   As noted in Finding B3, the element does not include a complete site analysis, therefore, the adequacy of sites and zoning were not established. Based on the results of a complete sites inventory and analysis, the City may need to add or revise programs to

address a shortfall of sites or zoning available to encourage a variety of housing types. In addition, the element should be revised as follows:

Replacement Housing Requirements: The sites inventory identifies sites with existing residential uses. Absent a replacement housing program (Gov. Code, § 65583.2, subd. (g)(3)), these sites are not adequate sites to accommodate lower-income households. The replacement housing program has the same requirements as set forth in Government Code section 65915, subdivision (c)(3). The element must be revised to include a program(s) as necessary.

Adequate Sites Alternate Program: As the element appears to rely on the preservation of housing projects to accommodate a portion of the RHNA for lower-income households pursuant to Government Code section 65583.1, subdivision (c). The element must include a program that commits the City to provide committed assistance through a legally enforceable agreement by the end of the third year of the housing-element planning period. The dollar amount or related in-kind services of the committed assistance must be substantial enough to make the targeted units available for occupancy within two years of the execution date of the agreement. In addition, the program must commit to report the status of the committed assistance program in the annual progress report no later than the fourth year of the planning period. If the City does not enter into an enforceable agreement of committed assistance for all the units initially identified by the end of the third year of the planning period, the local government must adopt an amendment to its housing element, no later than the end of the fourth year of the planning period, identifying additional adequate sites sufficient to accommodate the number of units for which committed assistance was not provided.

Rezone Program for Adequate Sites: The City appears to be relying on sites that require rezoning to accommodate a portion of its housing need for lower-income households. While the element includes Program PP-A.3 (Residential Overlays in Nonresidential Areas), it must specifically commit to rezoning pursuant to all the provisions outlined in Government Code section 65583.2, subdivisions (h) and (i).

3. *The housing element shall contain programs which assist in the development of adequate housing to meet the needs of extremely low-, very low-, low- and moderate-income households. (Gov. Code, § 65583, subd. (c)(2).)*

   While the element includes programs to assist in the development of very low-, low-, and moderate-income households, it must also include a program(s) to assist in the development of housing affordable ELI households. Programs must be revised or added to the element to assist in the development of housing for ELI households. Program actions could include prioritizing some funding for housing developments affordable to ELI households and offering financial incentives or regulatory concessions to encourage the development of housing types, such as multifamily, single-room occupancy (SRO) units, to address the identified housing needs for ELI households.
   For additional information, see the *Building Blocks* at http://www.hcd.ca.gov/community-development/building-blocks/housing-needs/extremely-low-income-housing-needs.shtml.

4. *Address and, where appropriate and legally possible, remove governmental and nongovernmental constraints to the maintenance, improvement, and development of*

*housing, including housing for all income levels and housing for persons with disabilities. The program shall remove constraints to, and provide reasonable accommodations for housing designed for, intended for occupancy by, or with supportive services for, persons with disabilities. (Gov. Code, § 65583, subd. (c)(3).)*

As noted in Findings B4 and B5, the element requires a complete analysis of potential governmental and nongovernmental constraints. Depending upon the results of that analysis, the City may need to revise or add programs to address and remove or mitigate any identified constraints.

5. *Promote and affirmatively further fair housing opportunities and promote housing throughout the community or communities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics protected by the California Fair Employment and Housing Act (Part 2.8 (commencing with Section 12900) of Division 3 of Title 2), Section 65008, and any other state and federal fair housing and planning law. (Gov. Code, § 65583, subd. (c)(5).)*

   As noted in Finding B2 the element must include a complete assessment of fair housing. Based on the outcomes of that analysis, the element must add or modify programs. For additional guidance on program requirements to AFFH, please see HCD's guidance at https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos.shtml.

6. *The housing program shall preserve for low-income household the assisted housing developments identified pursuant to paragraph (9) of subdivision (a). The program for preservation of the assisted housing developments shall utilize, to the extent necessary, all available federal, state, and local financing and subsidy programs identified in paragraph (9) of subdivision (a), except where a community has other urgent needs for which alternative funding sources are not available. The program may include strategies that involve local regulation and technical assistance. (Gov. Code, § 65583, subd. (c)(6).)*

   The element identifies 913 units at-risk of converting to market-rate uses in the planning period (page 4-1). The element includes Program D.2 (Continue the Conservation and Monitoring of Existing and Future Affordable Units) to preserve the at-risk units but provides vague program language and commitments. The Program must be revised with clear and specific commitment. For example, the Program should support applications by non-profits for funding to purchase at-risk units, strengthen relationships with the listed non-profits and develop a plan or strategy for quickly moving forward in the case units are noticed to convert to market-rate uses in the planning period, and consider pursuing funding on at least an annual basis. The program should also commit to contacting non-profits immediately to develop a preservation strategy by a date certain and be ready to quickly act when notice of conversion is received and monitoring the units to ensure tenants receive proper notifications, education and support. For additional information and a sample program, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/housing-needs/assisted-housing-developments.shtml.

# 2. Email notification of Revised Draft HEU Re-Release – November 19, 2021




**6th Cycle Draft Housing Element Update Re-Release**

In response to the California Department of Housing and Community Development and community feedback, the City of Irvine has re-released its revised 6th Cycle draft Housing Element for 2021–2029. The Housing Element is a mandatory chapter of the City's General Plan that requires review and updating every eight years by the State of California.

Per state statute, the 6th Cycle Housing Element should be adopted by October 15, 2021; however, a 120-day grace period is permitted (i.e., on or before February 11, 2021).

The draft update accommodates the City's total 23,610-unit Regional Housing Needs Assessment (RHNA) allocation, a state mandate, and includes a comprehensive plan of housing goals, policies, and programs consistent with State Housing Element laws.

The revised Draft Housing Element is available on the City's Housing Element Update website at *cityofirvine.org/heupdate*. The City welcomes all residents, community stakeholders, and interested parties to review and comment on the revised document.

Please submit any comments and/or questions on the revised Draft Housing Element to the City of Irvine's Community Development Department at 1 Civic Center Plaza, Irvine, CA 92606. Comments and questions may also be sent via email at *GPUpdate@cityofirvine.org* or phone at 949-724-6395.

For more information about the Housing Element Update in the City of Irvine, please visit *cityofirvine.org/heupdate*.

*Since its incorporation in 1971, Irvine has become a nationally recognized city, with a population of 307,670 that spans 66 square miles and is recognized as one of America's safest and most successful master-planned urban communities. Top-rated educational institutions, an enterprising business atmosphere, sound environmental stewardship, and respect for diversity all contribute to Irvine's enviable quality of life. This family-friendly city features more than 16,000 acres of parks, sports fields and dedicated open space and is the home of Great Park. For more information, please visit cityofirvine.org.*

# # #

برای کسب اطلاعات به‌زبان فارسی، لطفاً با شمارهٔ 949-724-6395 تماس بگیرید.
한국어로된 정보를 원하시면 949-724-6395 로 연락 바랍니다 .
如需中文資訊，請致電 949-724-6395。
有关中文信息，请致电 949-724-6395。
日本語で情報を共有する場合、電話番号949-724-6395までご連絡ください
Para obtener información en español, llame al 949-724-6395.
Để biết thêm thông tin bằng tiếng Việt, xin vui lòng gọi đến số 949-724-6395.
للحصول على المعلومات باللغة العربية، اتصل بالرقم 949-724-6395.




City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
949-724-6000
*cityofirvine.org*




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GOVDELIVERY

# 3. Draft Housing Element Correspondence

## Anonymous Comment In-Box on www.cityofirvine.org/HEUpdate:

Previous submission Next submission

Submission information

Form: Housing Element Update Feedback
Submitted by Anonymous (not verified)
Mon, 11/22/2021 - 12:26am
198.143.33.21

Message

Please build most of the new housing close to the transit center (train station) at Great Park. There already too much traffic and air pollution in the area. There are still wildlife in the South West part of Irvine. Please protect them by leaving open spaces as they are.

Previous submission Next submission

**From:** Neal Swerdlow
**To:** Melissa Chao
**Subject:** Re: Housing Element Update
**Date:** Wednesday, November 17, 2021 4:13:38 PM
**Attachments:** image003.png
image001.png
image002.png

---

**CAUTION:** EXTERNAL EMAIL

Thanks Melissa.

And a Happy Thanksgiving to you and your family also!

-----Original Message-----
From: Melissa Chao <MChao@cityofirvine.org>
To: Neal Swerdlow <nssfinance@aol.com>
Sent: Wed, Nov 17, 2021 4:09 pm
Subject: RE: Housing Element Update

Hi Neal,

No problem at all. Please feel free to reach out anytime with questions/concerns.

The draft (revised) HEU re-release for further public comment is anticipated this Friday, Nov. 19. A notification email will be sent out.

Please note on December 2 and 16, the Planning Commission will consider the draft 6th Cycle Housing Element and associated Initial Study/Negative Declaration and provide recommendations to the City Council (for anticipated adoption hearings in January 2022). Additional meeting information will be posted on www.cityofirvine.org/HEUpdate as it becomes available.

Hope you have a wonderful Thanksgiving holiday.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Neal Swerdlow <nssfinance@aol.com>
**Sent:** Wednesday, November 17, 2021 3:53 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Re: Housing Element Update

**CAUTION:** EXTERNAL EMAIL

Hi Melisa,

Your number is correct. Somebody provided me with outdated information which is not correct.

Sorry for the inconvenience.

Neal Swerdlow

-----Original Message-----
From: Melissa Chao <MChao@cityofirvine.org>
To: Neal Swerdlow <nssfinance@aol.com>
Cc: Hitta Mosesman <hitta.mosesman@weareharris.com>; Jordan Perez <Jordan.Perez@weareharris.com>; Melissa Chao <MChao@cityofirvine.org>
Sent: Wed, Nov 17, 2021 3:35 pm
Subject: RE: Housing Element Update

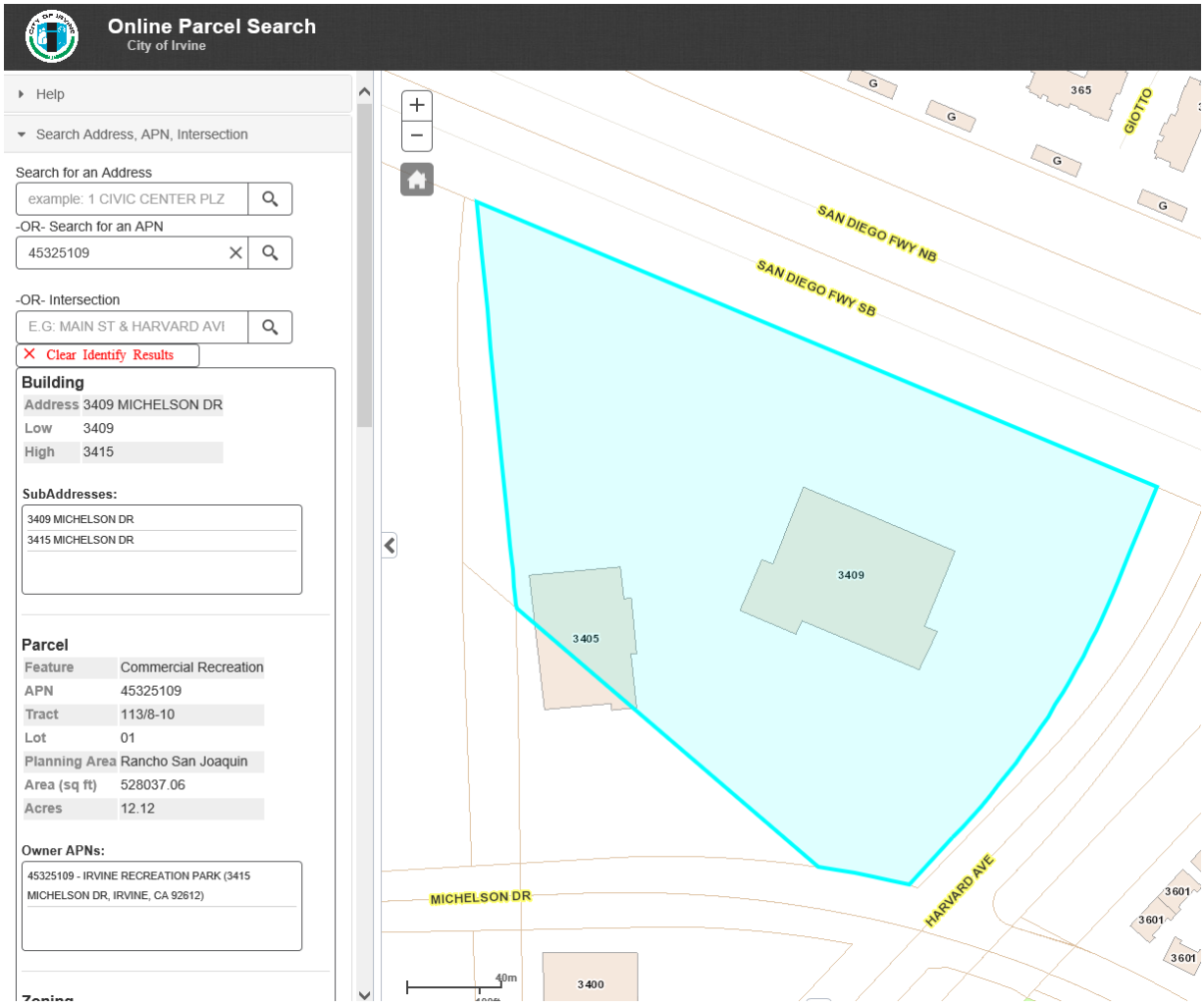
Hi Neal,

Below is what comes up in the City's GIS—based online parcel search. When I search for APN 453-251-08, no results show. The attached County's APN map does not show 453-251-08 either. Do you have other documentation that shows otherwise?

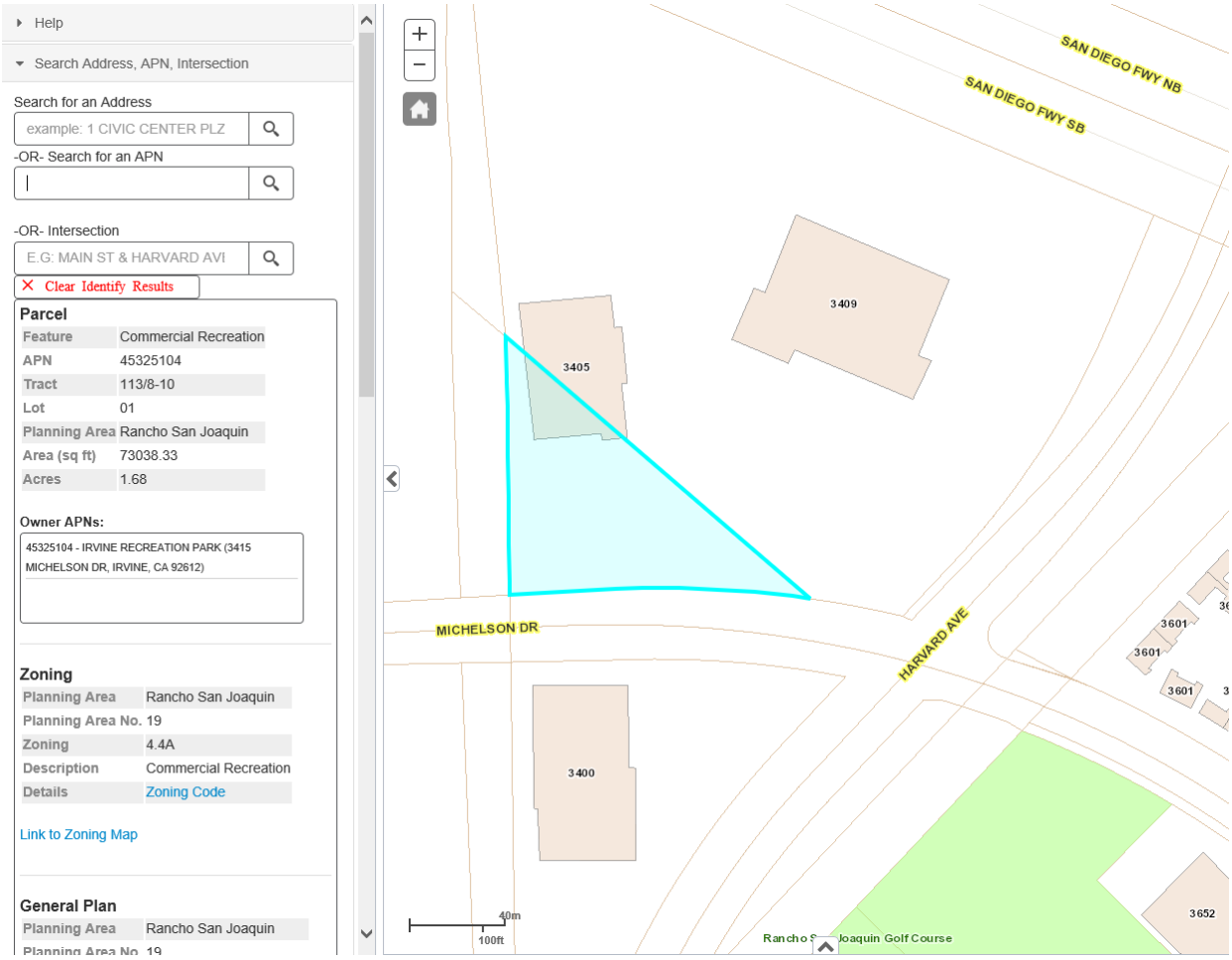
For 453-251-04, I've requested our consultant revise use from Vet Hospital to Amusement Park.

Thanks,
Melissa

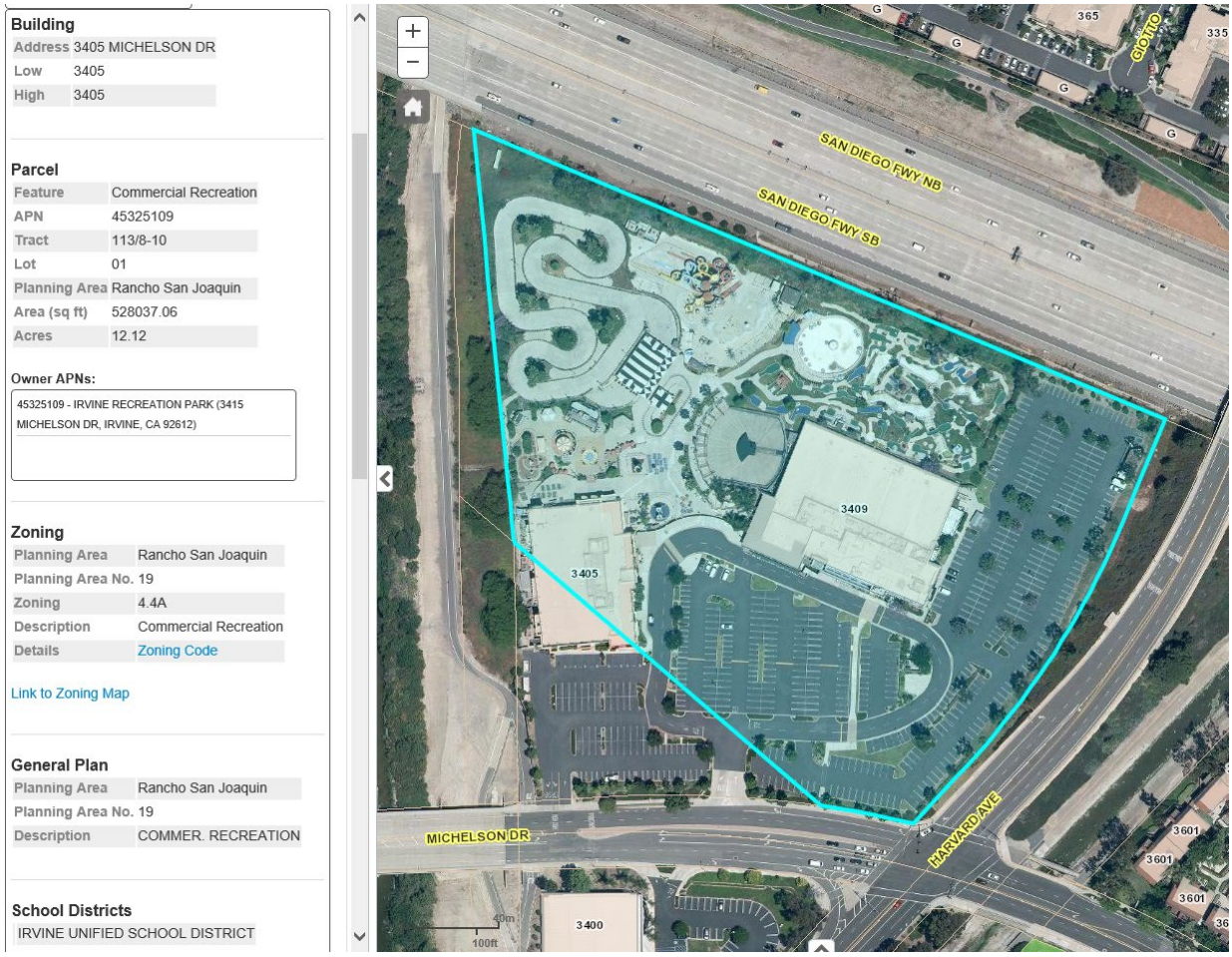
Line 4 of Table B:




Line 5 of Table B:




Map with 2020 aerial overlay with parcel lines:




**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Neal Swerdlow <nssfinance@aol.com>
**Sent:** Wednesday, November 17, 2021 2:49 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** Fwd: Housing Element Update

**CAUTION:** EXTERNAL EMAIL

Melissa,

Followup question, why is 453-251-04 showing existing use as Vet Hospital?

Thank you,

Neal Swerdlow

-----Original Message-----
From: Neal Swerdlow <nssfinance@aol.com>
To: mchao@cityofirvine.org <mchao@cityofirvine.org>
Sent: Wed, Nov 17, 2021 2:34 pm
Subject: Housing Element Update

Good afternoon Melissa,

We are the owners of Irvine Recreation Park which owns APN 453-251-04 and 453-251-08. Our property is listed on Table B at Column B, Row 4 and 5.

The property listed on Row 4 shows the correct address of 3415 Michelson Drive, but the APN shows 453-251-09 rather than 453-251-08.

Is this an error?

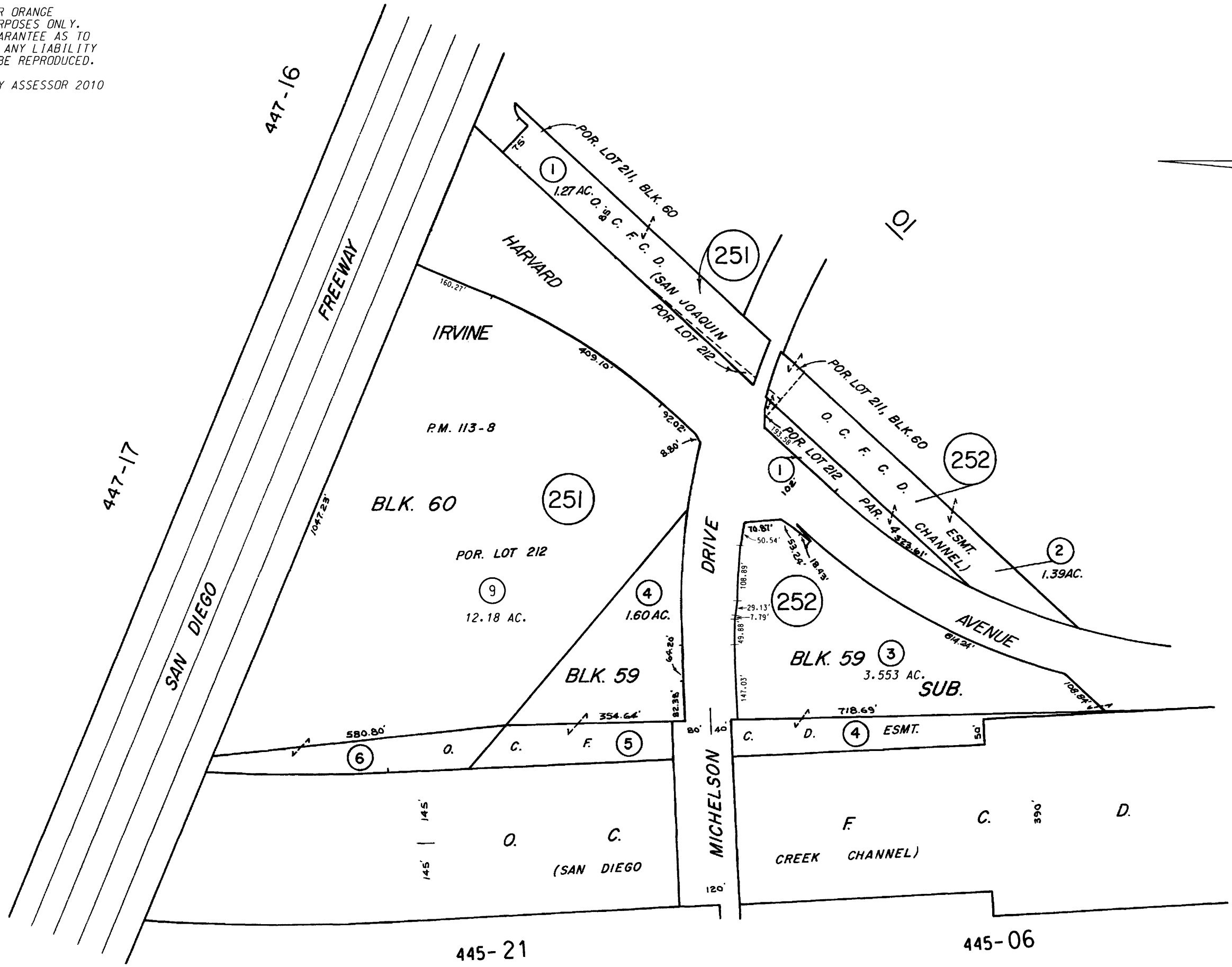
Thank you,

Neal Swerdlow
714.997.8531

THIS MAP WAS PREPARED FOR ORANGE COUNTY ASSESSOR DEPT. PURPOSES ONLY. THE ASSESSOR MAKES NO GUARANTEE AS TO ITS ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED.
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1" = 200'




MARCH 1979

IRVINE SUB. M.M. 1-88
PARCEL MAP P.M. 113-8

NOTE - ASSESSOR'S BLOCK & PARCEL NUMBERS SHOWN IN CIRCLES

ASSESSOR'S MAP
BOOK 453 PAGE 25
COUNTY OF ORANGE

A-823

**From:** Andrew Nelson
**To:** Melissa Chao
**Cc:** Marika Poynter; Hitta Mosesman; Jordan Perez; Sean Cao
**Subject:** Re: Irvine HEU - 18872 MacArthur Blvd
**Date:** Thursday, November 18, 2021 6:16:22 PM

---

**CAUTION:** EXTERNAL EMAIL

Thank you for this helpful message Melissa. Excellent service at 6 pm on a Thursday!

Sean Cao, copied, is the owner of the property and can indicate his wishes relative to this property's designation as a potential site for affordable housing.

We will review the rest of this helpful information you have sent and will respond.

With thanks,

Andrew Nelson
Red Oak Investments
310-880-0888-cell

On Thu, Nov 18, 2021, 5:58 PM Melissa Chao <MChao@cityofirvine.org> wrote:

> Hi Andrew,
>
> Based on our telephone discussion, you indicated the property owner of 18872 MacArthur may have potential concerns being designated as an affordable housing site on the City's draft HEU site inventory list (see attached Table A showing 442 lower income units), which is a companion to the color coded site map. Please provide feedback to our team (who are copied on this email) in the next week or two. For additional project information, please go to www.cityofirvine.org/HEUpdate.
>
> If the site requires rezoning to allow residential uses, the proposed density is TBD and will be established through the subsequent General Plan Update (GPU) and associated Zoning Ordinance Amendment (ZOA) work effort after the Housing Element is adopted/certified. This subsequent work effort is anticipated to be completed by October 2024 or possibly sooner.
>
> However, if you do not want to wait for the City's GPU/ZOA, your client could choose to move forward independently and file all the applicable development applications needed for residential development such as:

- General Plan and Zoning Ordinance Amendment to increase intensity cap and/or change classifications (if necessary)

https://irvineca.seamlessdocs.com/f/GeneralPlanAmendment

https://irvineca.seamlessdocs.com/f/ZoneChange

- Conditional Use Permit and/or Master Plan (as required by the zoning requirements)

https://irvineca.seamlessdocs.com/f/ConditionalUsePermit

https://irvineca.seamlessdocs.com/f/MasterPlan

- Subdivision Map

https://irvineca.seamlessdocs.com/f/TentativeTractParcelMap

- Park Plan for demonstrating minimum park dedication requirements are met

https://irvineca.seamlessdocs.com/f/ParkPlan

- Park Design (can be processed concurrently with CUP and/or MP or deferred as a separate application)

https://irvineca.seamlessdocs.com/f/ParkDesign

- Affordable Housing Plan for meeting the City's existing 15% inclusionary housing ordinance:

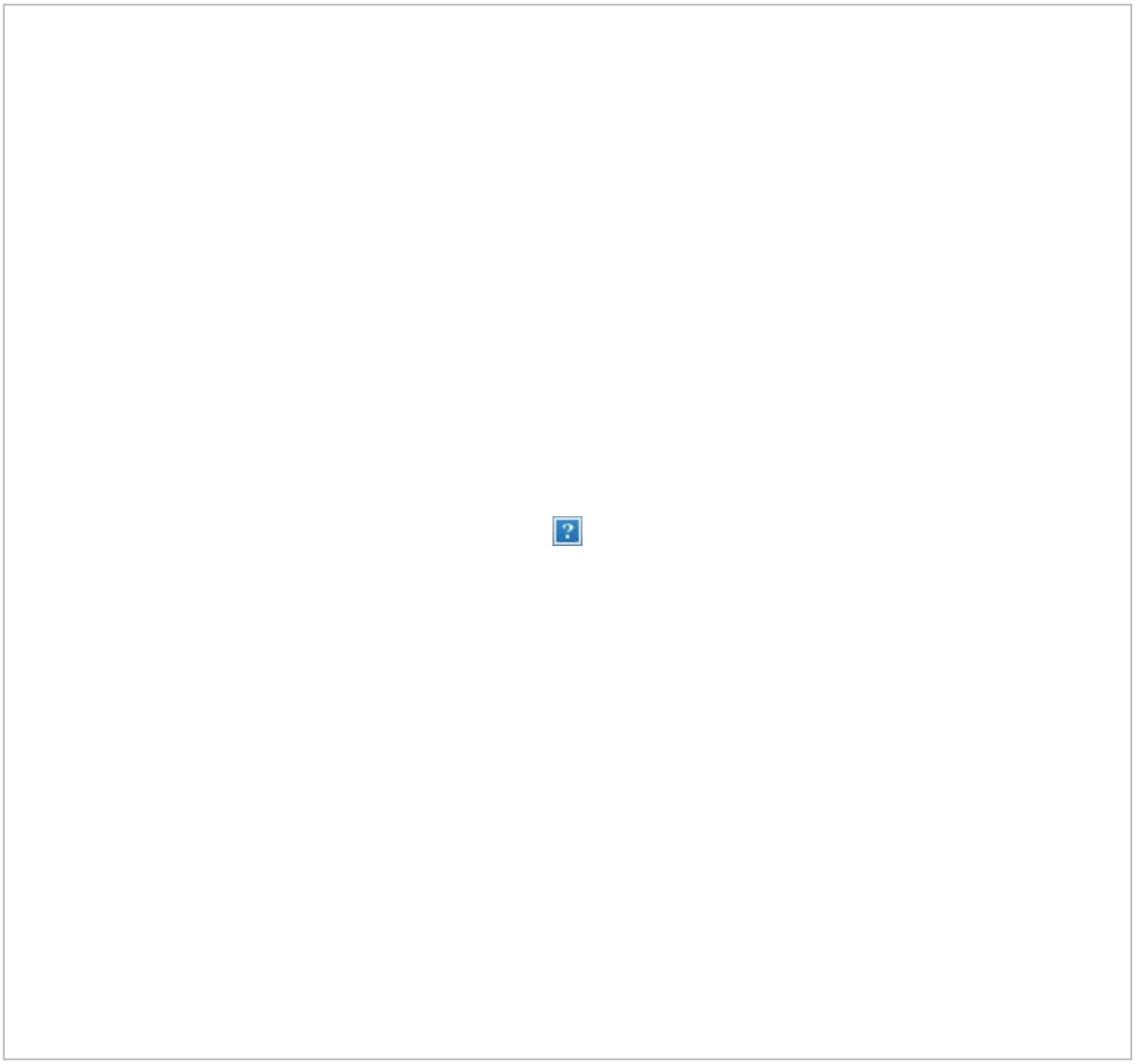
https://library.municode.com/ca/irvine/codes/zoning?nodeId=ZOOR_DIV2AD_CH2-3AFHOIMPR

- Appropriate CEQA documentation with technical studies

- For sites located in the Irvine Business Complex (Planning Area 36 or "IBC") such as 18872 MacArthur, it is subject to a Development Intensity Value (DIV) system as further described here:

https://irvineca.seamlessdocs.com/f/IrvineBusinessComplex

Below is a snapshot of the existing DIV allocation:



Prior to submitting any development applications, your client may want to submit a pre-application, so that various staff can research and respond accordingly to any specific questions/concerns your client may have.

- Pre-application information sheet: https://irvineca.seamlessdocs.com/f/PreApplication
- To submit, go to www.irvineready.com (everything is completed on-line). For assistance,

contact 949-724-6313.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
City of Irvine | Community Development

1 Civic Center Plaza, Irvine, CA 92606
P 949-724-6395 I F 949-724-6440

mchao@cityofirvine.org

**From:** Melissa Chao
**To:** Katie Flores
**Subject:** RE: Housing Element Update - Opportunity List
**Date:** Monday, November 29, 2021 10:16:59 AM
**Attachments:** image001.png
image003.png
image004.png

---

Hi Katie,

Sorry for the delay in responding, I just returned to the office today. Hope you had a wonderful Thanksgiving!

The latest version of the draft Housing Element site inventory as of 11/19/21 is available here: https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=33742

Please refer to pages A-228 through A-456 in Section A-K, Future Housing Sites, in Appendix A, Public Engagement, for correspondence with property owners that have expressed interest in being included in the site inventory.

The project webpage is routinely updated with new information and can be accessed at www.cityofirvine.org/HEUpdate.

Please let me know if you have any further questions.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

---

**From:** Katie Flores <kflores@intracorphomes.com>
**Sent:** Monday, November 22, 2021 3:28 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** FW: Housing Element Update - Opportunity List

**CAUTION:** EXTERNAL EMAIL

Hi Melissa,

Are you able to share the list of any property owners that have expressed interest in being included in the site inventory for future residential development?

Thank you,

**Katie Flores | Assistant Project Manager**
dir 949.757.8476 | cel 949.230.6234

INTRACORP SW, LLC | 895 Dove Street, Suite 400 | Newport Beach CA 92660 |

www.intracorphomes.com

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | Brandon Young; Clerk; Planning Commission |
| **Cc:** | Mitchell Tsai; Greg Sonstein; Hind Baki; Rebekah Youngblood; Melissa Chao |
| **Subject:** | RE: SWRCC - City of Irvine, 6th Cycle Housing Element Update] - 12/2/2021 CPC Comment Letter |
| **Date:** | Thursday, December 2, 2021 3:44:44 PM |

Hi Brandon,

This confirms receipt of this email and its attachment.

Thanks,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Brandon Young <brandon@mitchtsailaw.com>
**Sent:** Thursday, December 2, 2021 3:35 PM
**To:** Clerk <clerk@cityofirvine.org>; Planning Commission <PlanningCommission@cityofirvine.org>; Melissa Chao <MChao@cityofirvine.org>
**Cc:** Mitchell Tsai <mitch@mitchtsailaw.com>; Greg Sonstein <greg@mitchtsailaw.com>; Hind Baki <hind@mitchtsailaw.com>; Rebekah Youngblood <rebekah@mitchtsailaw.com>
**Subject:** SWRCC - City of Irvine, 6th Cycle Housing Element Update] - 12/2/2021 CPC Comment Letter

**CAUTION:** EXTERNAL EMAIL

Dear Mr. Petersen, Ms. Chao, and Community Development Department,

Please see the attached comment letter on City of Irvine's 12/2/2021 City Planning Commission meeting for the above referenced Project and confirm receipt of this email and its attachment.

Thank you,

**Brandon Young**
Office Manager
Mitchell M. Tsai, Attorney At Law
139 South Hudson Avenue, Suite 200
Pasadena, CA 91101
Office: (626) 381-9248
Fax: (626) 389-5414
Email: brandon@mitchtsailaw.com
Website: http://www.mitchtsailaw.com

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**VIA E-MAIL**

December 2, 2021

Carl Petersen
City Clerk
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
Em: clerk@cityofirvine.org; planningcommission@cityofirvine.org

Melinda Chao
Senior Planner
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
Em: mchao@cityofirvine.org

RE: Agenda Item No. 2 - GENERAL PLAN - DRAFT 2021 - 2029 HOUSING ELEMENT UPDATE

Dear Mr. Petersen, Ms. Chao, and Community Development Department,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Southwest Carpenters**"), my Office is submitting these comments on the City of Irvine's ("**City**" or "**Lead Agency**") 2021-2029 update to the City's General Plan Housing Element ("**Project**"), Agenda Item No. 2, for the December 2, 2021 City Planning Commission meeting.

The Southwest Carpenters is a labor union representing more than 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

Commenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

The City should require the use of a local skilled and trained workforce to benefit the community's economic development and environment. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips,

reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Local skilled and trained workforce requirements and policies have significant environmental benefits since they improve an area's jobs-housing balance, decreasing the amount of and length of job commutes and their associated greenhouse gas emissions. Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.

[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

[6] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

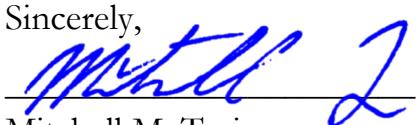
[7] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association

trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing." The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

Sincerely,



Mitchell M. Tsai
Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

# EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

## Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Minimum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

## Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 3,623 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

| Location Type | Location Name | Rural H-W (miles) | Urban H-W (miles) |
|---|---|---|---|
| Air Basin | Great Basin | 16.8 | 10.8 |
| Air Basin | Lake County | 16.8 | 10.8 |
| Air Basin | Lake Tahoe | 16.8 | 10.8 |
| Air Basin | Mojave Desert | 16.8 | 10.8 |
| Air Basin | Mountain | 16.8 | 10.8 |
| Air Basin | North Central | 17.1 | 12.3 |
| Air Basin | North Coast | 16.8 | 10.8 |
| Air Basin | Northeast | 16.8 | 10.8 |
| Air Basin | Sacramento | 16.8 | 10.8 |
| Air Basin | Salton Sea | 14.6 | 11 |
| Air Basin | San Diego | 16.8 | 10.8 |
| Air Basin | San Francisco | 10.8 | 10.8 |
| Air Basin | San Joaquin | 16.8 | 10.8 |
| Air Basin | South Central | 16.8 | 10.8 |
| Air Basin | South Coast | 19.8 | 14.7 |
| Air District | Amador County | 16.8 | 10.8 |
| Air District | Antelope Valley | 16.8 | 10.8 |
| Air District | Bay Area AQMD | 10.8 | 10.8 |
| Air District | Butte County | 12.54 | 12.54 |
| Air District | Calaveras | 16.8 | 10.8 |
| Air District | Colusa County | 16.8 | 10.8 |
| Air District | El Dorado | 16.8 | 10.8 |
| Air District | Feather River | 16.8 | 10.8 |
| Air District | Glenn County | 16.8 | 10.8 |
| Air District | Great Basin | 16.8 | 10.8 |
| Air District | Imperial County | 10.2 | 7.3 |
| Air District | Kern County | 16.8 | 10.8 |
| Air District | Lake County | 16.8 | 10.8 |
| Air District | Lassen County | 16.8 | 10.8 |
| Air District | Mariposa | 16.8 | 10.8 |
| Air District | Mendocino | 16.8 | 10.8 |
| Air District | Modoc County | 16.8 | 10.8 |
| Air District | Mojave Desert | 16.8 | 10.8 |
| Air District | Monterey Bay | 16.8 | 10.8 |
| Air District | North Coast | 16.8 | 10.8 |
| Air District | Northern Sierra | 16.8 | 10.8 |
| Air District | Northern | 16.8 | 10.8 |
| Air District | Placer County | 16.8 | 10.8 |
| Air District | Sacramento | 15 | 10 |

| | | | |
|---|---|---|---|
| Air District | San Diego | 16.8 | 10.8 |
| Air District | San Joaquin | 16.8 | 10.8 |
| Air District | San Luis Obispo | 13 | 13 |
| Air District | Santa Barbara | 8.3 | 8.3 |
| Air District | Shasta County | 16.8 | 10.8 |
| Air District | Siskiyou County | 16.8 | 10.8 |
| Air District | South Coast | 19.8 | 14.7 |
| Air District | Tehama County | 16.8 | 10.8 |
| Air District | Tuolumne | 16.8 | 10.8 |
| Air District | Ventura County | 16.8 | 10.8 |
| Air District | Yolo/Solano | 15 | 10 |
| County | Alameda | 10.8 | 10.8 |
| County | Alpine | 16.8 | 10.8 |
| County | Amador | 16.8 | 10.8 |
| County | Butte | 12.54 | 12.54 |
| County | Calaveras | 16.8 | 10.8 |
| County | Colusa | 16.8 | 10.8 |
| County | Contra Costa | 10.8 | 10.8 |
| County | Del Norte | 16.8 | 10.8 |
| County | El Dorado-Lake | 16.8 | 10.8 |
| County | El Dorado- | 16.8 | 10.8 |
| County | Fresno | 16.8 | 10.8 |
| County | Glenn | 16.8 | 10.8 |
| County | Humboldt | 16.8 | 10.8 |
| County | Imperial | 10.2 | 7.3 |
| County | Inyo | 16.8 | 10.8 |
| County | Kern-Mojave | 16.8 | 10.8 |
| County | Kern-San | 16.8 | 10.8 |
| County | Kings | 16.8 | 10.8 |
| County | Lake | 16.8 | 10.8 |
| County | Lassen | 16.8 | 10.8 |
| County | Los Angeles- | 16.8 | 10.8 |
| County | Los Angeles- | 19.8 | 14.7 |
| County | Madera | 16.8 | 10.8 |
| County | Marin | 10.8 | 10.8 |
| County | Mariposa | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Merced | 16.8 | 10.8 |
| County | Modoc | 16.8 | 10.8 |
| County | Mono | 16.8 | 10.8 |
| County | Monterey | 16.8 | 10.8 |
| County | Napa | 10.8 | 10.8 |

| | | | |
|---|---|---|---|
| County | Nevada | 16.8 | 10.8 |
| County | Orange | 19.8 | 14.7 |
| County | Placer-Lake | 16.8 | 10.8 |
| County | Placer-Mountain | 16.8 | 10.8 |
| County | Placer- | 16.8 | 10.8 |
| County | Plumas | 16.8 | 10.8 |
| County | Riverside- | 16.8 | 10.8 |
| County | Riverside- | 19.8 | 14.7 |
| County | Riverside-Salton | 14.6 | 11 |
| County | Riverside-South | 19.8 | 14.7 |
| County | Sacramento | 15 | 10 |
| County | San Benito | 16.8 | 10.8 |
| County | San Bernardino- | 16.8 | 10.8 |
| County | San Bernardino- | 19.8 | 14.7 |
| County | San Diego | 16.8 | 10.8 |
| County | San Francisco | 10.8 | 10.8 |
| County | San Joaquin | 16.8 | 10.8 |
| County | San Luis Obispo | 13 | 13 |
| County | San Mateo | 10.8 | 10.8 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Clara | 10.8 | 10.8 |
| County | Santa Cruz | 16.8 | 10.8 |
| County | Shasta | 16.8 | 10.8 |
| County | Sierra | 16.8 | 10.8 |
| County | Siskiyou | 16.8 | 10.8 |
| County | Solano- | 15 | 10 |
| County | Solano-San | 16.8 | 10.8 |
| County | Sonoma-North | 16.8 | 10.8 |
| County | Sonoma-San | 10.8 | 10.8 |
| County | Stanislaus | 16.8 | 10.8 |
| County | Sutter | 16.8 | 10.8 |
| County | Tehama | 16.8 | 10.8 |
| County | Trinity | 16.8 | 10.8 |
| County | Tulare | 16.8 | 10.8 |
| County | Tuolumne | 16.8 | 10.8 |
| County | Ventura | 16.8 | 10.8 |
| County | Yolo | 15 | 10 |
| County | Yuba | 16.8 | 10.8 |
| Statewide | Statewide | 16.8 | 10.8 |

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Mininum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1969 | 213.1969 | 0.0601 | 0.0000 | 214.6993 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6826 | 1,721.6826 | 0.1294 | 0.0000 | 1,724.9187 |
| 2023 | 0.6148 | 3.3649 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5295 | 1,627.5295 | 0.1185 | 0.0000 | 1,630.4925 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9078 | 52.9078 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6826** | **1,721.6826** | **0.1294** | **0.0000** | **1,724.9187** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1967 | 213.1967 | 0.0601 | 0.0000 | 214.6991 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6823 | 1,721.6823 | 0.1294 | 0.0000 | 1,724.9183 |
| 2023 | 0.6148 | 3.3648 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5291 | 1,627.5291 | 0.1185 | 0.0000 | 1,630.4921 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9077 | 52.9077 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6823** | **1,721.6823** | **0.1294** | **0.0000** | **1,724.9183** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **9-1-2021** | **11-30-2021** | 1.4103 | 1.4103 |
| **2** | **12-1-2021** | **2-28-2022** | 1.3613 | 1.3613 |
| **3** | **3-1-2022** | **5-31-2022** | 1.1985 | 1.1985 |
| **4** | **6-1-2022** | **8-31-2022** | 1.1921 | 1.1921 |
| **5** | **9-1-2022** | **11-30-2022** | 1.1918 | 1.1918 |
| **6** | **12-1-2022** | **2-28-2023** | 1.0774 | 1.0774 |
| **7** | **3-1-2023** | **5-31-2023** | 1.0320 | 1.0320 |
| **8** | **6-1-2023** | **8-31-2023** | 1.0260 | 1.0260 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 1.0265 | 1.0265 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8857 | 2.8857 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6207 | 1.6207 |
| | | **Highest** | 2.8857 | 2.8857 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

### 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1521 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1520 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| SubCategory | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7654 | 210.7654 | 0.0600 | 0.0000 | 212.2661 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6554 | 1,418.6554 | 0.1215 | 0.0000 | 1,421.6925 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4412 | 1,342.4412 | 0.1115 | 0.0000 | 1,345.2291 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6355 | 44.6355 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6554** | **1,418.6554** | **0.1215** | **0.0000** | **1,421.6925** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7651 | 210.7651 | 0.0600 | 0.0000 | 212.2658 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6550 | 1,418.6550 | 0.1215 | 0.0000 | 1,421.6921 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4409 | 1,342.4409 | 0.1115 | 0.0000 | 1,345.2287 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6354 | 44.6354 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6550** | **1,418.6550** | **0.1215** | **0.0000** | **1,421.6921** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **9-1-2021** | **11-30-2021** | 1.4091 | 1.4091 |
| **2** | **12-1-2021** | **2-28-2022** | 1.3329 | 1.3329 |
| **3** | **3-1-2022** | **5-31-2022** | 1.1499 | 1.1499 |
| **4** | **6-1-2022** | **8-31-2022** | 1.1457 | 1.1457 |
| **5** | **9-1-2022** | **11-30-2022** | 1.1415 | 1.1415 |
| **6** | **12-1-2022** | **2-28-2023** | 1.0278 | 1.0278 |
| **7** | **3-1-2023** | **5-31-2023** | 0.9868 | 0.9868 |
| **8** | **6-1-2023** | **8-31-2023** | 0.9831 | 0.9831 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 0.9798 | 0.9798 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8757 | 2.8757 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6188 | 1.6188 |
| | | **Highest** | 2.8757 | 2.8757 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0956 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0955 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

| Local Hire Provision Net Change | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,623 |
| Amortized (MT CO2e/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized (MT CO2e/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

# EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

**SOIL WATER AIR PROTECTION ENTERPRISE**
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
**Email:** prosenfeld@swape.com

# *Paul Rosenfeld, Ph.D.*

**Chemical Fate and Transport & Air Dispersion Modeling**

*Principal Environmental Chemist*

**Risk Assessment & Remediation Specialist**

## Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

## Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex $H_2O$ Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E**. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.,** J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.,** M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.,** J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.,** and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49( 9), 171-178.

**Rosenfeld, P. E**., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.,** Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E**., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.,** and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

**Rosenfeld, P.E.,** C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.,** and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.,** and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E. (**1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld, P. E. (**1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

## Presentations:

**Rosenfeld, P.E.,** Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

**Rosenfeld, P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D**. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D**. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E**., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D**. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

**Rosenfeld. P.E. (**October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E. (**2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

# EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

## Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization**
**Industrial Stormwater Compliance**
**Investigation and Remediation Strategies**
**Litigation Support and Testifying Expert**
**CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

**Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

**Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F**., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F**., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F**., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F**., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F**., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F**., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F**., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F**., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F**., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F**., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F**., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F**., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F**., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.**F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F**., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F**., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

EXECUTIVE COMMITTEE

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ADAM WOOD
BIASC

December 2, 2021

Mr. Jeff Pierson
Chair, Planning Commission
City of Irvine
One Civic Center Plaza
Irvine, CA 92606

Dear Chair Pierson and Commission,

The Building Industry Association of Orange County offers comments on the General Plan – Draft 2021 – 2029 Housing Element Update. Specifically, we draw attention to the proposed increase to the Inclusionary Zoning requirements under consideration as part of this proposal.

On October 18, 2021 the California Department of Housing and Community Development (HCD) submitted a comment letter regarding the City of Irvine's 6th Cycle Draft Housing Element. Attached to that letter was an Appendix describing "the revisions needed to comply with State Housing Element Law." In the Appendix, Section B.4 calls for an "analysis of potential and actual governmental constrains upon the … development of housing for all income levels." In specific reference to Fees and Exactions, HCD states that the element must describe all required fees and "analyze their impact as potential constraints on housing supply and affordability."

Inclusionary Zoning is a fee that can be a constraint on housing and therefore requires careful study. To that end, Section PP-E.3 on page 8-10 of the Second Draft 2021-2029 Housing Element, dated November 19, 2021 directly speaks to Irvine's Inclusionary Housing Ordinance and the potential update thereof. Although the first sentence states that the "City will retain a consultant to conduct a feasibility study to evaluate increasing" the requirement, the very next sentence presupposes the outcome of that study and states that updates to the Ordinance "***will*** reflect the 20 precent requirement." Inclusion of this language, presupposing the outcome of a feasibility study, undermines due process and any impartiality, credibility or reliability of the findings resulting from any such commissioned report.

Further, the very idea of increasing the Inclusionary requirement is, on its face, problematic. The proposed increase represents a significant new cost burden on development that will undoubtedly adversely impact the ability for the market to deliver much needed housing. Such an increase would re-write the underlying assumptions within the City of Irvine and provide a chilling effect on the development community's ability to secure adequate financing to pursue home building opportunity.

In short, the proposed increase to the existing Inclusionary Zoning fee doubles down on the idea of making housing more expensive in the hope of making housing more affordable. With a RHNA allocation of 23,610 units, affordability is not something that can be subsidized into

success. Instead of imposing an increased mandate that, by the Housing Element's own narrative, will be impossible to achieve without significant government subsidies, the city has the power to change that dynamic through incentive-based approaches. Reducing the cost of developing housing will activate the power of the Free Market and housing at the desired levels becomes feasible.

In summation, the Building Industry Association of Orange County requests amendments to the Inclusionary Zoning language that presupposes an increase to 20%, a comprehensive review of incentive-based approaches to achieving affordable housing (as opposed to punitive fees), and a comprehensive discussion of the constraints that limit housing production in light of the aforementioned.

We appreciate Irvine's commitment to housing and the proud tradition of the city in producing one of the nation's most desirable places to call Home. BIAOC looks forward to our continued work with the City Council, Planning Commission and Staff to ensure Irvine remains an exceptional place to live, work, and play.

Sincerely,



Adam Wood
Vice President
BIA/SC – Orange County Chapter

December 2, 2021

City of Irvine Planning Commission
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

**RE: Agenda Item 2. GENERAL PLAN - DRAFT 2021 - 2029 HOUSING ELEMENT UPDATE**

Chair Jeff Pierson and Planning Commission Members:

My name is Tim Shaw and I am a resident of the City of Irvine. I've lived here since 2002 and I served as the CEO of the Irvine Public Schools Foundation between 2001 and 2007. I currently serve as Chair of the Orange County Continuum of Care Board and as the lead consultant for Orange County United Way's Housing Champions Advocacy Network. I've previously served as the Executive Director of the Orange County Homeless Issues Task Force and I've been involved in homeless services and affordable housing advocacy for over 30 years in Orange County.

I urge you to ensure the City of Irvine includes in their 6th Cycle Housing Element policies and programs that will effectively produce affordable housing at the extremely low-, very low-, and low-income level.

During the 5th Cycle Planning Period (2014-2021) the City approach to meeting its Regional Housing Needs Assessment allocation (RHNA) has not met housing needs in a balanced manner. In the current period, moderate and above moderate housing production has been greatly incentivized as compared to production at the lower income levels. For the 2014-2021 planning period, the city had a RHNA of 2,817 very low- and 2,034 low-income units. To date, the City has built 1,149 of the 2,817 very low-income units and 37 of the 2,034 low- income units. At the moderate income level the city has greatly exceeded RHNA goals by approving 12,998 units at moderate and 16,825 units at above moderate. **The number of moderate and above moderate units approved in the last seven years was 25 times more than those at low and very low income.** This unbalanced housing production identifies that affordable housing policies need to be strengthened and updated to prioritize affordable housing development along with market rate housing.

The deficit of affordable housing in Irvine is unfortunate given that Irvine residents are in urgent need of housing at the lower income levels. According to SCAG's pre-certified housing data, there are a total of 50,263 renter households in Irvine, with 24,945 or 49.6% of those households spending thirty percent or more of gross income on housing costs. Additionally, 13,285 or 26.4% renter households are extremely rent burdened and are paying fifty percent or more of gross income on housing costs. The City of Irvine should consider its local economy and offer healthy and affordable housing options that the current market-rate housing development is not offering. Considering that the City of Irvine is a large regional employment center and that its daytime

population almost doubles during the typical work week, the city must recognize that affordable housing is needed to support the local business economy to have more people living in the city versus commuting from cities in Orange County and nearby counties.

To effectively produce housing at the extremely low-, very low-, and low-income levels, I recommend that the city:

1. Strengthen the existing Inclusionary Housing Ordinance with a 20% requirement of affordable housing production at the extremely low, very low- and low-income categories.
2. Increase the affordable housing in-lieu fee to reflect current development costs.
3. Prioritize affordable housing funding and programs to increase affordable housing options for families of lower incomes, especially at very low and extremely low-income.
4. Identify city-owned sites and prioritize these sites for the development of 100% affordable housing in Irvine.
5. Ensure opportunity sites are not simply upzoned or rezoned without including affordable housing policies that will capture the financial and land use incentives being given to property owners and market rate developers. An Affordable Housing program is also needed.
6. Coordinate efforts with the Irvine Community Land Trust to increase extremely, very low and low income housing.
7. Incentivize residential uses in targeted retail centers in the city to create mixed use and maximize density around the Irvine Transportation Center and IBC for housing development. A minimum of 20% should be included for lower income households.
8. Update Density Bonus Law to prioritize affordable housing development for lower income households in rental developments.
9. Affirmatively Furthering Fair Housing – The City of Irvine should provide adequate recommendations on how the city will Affirmatively Further Fair Housing and promote the production of affordable housing in all communities of the city.

I encourage the City of Irvine to consider these recommendations and to to develop and implement policies that will effectively produce lower income housing. I appreciate you taking the time to read this letter.

Sincerely,

Tim Shaw
11 Misty Run
Irvine, CA 92614
(949) 300-9154

greater irvine chamber
destination irvine

December 1, 2021

Chair Jeff Pierson
Irvine Planning Commission
1 Civic Center Plaza
Irvine, CA 92606

**RE: Second Draft - 2021-2029 Housing Element Update**

Chair Pierson & Commissioners -

On behalf of the Greater Irvine Chamber of Commerce, we appreciate the opportunity to comment on the 2021-2029 City of Irvine Housing Element Update (HEU), Second Draft. This is an important document that is rooted in the Master Plan's vision to provide a diverse range of housing for current and future Irvine residents. The Chamber supports the City's efforts to plan for and facilitate housing that meets the needs of our growing population.

Irvine's employers need these units, and at all levels of affordability. Chamber members consistently cite the need for homes near employment centers as the most significant hurdle to recruiting and retaining top-tier talent.

That is why the Chamber **supports** the HEU's broad goals and urges the City to prioritize sites near and within key employment centers. These areas offer an extraordinary opportunity to build attainable and affordable housing for Irvine's workforce.

To facilitate these goals, we support policy objectives like PP-A.3 that would allow for residential uses in appropriate non-residential areas. We also encourage the City to build in flexibility to future zoning on these sites. For example, 30 units per acre (as identified in PP-A.3) should be applied as a minimum with flexibility for additional density. This will accommodate the product types supported by younger professionals, recent graduates and their employers.

Overall, we are encouraged by the numerous policies proposed in the HEU that proactively encourage new housing by removing regulatory and cost barriers.

However, the Chamber is **opposed** to increasing affordable housing mandates from 15% to 20%. This would restrict housing of all income levels across Irvine.

The City rightly acknowledges that, "a primary barrier to more affordable housing is a lack of federal, state and local funding." Very low- and low-income units simply cannot be built without substantial

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GreaterIrvineChamber.com • DestinationIrvine.com • IrvineChamberEconomicDevelopment.com

ACCREDITED

government funding. Currently, this funding is grossly inadequate and its appropriation is beyond the City's control. Therefore, a new 20% mandate creates an insurmountable barrier to landowners - especially commercial landowners - as they consider residential projects. The consequence is zero units for the city.

Irvine is the region's leader in affordable housing because the Irvine Master Plan calls for - and has delivered - a diverse range of housing. Its visionary principles have fostered public/private partnerships that led to the Irvine Community Land Trust and the delivery of thousands of affordable units, including more than 4,500 affordable housing units in the past 20 years. An additional 1,000 are in planning or construction phases. The City acknowledges that this is "the highest number of affordable housing units in any city in Orange County."

This success strongly affirms Irvine's current approach to affordable housing. It should not be altered in pursuit of arbitrary percentages.

The Chamber is a proud partner with the City. We support its efforts to create housing opportunities near jobs to support our City's employers. We also oppose efforts that will reduce the amount of housing available and create insurmountable barriers to affordability and attainability.

We look forward to continuing this partnership as the HEU continues its public process.

Sincerely,

Bryan Starr
President/CEO
Greater Irvine Chamber of Commerce

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IRVINE COMPANY
Since 1864

December 1, 2021

Marika Poynter, Principal Planner
City of Irvine
Community Development Department
1 Civic Center Plaza
Irvine, CA 92606

RE: City of Irvine - Second Draft 2021 – 2029 Housing Element

Dear Ms. Poynter,

Thank you for the opportunity to review and comment on the City's Second Draft 2021 – 2029 Housing Element dated November 19, 2021 (the "draft element") and for your time in answering a number of questions for me. Irvine Company appreciates the significant effort of the City and its staff in preparing this mandated document addressing housing needs on the one hand while balancing a variety of other policy issues (with sometimes seemingly conflicting objectives) on the other. With this in mind, Irvine Company has the following comments and suggestions for the City's consideration.

- Page 7-22, Section 7.8.1 and Page 8-9, PP-D.3: Under the provisions of California Government Code Section 65583.2(g)(3), the draft element identifies a lower-income replacement need of 465 units at the Park West Apartments. PP-D.3 indicates City staff will review available information and survey residents in the event of a redevelopment proposal at the site. This proposed program indicates the replacement need could be higher depending on the results of staff's analysis, but does not account for the possibility that the number could also be lower. *In either case, Irvine Company considers it premature to include an exact replacement count prior to completion of a resident income analysis and that the number should be solely determined by the result of said analysis*. Moreover, it is also unclear why a single site should be called out in the Housing Element when the applicable Government Code applies to all relevant residential redevelopment. Instead, applicable sections of the Housing Element should be revised to simply state that "the City will ensure the appropriate number of affordable units is built with any residential redevelopment project pursuant to California Government Code 65583.2(g)(3)."

- Appendix D. Sites Inventory Form: Regarding Lots 103 and 106 within Planning Area 33, the second draft identifies Lot 103 (APN# 585-082-01) for lower-income housing and Lot 106 (APN# 585-081-02) for market-rate housing. We are requesting clarification that the proposed element would not necessarily limit affordable housing

housing and Lot 106 (APN# 585-081-02) for market-rate housing. We are requesting clarification that the proposed element would not necessarily limit affordable housing to Lot 103 or, for that matter, necessarily require affordable housing on either site if the required number of affordable units were to be provided in an alternative location acceptable to the City. In other words, we are seeking clarification that the ultimate location of future lower-income housing will remain flexible in keeping with the number of units assumed as necessary to meet RHNA goals, the Inclusionary Housing Ordinance and otherwise subject to City approval.

- Page 8-2, Section PP-A.3: The second draft proposes implementation of a residential overlay zone to be included in the subsequent General Plan Update and, through Appendix D, includes a limited number of staff-selected sites. Irvine Company supports this approach as a means to consider and facilitate the development of residential uses on sites where residents can take advantage of the benefits of living close to grocery stores, retail uses and restaurants, as well as jobs. To address evolving market conditions and other externalities (proximity to schools, services and/or job centers), *Irvine Company recommends that the residential overlay for commercial areas* eventually *be expanded beyond the limited number of centers in Appendix D*.

  Additionally, PP-A.3 indicates the residential overlay will allow residential densities of 30 units/acre and require residential uses to occupy 50 percent of the floor area of mixed-use projects. These somewhat arbitrary figures are potentially concerning. Regarding density, for these types of relatively small-scale, mixed-use infill projects, the market does not support true densities below 50-60 units/acre. Densities much lower than this are not viable unless the entire site area can be used to determine residential densities. Regarding floor area ratios, the proposed percentage may be acceptable in a vertically-integrated mixed-use project, but it may be challenging for horizontal mixed-use projects. Based on these concerns, *residential densities exceeding the proposed 30 units/acre should be allowed in the residential overlay consistent with all other non-vacant sites in the Housing Element and the document should be clarified such that the 50 percent minimum floor area ratio only applies to vertically-integrated mixed-use projects*.

- Page 8-10, Section PP-E.3: As the second draft indicates, the City, in partnership with the local development community, has successfully implemented an Inclusionary Housing Ordinance since 2003. In fact, Section 1.2.2 indicates that Irvine leads Orange County in the production of affordable housing. The current Inclusionary Housing Ordinance requiring that 15 percent of new housing developed be affordable to lower-income and moderate income households (5 percent each at very low, low and moderate income levels) has worked well.

  Through PP-E.3 the City is proposing to retain a consultant to conduct a feasibility study to evaluate increasing the inclusionary housing requirement from 15 percent (5

percent each at very low, low and moderate income levels) to 20 percent (9 percent very low, 6 percent low and 5 percent moderate income levels). Roughly speaking, this proposal would not result in the apparent one-third increase in the requirement, but rather would increase the cost to meet this mandate by almost two-thirds above the existing requirement. While this proposed program purports to study feasibility of the proposed increase, it actually discusses the increase as already determined (e.g. later in this program it states "updates to the Inclusionary Housing Ordinance will reflect the 20 percent requirement..." and in PP-L.1 which indicates "The City will update its Land Use Element and amend the Zoning Ordinance by October 2024 to update the Zoning Code to be consistent with State laws enacted over the past eight years, increase the inclusionary housing requirement to 20 percent affordable units required for all market rate housing developments, ..."). *At a minimum the Housing Element should be revised to reflect that only if justified by the feasibility study will there be any increase in the current inclusionary housing requirements.*

*As to the concept of increasing the inclusionary requirement at all, it is clear to us that the resulting significant increase in the cost of meeting such a mandate will ultimately upset the proven model dampening incentives for residential development. This is especially true as is acknowledged in this and the prior Housing Element that provision of very low income units is not likely without government subsidies. Moreover, in job centers, where housing is perhaps most needed yet there remain options for land uses other than housing, the added cost to market rate residential development makes such a conversion far less economically viable. Irvine Company, therefore, recommends the City reconsider the proposed increase and leave the requirement at its current level.*

*General Comments*:

- The second draft clearly addresses 100 percent affordable developments on public parcels. Furthermore, regarding Site 1 at the Marketplace, the document implies that 100 percent affordable projects can be acceptable on private sites, where a for-profit developer would likely partner with a non-profit developer to develop a separate parcel within a larger market-rate development. In allowing for 100 percent affordable development on City/government-owned sites, the City recognizes that this type of development and its accompanying ability to leverage state and federal tax credits can be an important and often necessary tool in the development of affordable housing. However, the document is not completely clear that 100 percent affordable projects will be allowed or potentially allowed to address the inclusionary requirements of market-rate development. Because of the ability to leverage critical governmental funding sources, *Irvine Company recommends that the City not foreclose this important tool as a means to effectively provide affordable housing in conjunction with all types of residential development.*

- In our discussions, you explained why affordable sites were identified in some areas, but not others. Specifically, in areas where residential uses are currently prohibited, no affordable sites were assumed. For example, while a significant number of new units are proposed for Planning Area 32, no affordable units are assumed in that area as residential units are not currently permitted at all within Planning Area 32. In that regard, it would be helpful to acknowledge somewhere in the Housing Element my understanding that to the extent housing for lower-income households is developed on sites not currently identified for affordable housing (e.g. with PA 32) those units would count towards satisfaction of the applicable RHNA income category and could otherwise potentially obviate the need for affordable housing at other sites identified in the Housing Element. Confirmation of my understanding of this important flexibility would be appreciated.

- Meeting the Housing Element's RHNA goals will be very difficult. As such, it is imperative that the Housing Element and its subsequent implementation include the maximum amount of flexibility and creative incentives beyond those currently offered by the City. These tools will be necessary to help offset the high cost of development of lower-income housing while at the same time not discouraging new housing development.

Again, thank you so much for your assistance and the opportunity for Irvine Company to review and comment on this critical long-term policy document. Irvine Company looks forward to the opportunity to continue working with the City to assist it in addressing its RHNA goals.

Sincerely,

Barry Curtis, AICP
Senior Director, Entitlement

cc: Peter Carmichael, Director of Community Development
Tim Gehrich, Deputy Director of Community Development

December 2, 2021

www.kennedycommission.org
17701 Cowan Ave., Suite 200
Irvine, CA 92614
949 250 0909

City of Irvine Planning Commission
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

**RE: Agenda Item 2. GENERAL PLAN - DRAFT 2021 - 2029 HOUSING ELEMENT UPDATE**

Dear Chair Jeff Pierson and Planning Commission Members:

The Kennedy Commission (the Commission) is a broad based coalition of residents and community organizations that advocates for the production of homes affordable for families earning less than $27,000 annually in Orange County. Formed in 2001, the Commission has been successful in partnering and working with Orange County jurisdictions to create effective housing and land-use policies that has led to the new construction of homes affordable to lower income working families.

We are writing today to ask that you ensure the City of Irvine includes in their 6th Cycle Housing Element policies and programs that will effectively produce affordable housing at the extremely low-, very low-, and low-income levels.

During the 5th Cycle Planning Period (2014-2021) the City approach to meeting its Regional Housing Needs Assessment allocation (RHNA) has not met housing needs in a balanced manner. In the current period, moderate and above moderate housing production has been greatly incentivized as compared to production at the lower income levels. For the 2014-2021 planning period, the City had a Regional Housing Needs Assessment (RHNA) of 2,817 very low- and 2,034 low-income units. To date, the City has built 1,149 of the 2,817 very low-income units and 37 of the 2,034 low- income units. At the moderate income level the city has greatly exceeded RHNA goals by approving 12,998 units at moderate and 16,825 units at above moderate. **The number of moderate and above moderate units approved in the last seven years was 25 times more than those at low and very low income.** This unbalanced housing production identifies that affordable housing policies need to be strengthened and updated to prioritize affordable housing development along with market rate housing.

The deficit of affordable housing in the City is unfortunate given that Irvine residents are in urgent need of housing at the lower income levels. According to SCAG's pre-certified housing data, there are a total of 50,263 renter households in Irvine, with 24,945 or 49.6% of those households spending thirty percent or more of gross income on housing costs. Additionally, 13,285 or 26.4% renter households are extremely rent burdened and are paying fifty percent or more of gross income on housing costs. The City of Irvine should take into account its local economy and offer healthy and affordable housing options that the current market-rate housing

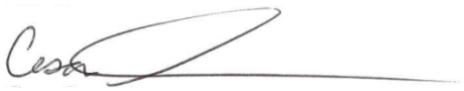
development is not offering. Considering that the City of Irvine is a large regional employment center and that its daytime population almost doubles during the typical work week, the City must recognize that affordable housing is needed to support the local business economy to have more people living in the city versus commuting from cities in Orange County and nearby counties.

To effectively produce housing at the extremely low-, very low-, and low-income levels, I recommend that the City:

1. Strengthen the existing Inclusionary Housing Ordinance with a 20% requirement of affordable housing production at the extremely low-, very low- and low-income categories.
2. Increase the affordable housing in-lieu fee to reflect current development costs.
3. Prioritize affordable housing funding and programs to increase affordable housing options for families of lower incomes, especially at very low and extremely low-income.
4. Identify city-owned sites and prioritize these sites for the development of 100% affordable housing in Irvine.
5. Ensure opportunity sites are not simply upzoned or rezoned without including affordable housing policies that will capture the financial and land use incentives being given to property owners and market rate developers. An Affordable Housing program is also needed.
6. Coordinate efforts with the Irvine Community Land Trust to increase extremely, very low- and low-income housing.
7. Incentivize residential uses in targeted retail centers in the City to create mixed use and maximize density around the Irvine Transportation Center and IBC for housing development. A minimum of 20% should be included for lower income households.
8. Update Density Bonus Law to prioritize affordable housing development for lower income households in rental developments.
9. Affirmatively Furthering Fair Housing – The City of Irvine should provide adequate recommendations on how the City will Affirmatively Further Fair Housing and promote the production of affordable housing in all communities of the city.

The Commission looks forward to partnering with the City of Irvine to create opportunities to increase affordable homes for lower income households in the City. If you have any questions, please feel free to contact me at (949) 250-0909 or cesarc@kennedycommission.org.

Sincerely,



Cesar Covarrubias
Executive Director

CC:
gpUpdate@cityofirvine.org
HousingElements@hcd.ca.gov

# 4. Draft IS/ND Public Comment Letters

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | Jo Ann Corey |
| **Subject:** | RE: IRWD Comment Letter - Irvine"s General Housing Element 2021-2029 Update Initial Study/Negative Declaration |
| **Date:** | Tuesday, December 7, 2021 11:08:46 AM |

Hi Jo Ann,

This email confirms receipt of this transmittal email and comment letter.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Jo Ann Corey <Corey@irwd.com>
**Sent:** Tuesday, December 7, 2021 8:47 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Subject:** IRWD Comment Letter - Irvine's General Housing Element 2021-2029 Update Initial Study/Negative Declaration
**Importance:** High

**CAUTION:** EXTERNAL EMAIL

Melissa,

On behalf of Irvine Ranch Water District (IRWD), please find the attached comment letter for the Initial Study/Negative Declaration (IS/ND) for the City of Irvine's General Plan Housing Element 2021-2029 Update. Please confirm receipt of this email and its attached comment letter.

IRWD appreciates the opportunity to review and comment on the draft IS/ND.

Regards,

**Jo Ann Corey, MPA**
**Environmental Compliance Analyst**
corey@irwd.com
949-453-5326 (direct)
949-636-1704 (mobile)
15600 Sand Canyon Avenue
Irvine, CA 92618

Irvine Ranch
WATER DISTRICT

December 7, 2021

Melissa Chao
Senior Planner
City of Irvine
Community Development Department
1 Civic Center Plaza
Irvine, CA 92606

**Via Email:**
mchao@cityofirvine.org

**Re: NOI – IS/ND General Plan Housing Element 2021-2029 Update**

Dear Ms. Chao:

Irvine Ranch Water District (IRWD) has received the City of Irvine's Notice of Intent (NOI) to prepare an Initial Study/Negative Declaration (IS/ND) for the City of Irvine General plan Housing Element 2021-2029 Update. IRWD has reviewed the draft IS/ND and offers the following comments.

The draft IS/ND correctly indicates that IRWD is the water purveyor for the City of Irvine. IRWD provides potable, and non-potable water supply, as well as sewage collection, treatment and disposal services for the City of Irvine. IRWD understands that the Housing Element Update (HUE) does not propose any development at this time. Future housing development facilitated by the HEU would be expected to connect to the existing domestic water supply system, sewer infrastructure and stormwater infrastructure. Any new residential development would be required to undergo separate environmental review, including an analysis of the water supply impacts. Overall, future housing development construction and operation would result in increased water, wastewater treatment, electric power, natural gas, and telecommunications demands and wastewater and solid waste generation, which would require the expansion or construction of utility infrastructure. Specific projects are unknown at this time and would require additional CEQA review.

In Section 2.4.19 Utilities and Service Systems, the draft IS/ND references the **2015** IRWD Urban Water Management Plan (UWMP). In accordance with the California Urban Water Management Planning Act and other applicable laws, IRWD, as an urban water supplier, is required to prepare and adopt a UWMP, which analyzes and projects IRWD's water supply reliability during normal, single dry, and multiple dry years over the next 20 years. The UWMP is updated every five years and submitted to the California Department of Water Resources. On June 28, 2021, IRWD's Board of Directors adopted IRWD's **2020** UWMP. IRWD requests that the draft IS/ND be revised to reference IRWD's **2020** UWMP. A copy of IRWD's 2020 UWMP can be obtained from IRWD's website at the following location: https://www.irwd.com/doing-business/urban-water-management-plan.

IRWD appreciates the opportunity to review and comment on this draft NOI/ND. IRWD looks forward to reviewing all future CEQA documents, which pertain to any new residential developments in the City of Irvine, as they become available. If you have any questions or require additional information, please contact the undersigned at (949) 453-5325 or Jo Ann Corey, Environmental Compliance Analyst at (949) 453-5326.

Sincerely,

Fiona M. Sanchez
Director of Water Resources

cc: Jo Ann Corey, IRWD

| | |
|---|---|
| **From:** | IGR – Intergovernmental Review |
| **To:** | Melissa Chao |
| **Cc:** | Anita Au; Frank Wen; Jessica Guillen |
| **Subject:** | SCAG Comments on the IS/ND for the City of Irvine General Plan Housing Element 2021-2029 Update [SCAG NO. IGR10521] |
| **Date:** | Tuesday, December 14, 2021 8:11:28 AM |
| **Attachments:** | image001.png<br>image002.png<br>image003.png<br>image004.png<br>IGR10521 ND City of Irvine General Plan Housing Element 2021-2029 Update.pdf |

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**CAUTION:** EXTERNAL EMAIL

Good morning Melissa,

Please find attached SCAG Comments on the Initial Study/Negative Declaration for the City of Irvine General Plan Housing Element 2021-2029 Update [SCAG NO. IGR10521].

Please contact me at (213) 630-1427 or IGR@scag.ca.gov if you have any questions or difficulties with the attached file.

***In light of the coronavirus and other public health concerns, please be advised that a majority of SCAG staff are teleworking with limited access to the SCAG offices. Therefore, if you wish to submit documents for IGR review, please submit it online via the IGR webpage or via email to IGR@scag.ca.gov.***

Thank you!

SCAG
INNOVATING FOR A BETTER TOMORROW

**Intergovernmental Review (IGR) Program**
Annaleigh Ekman (she/her), Assistant Regional Planner
Tel: (213) 630-1427
IGR@scag.ca.gov

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David Pollock, Moorpark

Transportation
Sean Ashton, Downey

**December 14, 2021**

Ms. Melissa Chao, Senior Planner
City of Irvine, Community Development Department
1 Civic Center
Irvine, California 92606
Phone: (949) 724-6395
E-mail: mchao@cityofirvine.org

**RE: SCAG Comments on the Initial Study/Negative Declaration for the City of Irvine General Plan Housing Element 2021-2029 Update [SCAG NO. IGR10521]**

Dear Ms. Chao,

Thank you for submitting the Notice of Intent to Adopt a Negative Declaration for the City of Irvine General Plan Housing Element 2021-2029 Update ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. The proposed project consists of the Housing Element Update for the 2021-2029 planning cycle, which includes a comprehensive analysis of the community's current and future housing needs.

Based on SCAG staff's review, the Initial Study/Negative Declaration (IS/ND) does not reference the most recently adopted 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). SCAG staff comments are detailed in the attachment to this letter.

When available, please send project related documents and notices to IGR@scag.ca.gov. If you have any questions regarding the attached comments, please contact the Intergovernmental Review (IGR) Program, attn.: Anita Au, Senior Regional Planner, at (213) 236-1874 or IGR@scag.ca.gov. Thank you.

Sincerely,

Frank Wen, Ph.D.
Manager, Planning Strategy Department

**COMMENTS ON THE NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION FOR THE CITY OF IRVINE GENERAL PLAN HOUSING ELEMENT 2021-2029 UPDATE [SCAG NO. IGR10521]**

## SUMMARY

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies.

Based on SCAG staff review, the IS/ND does not reference the most recently adopted 2020 Connect SoCal. SCAG staff recommends including references to Connect SoCal as described in the following sections.

## CONNECT SOCAL GOALS

The SCAG Regional Council fully adopted Connect SoCal in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

| SCAG CONNECT SOCAL GOALS | |
|---|---|
| Goal #1: | *Encourage regional economic prosperity and global competitiveness* |
| Goal #2: | *Improve mobility, accessibility, reliability and travel safety for people and goods* |
| Goal #3: | *Enhance the preservation, security, and resilience of the regional transportation system* |
| Goal #4: | *Increase person and goods movement and travel choices within the transportation system* |
| Goal #5: | *Reduce greenhouse gas emissions and improve air quality* |
| Goal #6: | *Support healthy and equitable communities* |
| Goal #7: | *Adapt to a changing climate and support an integrated regional development pattern and transportation network* |
| Goal #8: | *Leverage new transportation technologies and data-driven solutions that result in more efficient travel* |
| Goal #9: | *Encourage development of diverse housing types in areas that are supported by multiple transportation options* |
| Goal #10: | *Promote conservation of natural and agricultural lands and restoration of habitats* |

**Connect SoCal Strategies**

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. Of particular note are multiple strategies included in Chapter 3 of Connect SoCal intended to support implementation of the regional Sustainable Communities Strategy (SCS) framed within the context of focusing growth near destinations and mobility options; promoting diverse housing choices; leveraging technology innovations; supporting implementation of sustainability policies; and promoting a Green Region. To view Connect SoCal and the accompanying technical reports, please visit the Connect SoCal webpage. Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

***SCAG Staff Comments***

*SCAG staff recommends that you review 2020 Connect SoCal and consider its adopted goals and policies when finalizing the proposed project.*

**DEMOGRAPHICS AND GROWTH FORECASTS**

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG's 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California's GHG reduction target, approved by the California Air Resources Board (CARB) in accordance with state planning law. Connect SoCal's Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the Connect SoCal Demographics and Growth Forecast Technical Report. The growth forecasts for the region and applicable jurisdictions are below.

| | Adopted SCAG Region Wide Forecasts | | | | Adopted City of Irvine Forecasts | | | |
|---|---|---|---|---|---|---|---|---|
| | **Year 2020** | **Year 2030** | **Year 2035** | **Year 2045** | **Year 2020** | **Year 2030** | **Year 2035** | **Year 2045** |
| Population | 19,517,731 | 20,821,171 | 21,443,006 | 22,503,899 | 281,534 | 309,759 | 316,609 | 327,664 |
| Households | 6,333,458 | 6,902,821 | 7,170,110 | 7,633,451 | 103,382 | 112,404 | 115,305 | 121,739 |
| Employment | 8,695,427 | 9,303,627 | 9,566,384 | 10,048,822 | 282,215 | 312,288 | 322,674 | 330,170 |

***SCAG Staff Comments***

*SCAG staff recommends including a reference to the population, housing, and employment trends and forecasts based on the most recently adopted SCAG 2020 Connect SoCal Regional Growth Forecasts to recognize the city's planned growth.*

**REGIONAL HOUSING NEEDS ALLOCATION**

On March 4, 2021 SCAG's Regional Council adopted the 6th cycle Final Regional Housing Needs Assessment (RHNA) Allocation Plan which covers the planning period October 2021 through October 2029. The 6th cycle Final RHNA allocation for the applicable jurisdiction is below.

| SCAG 6th Cycle Final RHNA Allocation for City of Irvine | |
|---|---|
| **Income Category** | **RHNA Allocation (Units)** |
| Very low income | 6,396 |
| Low income | 4,235 |
| Moderate income | 4,308 |
| Above moderate income | 8,671 |
| Total RHNA Allocation | 23,610 |

Sixth cycle housing elements were due to the California Department of Housing and Community Development (HCD) by October 15, 2021. SCAG encourages jurisdictions to adopt a housing element in compliance with State housing law as determined by review from HCD. Jurisdictions that do not have an adopted compliant housing element may be ineligible for certain State funding and grant opportunities and may be at risk for legal action from stakeholders or HCD.

SCAG staff would like to call your attention to SCAG's HELPR 2.0, a web-mapping tool developed by SCAG to help local jurisdictions and stakeholders understand local land use, site opportunities, and environmental sensitivities for aligning housing planning with the state Department of Housing and Community Development's (HCD) 6th cycle housing element requirements.

***SCAG Staff Comments***

*Table 1. Irvine 6th Cycle Regional Housing Needs Assessment Allocation by Household Income 2021-2029 on page 4 of the IS/ND includes the correct Final RHNA Allocation numbers.*

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | Kelvin Okino |
| **Cc:** | John Fogarty; Jesse Barron |
| **Subject:** | RE: Response to NOI to Adopt an Initial Study/Negative Declaration Housing Element 2021-2029 |
| **Date:** | Wednesday, December 15, 2021 9:24:23 AM |
| **Attachments:** | image001.png |

Hi Kelvin,

Thank you for the comment letter.

After Housing Element adoption, we look forward to working with IUSD on the subsequent General Plan Update, Zoning Ordinance Amendment, and EIR work effort.

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Kelvin Okino <KelvinOkino@iusd.org>
**Sent:** Wednesday, December 15, 2021 8:44 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** John Fogarty <JohnFogarty@iusd.org>; Jesse Barron <JesseBarron@iusd.org>
**Subject:** Response to NOI to Adopt an Initial Study/Negative Declaration Housing Element 2021-2029

**CAUTION:** EXTERNAL EMAIL

Good Morning Melissa:

Please see our response to the General Plan Housing Element 2021-2029 Update. If you have any questions, please contact me.

Kelvin Okino
Executive Director, Facilities Planning and Construction | Irvine Unified School District
949-936-5305 | kelvinokino@iusd.org | 2015 Roosevelt | Irvine, CA 92620 | iusd.org



December 15, 2021 VIA EMAIL: mchao@cityofirvine.org

City of Irvine
ATT: Melissa Chao, Senior Planner
1 Civic Center Plaza
Irvine, CA 92606

Subject: City of Irvine General Plan Housing Element 2021-2029 Update Notice of Intent to Adopt an Initial Study/Negative Declaration

Thank you for the opportunity to review and comment on the City of Irvine 2021-2029 Housing Element. The City of Irvine is within the Irvine Unified School District (IUSD) boundaries; however, a portion of the City also lies within the Tustin and Santa Ana Unified School Districts.

The Draft 2021-2029 Housing Element includes provisions to accommodate 25,722 new housing units (including a 2,112-unit surplus over the State-allocated number of 23,610 units) at all income levels within current zoning code. In compliance with State law, the City must identify adequate sites with appropriate density and development standards to accommodate these units. It is our understanding that the City believes that CEQA review has been completed for these sites. In addition, the HEU identifies additional sites that would require rezoning before they can be developed. The sites, if rezoned, could accommodate an additional 31,934 dwelling units.

Moreover, it is our understanding that given that the proposed Housing Element does not include the necessary amendments to the City's Zoning Code and General Plan elements that allow for future housing development, no actual development on these potential sites could occur and result in environmental impacts, including impacts to schools. We assume that after the State certifies the 2021-2029 Housing Element, a separate environmental study will be prepared to address the regulatory changes described above.

We respectfully request that this subsequent environmental study include an analysis of the proposed project's impacts on IUSD's school facilities. Please continue to notify us of all actions on the 2021-2029 Housing Element and other resulting development projects provide us with the opportunity to review future environmental documents.

We look forward to working cooperatively with the City to create the best environment for our students and staff. If you have any questions, please contact me at (949) 936-5305 or kelvinokino@iusd.org.

Sincerely,

Kelvin K. Okino
Executive Director, Facilities and Construction

cc: John Fogarty, Irvine USD
Jesse Barron, Irvine USD

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | Choum, Lea [JWA] |
| **Cc:** | Mailbox, ALUC; Fitch, Julie [JWA] |
| **Subject:** | RE: ALUC comments on IS ND |
| **Date:** | Wednesday, December 15, 2021 12:40:00 PM |
| **Attachments:** | image001.png |

Hi Lea,

This email confirms receipt of the comment letter.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Choum, Lea [JWA] <LChoum@ocair.com>
**Sent:** Wednesday, December 15, 2021 11:49 AM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Mailbox, ALUC <alucinfo@ocair.com>; Fitch, Julie [JWA] <JFitch@ocair.com>
**Subject:** ALUC comments on IS ND

**CAUTION:** EXTERNAL EMAIL

Hello Melissa,

Attached are ALUC comments on the IS ND for the Housing Element Update.

Thank you,
Lea

**Lea U Choum** | Planning Manager
*John Wayne Airport, Orange County*
3160 Airway Avenue | Costa Mesa, CA 92626
**O** 949.252.5123 **C** 949.351.8947
ocair.com Facebook Twitter

JOHN WAYNE AIRPORT
ORANGE COUNTY

AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY
3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

December 15, 2021

Melissa Chao, Senior Planner
City of Irvine, Community Development Department
1 Civic Center Plaza
Irvine, CA 92606

**Subject:** City of Irvine IS/ND for Proposed General Plan 6th Cycle Housing Element 2021-2029 Update

Dear Ms. Chao:

Thank you for the opportunity to review the Initial Study/Negative Declaration (IS/ND), prepared in accordance with the California Environmental Quality Act (CEQA), for the City of Irvine Housing Element Update 2021–2029 (Update). In the context of the Airport Environs Land Use Plan for John Wayne Airport *(AELUP for JWA)*, the Airport Land Use Commission for Orange County (ALUC) offers the following comments and respectfully requests consideration of these comments prior to City action on the proposed Negative Declaration and Housing Element Update.

The Housing Element, as part of the Irvine General Plan, establishes housing-related actionable programs intended to guide decision-making related to land use planning and development activities for this planning period in accordance with the City's stated housing goals and state law.

Portions of the City of Irvine fall within the 60 and 65 dB CNEL noise contours for JWA including sections of the Irvine Business Complex (Planning Area 36) located to the north and west of the Airport. ALUC does not support residential uses within the 65 dB CNEL contour. In accordance with the *AELUP for JWA* Section 3.2.3, all residential units within the 65 dB CNEL contour are inconsistent in this area unless it can be shown conclusively that such units are sufficiently sound attenuated for present and projected noise exposure so as not to exceed an interior standard of 45 dB CNEL. As for residential development within the 60 dB CNEL contour, the ALUC may not find residential units incompatible in this area but would strongly recommend that residential units be limited or excluded from this area unless sufficiently sound attenuated not to exceed an interior level of 45 db.

The City's IS/ND for the proposed Update project has found that no adverse environmental impacts to either the human-made or physical environmental setting would occur, and no mitigation measures would be required. However, as part of our ALUC review, we have noted areas that have not been addressed in the IS/ND prepared for the proposed Update, as follows:

1. Update, Section 5.3.3.7 states, "Please note that the 5.2 IBC Industrial area is subject to a 35-foot maximum height, but there are no sites in this portion of the IBC, (and no units are planned in the 5.2 zone)." However, Figure 7-1, Area B1, shows a small area at the north end of the Airport on Red Hill Avenue within an industrial area that is shaded, and the corresponding legend shows "No Project Type Designation." It is unclear if this designation allows for a future project type to be designated or not. An explanation should be included that clarifies the intent of this small area and specifically states that this area is under the JWA primary aircraft approach corridor, within the 65 dB CNEL and within Safety Zone 5, as identified in the AELUP for JWA. The IS/ND for the Update should make clear that, in the future, this site will not be considered for any type of housing development due to aircraft noise and safety impacts.

2. Figure 7-1, Area C-1 on the western edge of JWA shows a portion shaded in light brown adjacent to MacArthur Blvd. that is labeled "Affordable Housing." (This area appears to include Sites 76, 78 and 82 noted in the Update Chapter 7 *Adequate Sites Inventory Analysis and Methodology* table.) However, the City of Irvine General Plan IBC Element (Supplement No. 8, June 2012), Page N-12, states that "The Business Complex District is applied to portions of the IBC characterized by existing longstanding office and industrial uses that are expected to remain. This District accommodates new industrial uses and an expansion of existing uses. Residential uses are not permitted in this area. [Underlining added.] The land use types and standards allowed in the district are determined by the base zoning designation." This "Business Complex District" along MacArthur Boulevard is also shown on the City's General Plan IBC Element Figure N-3. Additionally, please note that this area is immediately adjacent to, but outside the 65 dB CNEL noise contour for JWA, and within the 60 dB CNEL contour. The IS/ND should address the conflict between the proposed Update and the IBC Element. (IS/ND Checklist question 2.4.11 b (*Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*))

3. Because of the IBC proximity to airport noise, any prospective resident should be notified of the presence of aircraft overflight. We recommend that the IS/ND include reference to where in the City's General Plan or Zoning Code this notification requirement can be found, since the Housing Element is the primary

General Plan document for regulating new residential development in the City, and specifically within the IBC and Planning Area 36.

4. Generally, it seems that there would be potential CEQA impacts if sites that have not previously been identified for residential housing uses will now be designated as such. This is especially true for areas that may be affected by airport noise and safety requirements and should be addressed in the IS/ND.

5. Pease clarify in the IS/ND that any future land use amendments and zone changes within the Airport Influence Area of JWA would be subject to ALUC review.

A referral by the City to the ALUC is required for this project due to the location of the proposal within an AELUP Planning Area and due to the nature of the required City approvals (i.e. Housing Element Update) under PUC Section 21676(b). With respect to project submittals, please note that the Commission requests that referrals be submitted to the ALUC for a determination between the Local Agency's Planning Commission and City Council hearings. Since the ALUC meets on the third Thursday afternoon of each month, complete submittals must be received in the ALUC office by the first of the month to ensure sufficient time for review, analysis, and agendizing. A Housing Element Submittal form is available at:

https://www.ocair.com/about/administration/airport-governance/commissions/airport-land-use-commission/

Thank you for the opportunity to comment on this Draft Initial Study/Negative Declaration. Please contact Julie Fitch at (949) 252-5284 or via email at jfitch@ocair.com should you require additional information.

Sincerely,

Lea U. Choum

Lea U. Choum
Executive Officer

| | |
|---|---|
| **From:** | Melissa Chao |
| **To:** | Brandon Young |
| **Cc:** | Mitchell Tsai; Greg Sonstein; Hind Baki; Rebekah Youngblood; Melissa Chao |
| **Subject:** | RE: SWRCC - [City of Irvine, 6th Cycle Housing Element Update] - IS/MND Comment Letter |
| **Date:** | Wednesday, December 15, 2021 5:06:26 PM |

Hi Brandon,

This email confirms receipt of the email transmittal and attached comment letter.

Thank you,

**MELISSA CHAO | SENIOR PLANNER**
P 949-724-6395 I F 949-724-6440
mchao@cityofirvine.org

**From:** Brandon Young <brandon@mitchtsailaw.com>
**Sent:** Wednesday, December 15, 2021 4:35 PM
**To:** Melissa Chao <MChao@cityofirvine.org>
**Cc:** Mitchell Tsai <mitch@mitchtsailaw.com>; Greg Sonstein <greg@mitchtsailaw.com>; Hind Baki <hind@mitchtsailaw.com>; Rebekah Youngblood <rebekah@mitchtsailaw.com>
**Subject:** SWRCC - [City of Irvine, 6th Cycle Housing Element Update] - IS/MND Comment Letter

**CAUTION:** EXTERNAL EMAIL

Dear Ms. Chao,

Please see the attached comment letter on City of Irvine's Initial Study / Mitigated Negative Declaration for the above referenced Project and confirm receipt of this email and its attachment.

Thank you,

**Brandon Young**
Office Manager
Mitchell M. Tsai, Attorney At Law
139 South Hudson Avenue, Suite 200
Pasadena, CA 91101
Office: (626) 381-9248
Fax: (626) 389-5414
Email: brandon@mitchtsailaw.com
Website: http://www.mitchtsailaw.com

*** Our Office Has Recently Moved. Please Note New Mailing Address ****

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**VIA E-MAIL**

December 15, 2021

Melinda Chao
Senior Planner
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606
Em: mchao@cityofirvine.org

RE: GENERAL PLAN - DRAFT 2021 - 2029 HOUSING ELEMENT UPDATE – Initial Study/Mitigated Negative Declaration

Dear Melissa Chao,

On behalf of the Southwest Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWRCC**"), my Office is submitting these comments on the City of Irvine's ("**City**" or "**Lead Agency**") Initial Study/Mitigated Declaration for the 2021-2029 update to the City's General Plan Housing Element ("**Project**").

The Southwest Carpenters is a labor union representing more than 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

SWRCC expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City*

*of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected to the Project's environmental documentation may assert any issue timely raised by other parties).

Moreover, SWRCC requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

The City should require the use of a local skilled and trained workforce to benefit the community's economic development and environment. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

> . . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Local skilled and trained workforce requirements and policies have significant environmental benefits since they improve an area's jobs-housing balance, decreasing the amount of and length of job commutes and their associated greenhouse gas emissions. Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing." The city's First Source program encourages businesses to hire local residents,

[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.

[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

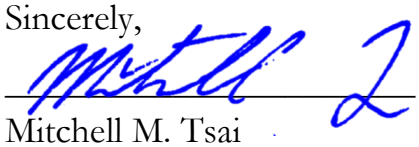
[6] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

[7] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

> especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

Sincerely,



Mitchell M. Tsai
Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

# EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

## Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

## Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Minimum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

## Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 3,623 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized Construction GHG Emissions (MT $CO_2e$/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

## Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

| Location Type | Location Name | Rural H-W (miles) | Urban H-W (miles) |
|---|---|---|---|
| Air Basin | Great Basin | 16.8 | 10.8 |
| Air Basin | Lake County | 16.8 | 10.8 |
| Air Basin | Lake Tahoe | 16.8 | 10.8 |
| Air Basin | Mojave Desert | 16.8 | 10.8 |
| Air Basin | Mountain | 16.8 | 10.8 |
| Air Basin | North Central | 17.1 | 12.3 |
| Air Basin | North Coast | 16.8 | 10.8 |
| Air Basin | Northeast | 16.8 | 10.8 |
| Air Basin | Sacramento | 16.8 | 10.8 |
| Air Basin | Salton Sea | 14.6 | 11 |
| Air Basin | San Diego | 16.8 | 10.8 |
| Air Basin | San Francisco | 10.8 | 10.8 |
| Air Basin | San Joaquin | 16.8 | 10.8 |
| Air Basin | South Central | 16.8 | 10.8 |
| Air Basin | South Coast | 19.8 | 14.7 |
| Air District | Amador County | 16.8 | 10.8 |
| Air District | Antelope Valley | 16.8 | 10.8 |
| Air District | Bay Area AQMD | 10.8 | 10.8 |
| Air District | Butte County | 12.54 | 12.54 |
| Air District | Calaveras | 16.8 | 10.8 |
| Air District | Colusa County | 16.8 | 10.8 |
| Air District | El Dorado | 16.8 | 10.8 |
| Air District | Feather River | 16.8 | 10.8 |
| Air District | Glenn County | 16.8 | 10.8 |
| Air District | Great Basin | 16.8 | 10.8 |
| Air District | Imperial County | 10.2 | 7.3 |
| Air District | Kern County | 16.8 | 10.8 |
| Air District | Lake County | 16.8 | 10.8 |
| Air District | Lassen County | 16.8 | 10.8 |
| Air District | Mariposa | 16.8 | 10.8 |
| Air District | Mendocino | 16.8 | 10.8 |
| Air District | Modoc County | 16.8 | 10.8 |
| Air District | Mojave Desert | 16.8 | 10.8 |
| Air District | Monterey Bay | 16.8 | 10.8 |
| Air District | North Coast | 16.8 | 10.8 |
| Air District | Northern Sierra | 16.8 | 10.8 |
| Air District | Northern | 16.8 | 10.8 |
| Air District | Placer County | 16.8 | 10.8 |
| Air District | Sacramento | 15 | 10 |

| | | | |
|---|---|---|---|
| Air District | San Diego | 16.8 | 10.8 |
| Air District | San Joaquin | 16.8 | 10.8 |
| Air District | San Luis Obispo | 13 | 13 |
| Air District | Santa Barbara | 8.3 | 8.3 |
| Air District | Shasta County | 16.8 | 10.8 |
| Air District | Siskiyou County | 16.8 | 10.8 |
| Air District | South Coast | 19.8 | 14.7 |
| Air District | Tehama County | 16.8 | 10.8 |
| Air District | Tuolumne | 16.8 | 10.8 |
| Air District | Ventura County | 16.8 | 10.8 |
| Air District | Yolo/Solano | 15 | 10 |
| County | Alameda | 10.8 | 10.8 |
| County | Alpine | 16.8 | 10.8 |
| County | Amador | 16.8 | 10.8 |
| County | Butte | 12.54 | 12.54 |
| County | Calaveras | 16.8 | 10.8 |
| County | Colusa | 16.8 | 10.8 |
| County | Contra Costa | 10.8 | 10.8 |
| County | Del Norte | 16.8 | 10.8 |
| County | El Dorado-Lake | 16.8 | 10.8 |
| County | El Dorado- | 16.8 | 10.8 |
| County | Fresno | 16.8 | 10.8 |
| County | Glenn | 16.8 | 10.8 |
| County | Humboldt | 16.8 | 10.8 |
| County | Imperial | 10.2 | 7.3 |
| County | Inyo | 16.8 | 10.8 |
| County | Kern-Mojave | 16.8 | 10.8 |
| County | Kern-San | 16.8 | 10.8 |
| County | Kings | 16.8 | 10.8 |
| County | Lake | 16.8 | 10.8 |
| County | Lassen | 16.8 | 10.8 |
| County | Los Angeles- | 16.8 | 10.8 |
| County | Los Angeles- | 19.8 | 14.7 |
| County | Madera | 16.8 | 10.8 |
| County | Marin | 10.8 | 10.8 |
| County | Mariposa | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Mendocino- | 16.8 | 10.8 |
| County | Merced | 16.8 | 10.8 |
| County | Modoc | 16.8 | 10.8 |
| County | Mono | 16.8 | 10.8 |
| County | Monterey | 16.8 | 10.8 |
| County | Napa | 10.8 | 10.8 |

| | | | |
|---|---|---|---|
| County | Nevada | 16.8 | 10.8 |
| County | Orange | 19.8 | 14.7 |
| County | Placer-Lake | 16.8 | 10.8 |
| County | Placer-Mountain | 16.8 | 10.8 |
| County | Placer- | 16.8 | 10.8 |
| County | Plumas | 16.8 | 10.8 |
| County | Riverside- | 16.8 | 10.8 |
| County | Riverside- | 19.8 | 14.7 |
| County | Riverside-Salton | 14.6 | 11 |
| County | Riverside-South | 19.8 | 14.7 |
| County | Sacramento | 15 | 10 |
| County | San Benito | 16.8 | 10.8 |
| County | San Bernardino- | 16.8 | 10.8 |
| County | San Bernardino- | 19.8 | 14.7 |
| County | San Diego | 16.8 | 10.8 |
| County | San Francisco | 10.8 | 10.8 |
| County | San Joaquin | 16.8 | 10.8 |
| County | San Luis Obispo | 13 | 13 |
| County | San Mateo | 10.8 | 10.8 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Barbara- | 8.3 | 8.3 |
| County | Santa Clara | 10.8 | 10.8 |
| County | Santa Cruz | 16.8 | 10.8 |
| County | Shasta | 16.8 | 10.8 |
| County | Sierra | 16.8 | 10.8 |
| County | Siskiyou | 16.8 | 10.8 |
| County | Solano- | 15 | 10 |
| County | Solano-San | 16.8 | 10.8 |
| County | Sonoma-North | 16.8 | 10.8 |
| County | Sonoma-San | 10.8 | 10.8 |
| County | Stanislaus | 16.8 | 10.8 |
| County | Sutter | 16.8 | 10.8 |
| County | Tehama | 16.8 | 10.8 |
| County | Trinity | 16.8 | 10.8 |
| County | Tulare | 16.8 | 10.8 |
| County | Tuolumne | 16.8 | 10.8 |
| County | Ventura | 16.8 | 10.8 |
| County | Yolo | 15 | 10 |
| County | Yuba | 16.8 | 10.8 |
| Statewide | Statewide | 16.8 | 10.8 |

| Worker Trip Length by Air Basin | | |
|---|---|---|
| **Air Basin** | **Rural (miles)** | **Urban (miles)** |
| Great Basin Valleys | 16.8 | 10.8 |
| Lake County | 16.8 | 10.8 |
| Lake Tahoe | 16.8 | 10.8 |
| Mojave Desert | 16.8 | 10.8 |
| Mountain Counties | 16.8 | 10.8 |
| North Central Coast | 17.1 | 12.3 |
| North Coast | 16.8 | 10.8 |
| Northeast Plateau | 16.8 | 10.8 |
| Sacramento Valley | 16.8 | 10.8 |
| Salton Sea | 14.6 | 11 |
| San Diego | 16.8 | 10.8 |
| San Francisco Bay Area | 10.8 | 10.8 |
| San Joaquin Valley | 16.8 | 10.8 |
| South Central Coast | 16.8 | 10.8 |
| South Coast | 19.8 | 14.7 |
| **Average** | **16.47** | **11.17** |
| **Mininum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1969 | 213.1969 | 0.0601 | 0.0000 | 214.6993 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6826 | 1,721.6826 | 0.1294 | 0.0000 | 1,724.9187 |
| 2023 | 0.6148 | 3.3649 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5295 | 1,627.5295 | 0.1185 | 0.0000 | 1,630.4925 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9078 | 52.9078 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6826** | **1,721.6826** | **0.1294** | **0.0000** | **1,724.9187** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1967 | 213.1967 | 0.0601 | 0.0000 | 214.6991 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6823 | 1,721.6823 | 0.1294 | 0.0000 | 1,724.9183 |
| 2023 | 0.6148 | 3.3648 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5291 | 1,627.5291 | 0.1185 | 0.0000 | 1,630.4921 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9077 | 52.9077 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6823** | **1,721.6823** | **0.1294** | **0.0000** | **1,724.9183** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 9-1-2021 | 11-30-2021 | 1.4103 | 1.4103 |
| 2 | 12-1-2021 | 2-28-2022 | 1.3613 | 1.3613 |
| 3 | 3-1-2022 | 5-31-2022 | 1.1985 | 1.1985 |
| 4 | 6-1-2022 | 8-31-2022 | 1.1921 | 1.1921 |
| 5 | 9-1-2022 | 11-30-2022 | 1.1918 | 1.1918 |
| 6 | 12-1-2022 | 2-28-2023 | 1.0774 | 1.0774 |
| 7 | 3-1-2023 | 5-31-2023 | 1.0320 | 1.0320 |
| 8 | 6-1-2023 | 8-31-2023 | 1.0260 | 1.0260 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 1.0265 | 1.0265 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8857 | 2.8857 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6207 | 1.6207 |
| | | **Highest** | 2.8857 | 2.8857 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.7000e-004 | 6.0000e-004 | 6.8100e-003 | 2.0000e-005 | 1.9700e-003 | 2.0000e-005 | 1.9900e-003 | 5.2000e-004 | 1.0000e-005 | 5.4000e-004 | 0.0000 | 1.7801 | 1.7801 | 5.0000e-005 | 0.0000 | 1.7814 |
| **Total** | **7.7000e-004** | **6.0000e-004** | **6.8100e-003** | **2.0000e-005** | **1.9700e-003** | **2.0000e-005** | **1.9900e-003** | **5.2000e-004** | **1.0000e-005** | **5.4000e-004** | **0.0000** | **1.7801** | **1.7801** | **5.0000e-005** | **0.0000** | **1.7814** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6400e-003 | 1.2700e-003 | 0.0144 | 4.0000e-005 | 4.1600e-003 | 3.0000e-005 | 4.2000e-003 | 1.1100e-003 | 3.0000e-005 | 1.1400e-003 | 0.0000 | 3.7579 | 3.7579 | 1.1000e-004 | 0.0000 | 3.7607 |
| **Total** | **1.6400e-003** | **1.2700e-003** | **0.0144** | **4.0000e-005** | **4.1600e-003** | **3.0000e-005** | **4.2000e-003** | **1.1100e-003** | **3.0000e-005** | **1.1400e-003** | **0.0000** | **3.7579** | **3.7579** | **1.1000e-004** | **0.0000** | **3.7607** |

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 2.1000e-004 | 2.4400e-003 | 1.0000e-005 | 7.7000e-004 | 1.0000e-005 | 7.7000e-004 | 2.0000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.6679 | 0.6679 | 2.0000e-005 | 0.0000 | 0.6684 |
| **Total** | **2.8000e-004** | **2.1000e-004** | **2.4400e-003** | **1.0000e-005** | **7.7000e-004** | **1.0000e-005** | **7.7000e-004** | **2.0000e-004** | **1.0000e-005** | **2.1000e-004** | **0.0000** | **0.6679** | **0.6679** | **2.0000e-005** | **0.0000** | **0.6684** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.4088 | 0.3066 | 3.5305 | 0.0107 | 1.1103 | 8.8700e-003 | 1.1192 | 0.2949 | 8.1700e-003 | 0.3031 | 0.0000 | 966.8117 | 966.8117 | 0.0266 | 0.0000 | 967.4773 |
| **Total** | **0.4616** | **2.0027** | **3.9885** | **0.0152** | **1.2243** | **0.0121** | **1.2363** | **0.3278** | **0.0112** | **0.3390** | **0.0000** | **1,408.7952** | **1,408.7952** | **0.0530** | **0.0000** | **1,410.1208** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.7000e-004 | 3.1200e-003 | 1.0000e-005 | 1.0700e-003 | 1.0000e-005 | 1.0800e-003 | 2.8000e-004 | 1.0000e-005 | 2.9000e-004 | 0.0000 | 0.8963 | 0.8963 | 2.0000e-005 | 0.0000 | 0.8968 |
| **Total** | **3.7000e-004** | **2.7000e-004** | **3.1200e-003** | **1.0000e-005** | **1.0700e-003** | **1.0000e-005** | **1.0800e-003** | **2.8000e-004** | **1.0000e-005** | **2.9000e-004** | **0.0000** | **0.8963** | **0.8963** | **2.0000e-005** | **0.0000** | **0.8968** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.9000e-004 | 4.1000e-004 | 4.9200e-003 | 2.0000e-005 | 1.8100e-003 | 1.0000e-005 | 1.8200e-003 | 4.8000e-004 | 1.0000e-005 | 4.9000e-004 | 0.0000 | 1.4697 | 1.4697 | 4.0000e-005 | 0.0000 | 1.4706 |
| **Total** | **5.9000e-004** | **4.1000e-004** | **4.9200e-003** | **2.0000e-005** | **1.8100e-003** | **1.0000e-005** | **1.8200e-003** | **4.8000e-004** | **1.0000e-005** | **4.9000e-004** | **0.0000** | **1.4697** | **1.4697** | **4.0000e-005** | **0.0000** | **1.4706** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0101 | 6.9900e-003 | 0.0835 | 2.8000e-004 | 0.0307 | 2.3000e-004 | 0.0309 | 8.1500e-003 | 2.2000e-004 | 8.3700e-003 | 0.0000 | 24.9407 | 24.9407 | 6.1000e-004 | 0.0000 | 24.9558 |
| **Total** | **0.0101** | **6.9900e-003** | **0.0835** | **2.8000e-004** | **0.0307** | **2.3000e-004** | **0.0309** | **8.1500e-003** | **2.2000e-004** | **8.3700e-003** | **0.0000** | **24.9407** | **24.9407** | **6.1000e-004** | **0.0000** | **24.9558** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

### 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1521 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1520 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| **Total** | **0.0772** | **0.0530** | **0.7250** | **2.0600e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **204.9786** | **204.9786** | **6.0400e-003** | | **205.1296** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0857 | 0.0589 | 0.8056 | 2.2900e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 227.7540 | 227.7540 | 6.7100e-003 | | 227.9217 |
| **Total** | **0.0857** | **0.0589** | **0.8056** | **2.2900e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **227.7540** | **227.7540** | **6.7100e-003** | | **227.9217** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0803 | 0.0532 | 0.7432 | 2.2100e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 219.7425 | 219.7425 | 6.0600e-003 | | 219.8941 |
| **Total** | **0.0803** | **0.0532** | **0.7432** | **2.2100e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **219.7425** | **219.7425** | **6.0600e-003** | | **219.8941** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0566 | 0.0361 | 0.5133 | 1.5900e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 158.7723 | 158.7723 | 4.1000e-003 | | 158.8748 |
| **Total** | **0.0566** | **0.0361** | **0.5133** | **1.5900e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **158.7723** | **158.7723** | **4.1000e-003** | | **158.8748** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0535 | 0.0329 | 0.4785 | 1.5400e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 153.8517 | 153.8517 | 3.7600e-003 | | 153.9458 |
| **Total** | **0.0535** | **0.0329** | **0.4785** | **1.5400e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **153.8517** | **153.8517** | **3.7600e-003** | | **153.9458** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2865 | 46.4651 | 31.6150 | 0.0642 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,221.4937 | 6,221.4937 | 1.9491 | 0.0000 | 6,270.2214 |
| 2022 | 5.7218 | 38.9024 | 47.3319 | 0.1455 | 9.8688 | 1.6366 | 10.7736 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 14,630.3099 | 14,630.3099 | 1.9499 | 0.0000 | 14,657.2663 |
| 2023 | 5.2705 | 26.4914 | 44.5936 | 0.1413 | 9.8688 | 0.7800 | 10.6488 | 2.6381 | 0.7328 | 3.3708 | 0.0000 | 14,210.3424 | 14,210.3424 | 1.0230 | 0.0000 | 14,235.9160 |
| 2024 | 237.2328 | 9.5610 | 15.0611 | 0.0243 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,352.4178 | 2,352.4178 | 0.7175 | 0.0000 | 2,370.3550 |
| **Maximum** | **237.2328** | **46.4651** | **47.3319** | **0.1455** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **14,630.3099** | **14,630.3099** | **1.9499** | **0.0000** | **14,657.2663** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| **Total** | **0.0858** | **0.0587** | **0.6629** | **1.9400e-003** | **0.2012** | **1.6300e-003** | **0.2028** | **0.0534** | **1.5000e-003** | **0.0549** | | **193.0052** | **193.0052** | **5.6800e-003** | | **193.1472** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0954 | 0.0652 | 0.7365 | 2.1500e-003 | 0.2236 | 1.8100e-003 | 0.2254 | 0.0593 | 1.6600e-003 | 0.0610 | | 214.4502 | 214.4502 | 6.3100e-003 | | 214.6080 |
| **Total** | **0.0954** | **0.0652** | **0.7365** | **2.1500e-003** | **0.2236** | **1.8100e-003** | **0.2254** | **0.0593** | **1.6600e-003** | **0.0610** | | **214.4502** | **214.4502** | **6.3100e-003** | | **214.6080** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0896 | 0.0589 | 0.6784 | 2.0800e-003 | 0.2236 | 1.7500e-003 | 0.2253 | 0.0593 | 1.6100e-003 | 0.0609 | | 206.9139 | 206.9139 | 5.7000e-003 | | 207.0563 |
| **Total** | **0.0896** | **0.0589** | **0.6784** | **2.0800e-003** | **0.2236** | **1.7500e-003** | **0.2253** | **0.0593** | **1.6100e-003** | **0.0609** | | **206.9139** | **206.9139** | **5.7000e-003** | | **207.0563** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0400 | 0.4677 | 1.5000e-003 | 0.1677 | 1.2800e-003 | 0.1689 | 0.0445 | 1.1700e-003 | 0.0456 | | 149.5081 | 149.5081 | 3.8500e-003 | | 149.6043 |
| **Total** | **0.0633** | **0.0400** | **0.4677** | **1.5000e-003** | **0.1677** | **1.2800e-003** | **0.1689** | **0.0445** | **1.1700e-003** | **0.0456** | | **149.5081** | **149.5081** | **3.8500e-003** | | **149.6043** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0601 | 0.0364 | 0.4354 | 1.4500e-003 | 0.1677 | 1.2600e-003 | 0.1689 | 0.0445 | 1.1600e-003 | 0.0456 | | 144.8706 | 144.8706 | 3.5300e-003 | | 144.9587 |
| **Total** | **0.0601** | **0.0364** | **0.4354** | **1.4500e-003** | **0.1677** | **1.2600e-003** | **0.1689** | **0.0445** | **1.1600e-003** | **0.0456** | | **144.8706** | **144.8706** | **3.5300e-003** | | **144.9587** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| SubCategory | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7654 | 210.7654 | 0.0600 | 0.0000 | 212.2661 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6554 | 1,418.6554 | 0.1215 | 0.0000 | 1,421.6925 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4412 | 1,342.4412 | 0.1115 | 0.0000 | 1,345.2291 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6355 | 44.6355 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6554** | **1,418.6554** | **0.1215** | **0.0000** | **1,421.6925** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7651 | 210.7651 | 0.0600 | 0.0000 | 212.2658 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6550 | 1,418.6550 | 0.1215 | 0.0000 | 1,421.6921 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4409 | 1,342.4409 | 0.1115 | 0.0000 | 1,345.2287 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6354 | 44.6354 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6550** | **1,418.6550** | **0.1215** | **0.0000** | **1,421.6921** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **9-1-2021** | **11-30-2021** | 1.4091 | 1.4091 |
| **2** | **12-1-2021** | **2-28-2022** | 1.3329 | 1.3329 |
| **3** | **3-1-2022** | **5-31-2022** | 1.1499 | 1.1499 |
| **4** | **6-1-2022** | **8-31-2022** | 1.1457 | 1.1457 |
| **5** | **9-1-2022** | **11-30-2022** | 1.1415 | 1.1415 |
| **6** | **12-1-2022** | **2-28-2023** | 1.0278 | 1.0278 |
| **7** | **3-1-2023** | **5-31-2023** | 0.9868 | 0.9868 |
| **8** | **6-1-2023** | **8-31-2023** | 0.9831 | 0.9831 |

| | | | | |
|---|---|---|---|---|
| **9** | **9-1-2023** | **11-30-2023** | 0.9798 | 0.9798 |
| **10** | **12-1-2023** | **2-29-2024** | 2.8757 | 2.8757 |
| **11** | **3-1-2024** | **5-31-2024** | 1.6188 | 1.6188 |
| | | **Highest** | 2.8757 | 2.8757 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Energy | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 3,896.0732 | 3,896.0732 | 0.1303 | 0.0468 | 3,913.2833 |
| Mobile | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 207.8079 | 0.0000 | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 29.1632 | 556.6420 | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| **Total** | **6.8692** | **9.5223** | **30.3407** | **0.0914** | **7.7979** | **0.2260** | **8.0240** | **2.0895** | **0.2219** | **2.3114** | **236.9712** | **12,294.1807** | **12,531.1519** | **15.7904** | **0.1260** | **12,963.4751** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0012 | 51.0012 | 0.0144 | 0.0000 | 51.3601 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0012** | **51.0012** | **0.0144** | **0.0000** | **51.3601** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0496 | 0.0000 | 0.0496 | 7.5100e-003 | 0.0000 | 7.5100e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0475 | 0.4716 | 0.3235 | 5.8000e-004 | | 0.0233 | 0.0233 | | 0.0216 | 0.0216 | 0.0000 | 51.0011 | 51.0011 | 0.0144 | 0.0000 | 51.3600 |
| **Total** | **0.0475** | **0.4716** | **0.3235** | **5.8000e-004** | **0.0496** | **0.0233** | **0.0729** | **7.5100e-003** | **0.0216** | **0.0291** | **0.0000** | **51.0011** | **51.0011** | **0.0144** | **0.0000** | **51.3600** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7061 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7061** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1807 | 0.0000 | 0.1807 | 0.0993 | 0.0000 | 0.0993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0389 | 0.4050 | 0.2115 | 3.8000e-004 | | 0.0204 | 0.0204 | | 0.0188 | 0.0188 | 0.0000 | 33.4357 | 33.4357 | 0.0108 | 0.0000 | 33.7060 |
| **Total** | **0.0389** | **0.4050** | **0.2115** | **3.8000e-004** | **0.1807** | **0.0204** | **0.2011** | **0.0993** | **0.0188** | **0.1181** | **0.0000** | **33.4357** | **33.4357** | **0.0108** | **0.0000** | **33.7060** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 4.3000e-004 | 4.8700e-003 | 1.0000e-005 | 1.3400e-003 | 1.0000e-005 | 1.3500e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.2225 | 1.2225 | 4.0000e-005 | 0.0000 | 1.2234 |
| **Total** | **5.8000e-004** | **4.3000e-004** | **4.8700e-003** | **1.0000e-005** | **1.3400e-003** | **1.0000e-005** | **1.3500e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.2225** | **1.2225** | **4.0000e-005** | **0.0000** | **1.2234** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5405 | 103.5405 | 0.0335 | 0.0000 | 104.3776 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5405** | **103.5405** | **0.0335** | **0.0000** | **104.3776** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1741 | 0.0000 | 0.1741 | 0.0693 | 0.0000 | 0.0693 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0796 | 0.8816 | 0.5867 | 1.1800e-003 | | 0.0377 | 0.0377 | | 0.0347 | 0.0347 | 0.0000 | 103.5403 | 103.5403 | 0.0335 | 0.0000 | 104.3775 |
| **Total** | **0.0796** | **0.8816** | **0.5867** | **1.1800e-003** | **0.1741** | **0.0377** | **0.2118** | **0.0693** | **0.0347** | **0.1040** | **0.0000** | **103.5403** | **103.5403** | **0.0335** | **0.0000** | **104.3775** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.2200e-003 | 9.0000e-004 | 0.0103 | 3.0000e-005 | 2.8300e-003 | 2.0000e-005 | 2.8600e-003 | 7.5000e-004 | 2.0000e-005 | 7.8000e-004 | 0.0000 | 2.5808 | 2.5808 | 8.0000e-005 | 0.0000 | 2.5828 |
| **Total** | **1.2200e-003** | **9.0000e-004** | **0.0103** | **3.0000e-005** | **2.8300e-003** | **2.0000e-005** | **2.8600e-003** | **7.5000e-004** | **2.0000e-005** | **7.8000e-004** | **0.0000** | **2.5808** | **2.5808** | **8.0000e-005** | **0.0000** | **2.5828** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0807 | 0.0000 | 0.0807 | 0.0180 | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0127 | 0.1360 | 0.1017 | 2.2000e-004 | | 5.7200e-003 | 5.7200e-003 | | 5.2600e-003 | 5.2600e-003 | 0.0000 | 19.0871 | 19.0871 | 6.1700e-003 | 0.0000 | 19.2414 |
| **Total** | **0.0127** | **0.1360** | **0.1017** | **2.2000e-004** | **0.0807** | **5.7200e-003** | **0.0865** | **0.0180** | **5.2600e-003** | **0.0233** | **0.0000** | **19.0871** | **19.0871** | **6.1700e-003** | **0.0000** | **19.2414** |

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.5000e-004 | 1.7400e-003 | 1.0000e-005 | 5.2000e-004 | 0.0000 | 5.3000e-004 | 1.4000e-004 | 0.0000 | 1.4000e-004 | 0.0000 | 0.4587 | 0.4587 | 1.0000e-005 | 0.0000 | 0.4590 |
| **Total** | **2.1000e-004** | **1.5000e-004** | **1.7400e-003** | **1.0000e-005** | **5.2000e-004** | **0.0000** | **5.3000e-004** | **1.4000e-004** | **0.0000** | **1.4000e-004** | **0.0000** | **0.4587** | **0.4587** | **1.0000e-005** | **0.0000** | **0.4590** |

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1324 | 293.1324 | 0.0702 | 0.0000 | 294.8881 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1324** | **293.1324** | **0.0702** | **0.0000** | **294.8881** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2158 | 1.9754 | 2.0700 | 3.4100e-003 | | 0.1023 | 0.1023 | | 0.0963 | 0.0963 | 0.0000 | 293.1321 | 293.1321 | 0.0702 | 0.0000 | 294.8877 |
| **Total** | **0.2158** | **1.9754** | **2.0700** | **3.4100e-003** | | **0.1023** | **0.1023** | | **0.0963** | **0.0963** | **0.0000** | **293.1321** | **293.1321** | **0.0702** | **0.0000** | **294.8877** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0527 | 1.6961 | 0.4580 | 4.5500e-003 | 0.1140 | 3.1800e-003 | 0.1171 | 0.0329 | 3.0400e-003 | 0.0359 | 0.0000 | 441.9835 | 441.9835 | 0.0264 | 0.0000 | 442.6435 |
| Worker | 0.3051 | 0.2164 | 2.5233 | 7.3500e-003 | 0.7557 | 6.2300e-003 | 0.7619 | 0.2007 | 5.7400e-003 | 0.2065 | 0.0000 | 663.9936 | 663.9936 | 0.0187 | 0.0000 | 664.4604 |
| **Total** | **0.3578** | **1.9125** | **2.9812** | **0.0119** | **0.8696** | **9.4100e-003** | **0.8790** | **0.2336** | **8.7800e-003** | **0.2424** | **0.0000** | **1,105.9771** | **1,105.9771** | **0.0451** | **0.0000** | **1,107.1039** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2789 | 286.2789 | 0.0681 | 0.0000 | 287.9814 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2789** | **286.2789** | **0.0681** | **0.0000** | **287.9814** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1942 | 1.7765 | 2.0061 | 3.3300e-003 | | 0.0864 | 0.0864 | | 0.0813 | 0.0813 | 0.0000 | 286.2785 | 286.2785 | 0.0681 | 0.0000 | 287.9811 |
| **Total** | **0.1942** | **1.7765** | **2.0061** | **3.3300e-003** | | **0.0864** | **0.0864** | | **0.0813** | **0.0813** | **0.0000** | **286.2785** | **286.2785** | **0.0681** | **0.0000** | **287.9811** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.2795 | 0.1910 | 2.2635 | 6.9100e-003 | 0.7377 | 5.9100e-003 | 0.7436 | 0.1960 | 5.4500e-003 | 0.2014 | 0.0000 | 624.5363 | 624.5363 | 0.0164 | 0.0000 | 624.9466 |
| **Total** | **0.3177** | **1.4420** | **2.6646** | **0.0112** | **0.8490** | **7.3700e-003** | **0.8564** | **0.2281** | **6.8500e-003** | **0.2349** | **0.0000** | **1,042.5294** | **1,042.5294** | **0.0392** | **0.0000** | **1,043.5090** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7100e-003 | 0.0663 | 0.0948 | 1.5000e-004 | | 3.3200e-003 | 3.3200e-003 | | 3.0500e-003 | 3.0500e-003 | 0.0000 | 13.0175 | 13.0175 | 4.2100e-003 | 0.0000 | 13.1227 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **6.7100e-003** | **0.0663** | **0.0948** | **1.5000e-004** | | **3.3200e-003** | **3.3200e-003** | | **3.0500e-003** | **3.0500e-003** | **0.0000** | **13.0175** | **13.0175** | **4.2100e-003** | **0.0000** | **13.1227** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.8000e-004 | 1.9000e-004 | 2.2300e-003 | 1.0000e-005 | 7.3000e-004 | 1.0000e-005 | 7.3000e-004 | 1.9000e-004 | 1.0000e-005 | 2.0000e-004 | 0.0000 | 0.6156 | 0.6156 | 2.0000e-005 | 0.0000 | 0.6160 |
| **Total** | **2.8000e-004** | **1.9000e-004** | **2.2300e-003** | **1.0000e-005** | **7.3000e-004** | **1.0000e-005** | **7.3000e-004** | **1.9000e-004** | **1.0000e-005** | **2.0000e-004** | **0.0000** | **0.6156** | **0.6156** | **2.0000e-005** | **0.0000** | **0.6160** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0109 | 0.1048 | 0.1609 | 2.5000e-004 | | 5.1500e-003 | 5.1500e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 22.0292 | 22.0292 | 7.1200e-003 | 0.0000 | 22.2073 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0109** | **0.1048** | **0.1609** | **2.5000e-004** | | **5.1500e-003** | **5.1500e-003** | | **4.7400e-003** | **4.7400e-003** | **0.0000** | **22.0292** | **22.0292** | **7.1200e-003** | **0.0000** | **22.2073** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.4000e-004 | 2.9000e-004 | 3.5100e-003 | 1.0000e-005 | 1.2300e-003 | 1.0000e-005 | 1.2400e-003 | 3.3000e-004 | 1.0000e-005 | 3.4000e-004 | 0.0000 | 1.0094 | 1.0094 | 3.0000e-005 | 0.0000 | 1.0100 |
| **Total** | **4.4000e-004** | **2.9000e-004** | **3.5100e-003** | **1.0000e-005** | **1.2300e-003** | **1.0000e-005** | **1.2400e-003** | **3.3000e-004** | **1.0000e-005** | **3.4000e-004** | **0.0000** | **1.0094** | **1.0094** | **3.0000e-005** | **0.0000** | **1.0100** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 4.1372 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1600e-003 | 0.0213 | 0.0317 | 5.0000e-005 | | 1.0700e-003 | 1.0700e-003 | | 1.0700e-003 | 1.0700e-003 | 0.0000 | 4.4682 | 4.4682 | 2.5000e-004 | 0.0000 | 4.4745 |
| **Total** | **4.1404** | **0.0213** | **0.0317** | **5.0000e-005** | | **1.0700e-003** | **1.0700e-003** | | **1.0700e-003** | **1.0700e-003** | **0.0000** | **4.4682** | **4.4682** | **2.5000e-004** | **0.0000** | **4.4745** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Low Rise | 408494 | 2.2000e-003 | 0.0188 | 8.0100e-003 | 1.2000e-004 | | 1.5200e-003 | 1.5200e-003 | | 1.5200e-003 | 1.5200e-003 | 0.0000 | 21.7988 | 21.7988 | 4.2000e-004 | 4.0000e-004 | 21.9284 |
| Apartments Mid Rise | 1.30613e+007 | 0.0704 | 0.6018 | 0.2561 | 3.8400e-003 | | 0.0487 | 0.0487 | | 0.0487 | 0.0487 | 0.0000 | 696.9989 | 696.9989 | 0.0134 | 0.0128 | 701.1408 |
| General Office Building | 468450 | 2.5300e-003 | 0.0230 | 0.0193 | 1.4000e-004 | | 1.7500e-003 | 1.7500e-003 | | 1.7500e-003 | 1.7500e-003 | 0.0000 | 24.9983 | 24.9983 | 4.8000e-004 | 4.6000e-004 | 25.1468 |
| High Turnover (Sit Down Restaurant) | 8.30736e+006 | 0.0448 | 0.4072 | 0.3421 | 2.4400e-003 | | 0.0310 | 0.0310 | | 0.0310 | 0.0310 | 0.0000 | 443.3124 | 443.3124 | 8.5000e-003 | 8.1300e-003 | 445.9468 |
| Hotel | 1.74095e+006 | 9.3900e-003 | 0.0853 | 0.0717 | 5.1000e-004 | | 6.4900e-003 | 6.4900e-003 | | 6.4900e-003 | 6.4900e-003 | 0.0000 | 92.9036 | 92.9036 | 1.7800e-003 | 1.7000e-003 | 93.4557 |
| Quality Restaurant | 1.84608e+006 | 9.9500e-003 | 0.0905 | 0.0760 | 5.4000e-004 | | 6.8800e-003 | 6.8800e-003 | | 6.8800e-003 | 6.8800e-003 | 0.0000 | 98.5139 | 98.5139 | 1.8900e-003 | 1.8100e-003 | 99.0993 |
| Regional Shopping Center | 91840 | 5.0000e-004 | 4.5000e-003 | 3.7800e-003 | 3.0000e-005 | | 3.4000e-004 | 3.4000e-004 | | 3.4000e-004 | 3.4000e-004 | 0.0000 | 4.9009 | 4.9009 | 9.0000e-005 | 9.0000e-005 | 4.9301 |
| **Total** | | **0.1398** | **1.2312** | **0.7770** | **7.6200e-003** | | **0.0966** | **0.0966** | | **0.0966** | **0.0966** | **0.0000** | **1,383.4268** | **1,383.4268** | **0.0265** | **0.0254** | **1,391.6478** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.4137 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 4.3998 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0206 | 0.1763 | 0.0750 | 1.1200e-003 | | 0.0143 | 0.0143 | | 0.0143 | 0.0143 | 0.0000 | 204.1166 | 204.1166 | 3.9100e-003 | 3.7400e-003 | 205.3295 |
| Landscaping | 0.3096 | 0.1187 | 10.3054 | 5.4000e-004 | | 0.0572 | 0.0572 | | 0.0572 | 0.0572 | 0.0000 | 16.8504 | 16.8504 | 0.0161 | 0.0000 | 17.2540 |
| **Total** | **5.1437** | **0.2950** | **10.3804** | **1.6600e-003** | | **0.0714** | **0.0714** | | **0.0714** | **0.0714** | **0.0000** | **220.9670** | **220.9670** | **0.0201** | **3.7400e-003** | **222.5835** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |
| Unmitigated | 585.8052 | 3.0183 | 0.0755 | 683.7567 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |
| Unmitigated | 207.8079 | 12.2811 | 0.0000 | 514.8354 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0956 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0955 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| **Total** | **41.1168** | **67.2262** | **207.5497** | **0.6278** | **45.9592** | **2.4626** | **48.4217** | **12.2950** | **2.4385** | **14.7336** | **0.0000** | **76,811.1816** | **76,811.1816** | **2.8282** | **0.4832** | **77,025.8786** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 45.00 | 1000sqft | 1.03 | 45,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 36.00 | 1000sqft | 0.83 | 36,000.00 | 0 |
| Hotel | 50.00 | Room | 1.67 | 72,600.00 | 0 |
| Quality Restaurant | 8.00 | 1000sqft | 0.18 | 8,000.00 | 0 |
| Apartments Low Rise | 25.00 | Dwelling Unit | 1.56 | 25,000.00 | 72 |
| Apartments Mid Rise | 975.00 | Dwelling Unit | 25.66 | 975,000.00 | 2789 |
| Regional Shopping Center | 56.00 | 1000sqft | 1.29 | 56,000.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2028 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | FireplaceWoodMass | 1,019.20 | 0.00 |
| tblFireplaces | NumberWood | 1.25 | 0.00 |
| tblFireplaces | NumberWood | 48.75 | 0.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblTripsAndVMT | WorkerTripLength | 14.70 | 10.00 |
| tblVehicleTrips | ST_TR | 7.16 | 6.17 |
| tblVehicleTrips | ST_TR | 6.39 | 3.87 |
| tblVehicleTrips | ST_TR | 2.46 | 1.39 |
| tblVehicleTrips | ST_TR | 158.37 | 79.82 |

| | | | |
|---|---|---|---|
| tblVehicleTrips | ST_TR | 8.19 | 3.75 |
| tblVehicleTrips | ST_TR | 94.36 | 63.99 |
| tblVehicleTrips | ST_TR | 49.97 | 10.74 |
| tblVehicleTrips | SU_TR | 6.07 | 6.16 |
| tblVehicleTrips | SU_TR | 5.86 | 4.18 |
| tblVehicleTrips | SU_TR | 1.05 | 0.69 |
| tblVehicleTrips | SU_TR | 131.84 | 78.27 |
| tblVehicleTrips | SU_TR | 5.95 | 3.20 |
| tblVehicleTrips | SU_TR | 72.16 | 57.65 |
| tblVehicleTrips | SU_TR | 25.24 | 6.39 |
| tblVehicleTrips | WD_TR | 6.59 | 5.83 |
| tblVehicleTrips | WD_TR | 6.65 | 4.13 |
| tblVehicleTrips | WD_TR | 11.03 | 6.41 |
| tblVehicleTrips | WD_TR | 127.15 | 65.80 |
| tblVehicleTrips | WD_TR | 8.17 | 3.84 |
| tblVehicleTrips | WD_TR | 89.95 | 62.64 |
| tblVehicleTrips | WD_TR | 42.70 | 9.43 |
| tblWoodstoves | NumberCatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberCatalytic | 48.75 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 1.25 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 48.75 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveDayYear | 25.00 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |
| tblWoodstoves | WoodstoveWoodMass | 999.60 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Energy | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| Mobile | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| **Total** | **40.7912** | **67.7872** | **202.7424** | **0.6043** | **45.9592** | **2.4640** | **48.4231** | **12.2950** | **2.4399** | **14.7349** | **0.0000** | **74,422.3787** | **74,422.3787** | **2.8429** | **0.4832** | **74,637.4417** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 9/1/2021 | 10/12/2021 | 5 | 30 | |
| 2 | Site Preparation | Site Preparation | 10/13/2021 | 11/9/2021 | 5 | 20 | |
| 3 | Grading | Grading | 11/10/2021 | 1/11/2022 | 5 | 45 | |
| 4 | Building Construction | Building Construction | 1/12/2022 | 12/12/2023 | 5 | 500 | |
| 5 | Paving | Paving | 12/13/2023 | 1/30/2024 | 5 | 35 | |
| 6 | Architectural Coating | Architectural Coating | 1/31/2024 | 3/19/2024 | 5 | 35 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 458.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 801.00 | 143.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 160.00 | 0.00 | 0.00 | 10.00 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 3.3074 | 0.0000 | 3.3074 | 0.5008 | 0.0000 | 0.5008 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| **Total** | **3.1651** | **31.4407** | **21.5650** | **0.0388** | **3.3074** | **1.5513** | **4.8588** | **0.5008** | **1.4411** | **1.9419** | **0.0000** | **3,747.9449** | **3,747.9449** | **1.0549** | | **3,774.3174** |

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| **Total** | **3.8882** | **40.4971** | **21.1543** | **0.0380** | **18.0663** | **2.0445** | **20.1107** | **9.9307** | **1.8809** | **11.8116** | **0.0000** | **3,685.6569** | **3,685.6569** | **1.1920** | | **3,715.4573** |

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.0434 | 6,007.0434 | 1.9428 | | 6,055.6134 |
| **Total** | **4.1912** | **46.3998** | **30.8785** | **0.0620** | **8.6733** | **1.9853** | **10.6587** | **3.5965** | **1.8265** | **5.4230** | **0.0000** | **6,007.0434** | **6,007.0434** | **1.9428** | | **6,055.6134** |

## 3.4 Grading - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

## 3.4 Grading - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 8.6733 | 0.0000 | 8.6733 | 3.5965 | 0.0000 | 3.5965 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | 0.0000 | 6,011.4105 | 6,011.4105 | 1.9442 | | 6,060.0158 |
| **Total** | **3.6248** | **38.8435** | **29.0415** | **0.0621** | **8.6733** | **1.6349** | **10.3082** | **3.5965** | **1.5041** | **5.1006** | **0.0000** | **6,011.4105** | **6,011.4105** | **1.9442** | | **6,060.0158** |

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| **Total** | **1.7062** | **15.6156** | **16.3634** | **0.0269** | | **0.8090** | **0.8090** | | **0.7612** | **0.7612** | **0.0000** | **2,554.3336** | **2,554.3336** | **0.6120** | | **2,569.6322** |

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.2099 | 2,555.2099 | 0.6079 | | 2,570.4061 |
| **Total** | **1.5728** | **14.3849** | **16.2440** | **0.0269** | | **0.6997** | **0.6997** | | **0.6584** | **0.6584** | **0.0000** | **2,555.2099** | **2,555.2099** | **0.6079** | | **2,570.4061** |

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.5841 | 2,207.5841 | 0.7140 | | 2,225.4336 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.0327** | **10.1917** | **14.5842** | **0.0228** | | **0.5102** | **0.5102** | | **0.4694** | **0.4694** | **0.0000** | **2,207.5841** | **2,207.5841** | **0.7140** | | **2,225.4336** |

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.9882 | 9.5246 | 14.6258 | 0.0228 | | 0.4685 | 0.4685 | | 0.4310 | 0.4310 | 0.0000 | 2,207.5472 | 2,207.5472 | 0.7140 | | 2,225.3963 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **0.9882** | **9.5246** | **14.6258** | **0.0228** | | **0.4685** | **0.4685** | | **0.4310** | **0.4310** | **0.0000** | **2,207.5472** | **2,207.5472** | **0.7140** | | **2,225.3963** |

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 236.4115 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1808 | 1.2188 | 1.8101 | 2.9700e-003 | | 0.0609 | 0.0609 | | 0.0609 | 0.0609 | 0.0000 | 281.4481 | 281.4481 | 0.0159 | | 281.8443 |
| **Total** | **236.5923** | **1.2188** | **1.8101** | **2.9700e-003** | | **0.0609** | **0.0609** | | **0.0609** | **0.0609** | **0.0000** | **281.4481** | **281.4481** | **0.0159** | | **281.8443** |

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Low Rise | 145.75 | 154.25 | 154.00 | 506,227 | 506,227 |
| Apartments Mid Rise | 4,026.75 | 3,773.25 | 4075.50 | 13,660,065 | 13,660,065 |
| General Office Building | 288.45 | 62.55 | 31.05 | 706,812 | 706,812 |
| High Turnover (Sit Down Restaurant) | 2,368.80 | 2,873.52 | 2817.72 | 3,413,937 | 3,413,937 |
| Hotel | 192.00 | 187.50 | 160.00 | 445,703 | 445,703 |
| Quality Restaurant | 501.12 | 511.92 | 461.20 | 707,488 | 707,488 |
| Regional Shopping Center | 528.08 | 601.44 | 357.84 | 1,112,221 | 1,112,221 |
| Total | 8,050.95 | 8,164.43 | 8,057.31 | 20,552,452 | 20,552,452 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Low Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Apartments Mid Rise | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| General Office Building | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| High Turnover (Sit Down Restaurant) | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Hotel | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Quality Restaurant | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |
| Regional Shopping Center | 0.543088 | 0.044216 | 0.209971 | 0.116369 | 0.014033 | 0.006332 | 0.021166 | 0.033577 | 0.002613 | 0.001817 | 0.005285 | 0.000712 | 0.000821 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |
| NaturalGas Unmitigated | 0.7660 | 6.7462 | 4.2573 | 0.0418 | | 0.5292 | 0.5292 | | 0.5292 | 0.5292 | | 8,355.9832 | 8,355.9832 | 0.1602 | 0.1532 | 8,405.6387 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |
| Unmitigated | 30.5020 | 15.0496 | 88.4430 | 0.0944 | | 1.5974 | 1.5974 | | 1.5974 | 1.5974 | 0.0000 | 18,148.5950 | 18,148.5950 | 0.4874 | 0.3300 | 18,259.1192 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 2.2670 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 24.1085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.6500 | 14.1000 | 6.0000 | 0.0900 | | 1.1400 | 1.1400 | | 1.1400 | 1.1400 | 0.0000 | 18,000.0000 | 18,000.0000 | 0.3450 | 0.3300 | 18,106.9650 |
| Landscaping | 2.4766 | 0.9496 | 82.4430 | 4.3600e-003 | | 0.4574 | 0.4574 | | 0.4574 | 0.4574 | | 148.5950 | 148.5950 | 0.1424 | | 152.1542 |
| **Total** | **30.5020** | **15.0496** | **88.4430** | **0.0944** | | **1.5974** | **1.5974** | | **1.5974** | **1.5974** | **0.0000** | **18,148.5950** | **18,148.5950** | **0.4874** | **0.3300** | **18,259.1192** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

| Local Hire Provision Net Change | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,623 |
| Amortized (MT CO2e/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized (MT CO2e/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

# EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

**SOIL WATER AIR PROTECTION ENTERPRISE**
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
**Email:** prosenfeld@swape.com

# *Paul Rosenfeld, Ph.D.*

**Chemical Fate and Transport & Air Dispersion Modeling**

*Principal Environmental Chemist*

**Risk Assessment & Remediation Specialist**

## Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

## Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

## Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex $H_2O$ Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

## Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

**Rosenfeld, P.E**. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

**Rosenfeld, P.E.,** J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

**Rosenfeld, P. E.,** M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

**Rosenfeld P. E.,** J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

**Rosenfeld, P.E.,** and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

**Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49( 9), 171-178.

**Rosenfeld, P. E**., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

**Rosenfeld, P.E.,** Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

**Rosenfeld, P.E**., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

**Rosenfeld, P.E.,** and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

**Rosenfeld, P.E.,** C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

**Rosenfeld, P.E.,** and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

**Rosenfeld, P.E.,** and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

**Rosenfeld, P. E.** (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

**Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

**Rosenfeld, P. E. (**1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

**Rosenfeld, P. E.** (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

**Rosenfeld, P. E. (**1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

## Presentations:

**Rosenfeld, P.E.,** Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

**Rosenfeld, P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

**Rosenfeld, P.E.** (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

**Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld, P. E.** (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

**Rosenfeld P. E.** (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

**Rosenfeld P. E.** (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

**Paul Rosenfeld Ph.D**. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

**Paul Rosenfeld Ph.D**. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

**Paul Rosenfeld Ph.D**. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

**Paul Rosenfeld Ph.D**. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld Ph.D**. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

**Paul Rosenfeld, Ph.D.** (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

**Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

**Rosenfeld, P. E**., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

**Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

**Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

**Paul Rosenfeld, Ph.D**. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

**Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

**Rosenfeld, P.E**. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

**Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

**Rosenfeld. P.E. (**October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

**Rosenfeld, P.E. (**2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

**Rosenfeld, P.E**., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

**Rosenfeld, P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

**Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

**Rosenfeld, P.E,** C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

**Rosenfeld, P.E.**, C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

## Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

## Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

## Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

# EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

## Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization**
**Industrial Stormwater Compliance**
**Investigation and Remediation Strategies**
**Litigation Support and Testifying Expert**
**CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

**Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

**Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F**., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.,** 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.,** 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.,** 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F**., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

**Hagemann, M.F**., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F**., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F**., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F**., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F**., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F**., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F**., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F**., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F**., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F**., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F**., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F**., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F**., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F**., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F**., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.**F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F**., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

**Hagemann, M.F**., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

# 5a. Planning Commission December 2, 2021 Meeting Agenda

# AGENDA

## PLANNING COMMISSION
## REGULAR MEETING

**December 2, 2021**
**5:30 PM**
**City Council Chamber**
One Civic Center Plaza
Irvine, CA 92606

Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner

### PARTICIPATION AT PLANNING COMMISSION MEETINGS

MEETINGS ARE AVAILABLE TO ATTEND IN-PERSON IN THE CITY COUNCIL CHAMBER OR WATCHED LIVE THROUGH THE "ZOOM" APPLICATION. INFORMATION FOR "ZOOM" CAN BE FOUND ONLINE AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO THE PLANNING COMMISSION AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/PLANNINGCOMMISSION.

**REQUEST TO SPEAK IN PERSON:** IF YOU WOULD LIKE TO ADDRESS THE PLANNING COMMISSION ON A SCHEDULED AGENDA ITEM – INCLUDING A REGULAR BUSINESS ITEM, A PUBLIC HEARING ITEM, OR PUBLIC COMMENTS – PLEASE REGISTER BY COMPLETING THE ELECTRONIC FORM AVAILABLE ON THE KIOSK AT THE ENTRANCE TO THE CITY COUNCIL CHAMBER. PLEASE IDENTIFY ON THE FORM YOUR NAME AND THE ITEM ON WHICH YOU WOULD LIKE TO SPEAK. THE REQUEST TO SPEAK FORM ON THE KIOSK ASSISTS THE CHAIR IN ENSURING THAT ALL PERSONS WISHING TO ADDRESS THE PLANNING COMMISSION ARE RECOGNIZED. IT ALSO ENSURES THE ACCURATE IDENTIFICATION OF MEETING PARTICIPANTS IN THE PLANNING COMMISSION MINUTES. YOUR NAME WILL BE CALLED AT THE TIME THE MATTER IS HEARD BY THE PLANNING COMMISSION. CITY POLICY IS TO LIMIT PUBLIC TESTIMONY TO UP TO FIVE MINUTES PER SPEAKER ON AGENDIZED ITEMS, AND THREE MINUTES DURING GENERAL PUBLIC COMMENTS (UNLESS THE TIME LIMIT IS EXTENDED BY THE CHAIR), WHICH INCLUDES THE PRESENTATION OF ELECTRONIC OR AUDIO-VISUAL INFORMATION. SPEAKERS MAY NOT YIELD THEIR TIME TO OTHER PERSONS.

**PLEASE TAKE NOTICE THAT** THE ORDER OF SCHEDULED AGENDA ITEMS BELOW AND/OR THE TIME THEY ARE ACTUALLY HEARD, CONSIDERED AND DECIDED MAY BE MODIFIED BY THE CHAIR DURING THE COURSE OF THE MEETING, SO PLEASE STAY ALERT.

**PLEASE NOTE:** THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 949-724-6465, OR VIA EMAIL AT PLANNINGCOMMISSION@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

## CALL TO ORDER

## ROLL CALL

## PLEDGE OF ALLEGIANCE

## INTRODUCTIONS

## ADDITIONS AND DELETIONS TO THE AGENDA

Additions to the agenda are limited by the California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda must be acted upon prior to the next Planning Commission meeting.

## PUBLIC COMMENTS

## COMMISSION BUSINESS

### 1. MINUTES

**RECOMMENDED ACTION:**
Approve Minutes of the November 4, 2021 Regular Planning Commission Meeting

## PUBLIC HEARINGS

### 2. GENERAL PLAN - DRAFT 2021 - 2029 HOUSING ELEMENT UPDATE

**RECOMMENDED ACTION:**
1) Conduct the public hearing.
2) Continue the public hearing to December 16, 2021.

## STAFF REPORTS

## PLANNING COMMISSION REPORTS

## ADJOURNMENT

### NOTICE TO THE PUBLIC

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission

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The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

### STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be

downloaded from the City's website at *cityofirvine.org/planningcommission* at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

## SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

## SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

### MEDIA TYPES AND GUIDELINES

1. Written Materials/Handouts: Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings: Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals: Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

## CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Planning Commission liaison at 949-724-6465.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II).

## MEETING SCHEDULE

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department

- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on November 18, 2021 by 7 p.m. as well as on the City's web page.

Laya Espinosa
Commission Liaison

# 4b. Planning Commission December 2, 2021 Staff Report

## REQUEST FOR PLANNING COMMISSION ACTION

**MEETING DATE:** December 2, 2021

**TITLE:** GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE

Director of Community Development

### RECOMMENDED ACTION

1. Conduct the public hearing.
2. Continue the public hearing to December 16, 2021.

### EXECUTIVE SUMMARY

State law requires all cities to update the Housing Element of its General Plan every eight years. It further requires the current update to be completed by October 15, 2021, however, statute allows for a 120-day grace period. The City's Housing Element was adopted by the City Council in 2013 for the 2013-2021 planning period. This update will address the 2021-2029 planning period. The draft 2021-2029 Housing Element was submitted to the California Department of Housing and Community Development (HCD) for the required 60-day review. HCD provided the City with a findings letter on October 18, 2021 that identified modifications required for the draft 2021-2029 Housing Element to be certified by HCD before the February 11, 2022 deadline.

The most significant update included in the draft 2021-2029 Housing Element is the identification of sites to accommodate the Regional Housing Needs Assessment (RHNA) and enhanced housing policies to support housing and affordability consistent with new state statute. The RHNA has been significantly increased from the current 5$^{th}$ Cycle RHNA allocation issued by the Southern California Association of Governments (SCAG). It is important to note that housing element law does not require a city to build housing units, but rather to demonstrate that the city has the land capacity to address RHNA through a required sites inventory analysis.

The content of the draft 2021-2029 Housing Element is structured for consistency with the requirements set forth in state law. In addition to responding to the requirements of state law, the Housing Element demonstrates how the strategies to meet the City's locally determined housing needs are addressed through plans, programs, and projects. This report includes an update on the status of the draft Housing Element, how it complies with

state housing element law, the findings provided to the City by HCD on the initial review of the draft, and how the City has responded to HCD's findings.

## COMMISSION/BOARD/COMMITTEE RECOMMENDATION

At its July 1 and 15, 2021 meetings, the Planning Commission considered the preliminary draft 2021-2029 Housing Element. The Planning Commission specifically asked Community Development staff to strengthen policies and programs associated with the development of affordable housing. Where feasible and appropriate, staff revised the policies and programs to include language that is more definitive, establishes more detailed timeframes for fee programs, and strengthens the support for services to renters and homeowners.

At its August 5, 2021 meeting, the Planning Commission unanimously authorized the release of the preliminary draft 2021-2029 Housing Element to HCD for the required 60-day review.

## ANALYSIS

### Background

Under California law (Government Code Section 65580 et seq.), cities must update their housing element every eight years. As prescribed by law, the current update must be completed by October 2021. The City transmitted the draft 2021-2029 Housing Element to HCD for a mandatory 60-day preliminary review on August 19, 2021. The City received HCD's initial findings on October 18, 2021 and revised the draft 2021-2029 Housing Element to address these findings. The revised version was resubmitted to HCD for "informal review" on November 19, 2021. The document will be available for an initial public review two weeks before the document is officially resubmitted to HCD for another 60-day review period, December 3, 2021. However, the revised draft Housing Element update will be available for public review through the adoption of the plan by the City Council. To meet the statutory timelines for the Housing Element, including the permitted 120 day grace period, the draft Housing Element must be reviewed and adopted while HCD continues to work with the City on the necessary revisions needed for certification.

Irvine's Housing Element for the planning period 2013-2021 was adopted by the City Council in September 2013 and it was found by HCD to be in full compliance with state housing element law. The Housing Element update will cover the state-required eight-year planning period between October 15, 2021 and October 15, 2029. The update will address various state mandates including the RHNA, which has been significantly increased from the current 12,149 units to 23,610 units. In addition to this increase, a significant change to state housing element statute is the requirement to demonstrate adequate sites to accommodate the RHNA at all affordability levels.

## Housing Element Requirements

State law requires each city to prepare and adopt a housing element as part of its General Plan. According to state law, the Housing Element must: provide goals, policies, quantified objectives, and scheduled programs to preserve, improve, and develop housing. The Housing Element must identify and analyze existing and projected housing needs for all economic segments of the community.

### *Housing Needs Assessment*

The state develops housing demand projections and apportions these projections to each of the state's regions. In Orange County, SCAG allocates the state's regional projected demand to individual jurisdictions. This allocation is referred to as the 6th Cycle RHNA, and is intended to reflect the projected housing demand of each jurisdiction. State law requires that jurisdictions incorporate this allocation into their Housing Element update. To assess projected housing needs, a complete description of the City's most recent population estimate, and general characteristics of the employment market is provided. This information offers insight into the types of jobs in the community and the incomes associated with such jobs. It also identifies proposed development activities and future housing needs generated by new employment opportunities.

The "Housing Needs" section of the Housing Element identifies and analyzes the existing and projected housing need of the community pursuant to the RHNA. This is different from previous cycles where the RHNA only included the projected need. An assessment must be undertaken of the community's existing and projected housing needs based on household characteristics, housing stock conditions, special housing needs, and demographic and employment trends. The City's total final RHNA allocation is 23,610. According to the methodology approved by SCAG, the projected need for the City, which is based on planned development and the City's official growth forecast, is 7,690 units. The existing need for the City is 15,864 and is solely based on a jurisdiction's access to jobs and transit. The existing need also included additional units that were reallocated from disadvantaged communities (DACs) in Orange County. An additional 56 units were allocated to the City as a result of any successful RHNA appeal. The assessment of existing housing needs includes current demographic information, such as the total population, the number of households over-burdened by housing costs (households paying more than 30% of income for housing), the number of households living in overcrowded conditions, and special housing needs. It also includes the number of housing units that need rehabilitation, as well as assisted affordable units at risk of converting to market rate. The majority of the data included in this section has been pre-certified by HCD for the SCAG region.

Projected need is the household growth for jurisdictions between July 1, 2021 and October 1, 2029. Existing need is considered the remainder of the regional determination after projected need is subtracted. The allocation establishes the number of new units

anticipated to be needed, by income category, to accommodate the expected population growth over the planning period of the Housing Element. The housing needs findings are used to inform and develop the Housing Element policies and programs to ensure that the City focuses its efforts on the community's identified needs.

*Sites Inventory, Analysis, and Goals and Policies*

State law requires jurisdictions to provide an inventory of land suitable for residential development that will allow for, and facilitate production of, the City's regional share of housing as determined by the RHNA.

To determine whether the City has sufficient land to accommodate its share of regional housing needs for all income groups, the City must identify "adequate sites" in the Housing Element site inventory. The purpose of the housing element's site inventory is to identify and analyze specific land (sites) that is available and suitable for residential development in order to determine the jurisdiction's capacity to accommodate residential development and reconcile that capacity with the jurisdiction's RHNA. The site inventory enables the jurisdiction to determine whether there are sufficient adequate sites to accommodate the RHNA by income category. A site inventory and analysis will determine whether program actions must be adopted to "make sites available" with appropriate zoning, development standards, and infrastructure capacity to accommodate the new housing need.

Other characteristics to consider when evaluating the appropriateness of sites include physical features (e.g., size and shape of the site, improvements currently on the site, slope instability or erosion, or environmental and pollution considerations), location (e.g., proximity and access to infrastructure, transit, job centers, and public or community services), competitiveness for affordable housing funding (e.g., Low Income Housing Tax Credit score criteria), and likelihood or interest in development due to access to opportunities such as jobs and high performing schools. When determining sites to include in the inventory to meet the lower income housing need, HCD recommends that a local government first identify development potential in high opportunity neighborhoods. High opportunity areas are places that currently have strong economic, environmental, and educational outcomes. Locating affordable housing in high opportunity areas would result in more racial integration of neighborhoods and offer new economic opportunities to lower income segments of the population. This will assist the local government in meeting its requirements to affirmatively further fair housing and ensure developments are more competitive for development financing.

Sites are considered suitable for residential development if zoned appropriately and available for residential use during the planning period. Housing Element law does not require a jurisdiction to build housing units, but rather to demonstrate that the jurisdiction has the land capacity to address its RHNA. If a jurisdiction cannot demonstrate that the existing zoning and General Plan designations can accommodate its RHNA allocation,

the jurisdiction is required to re-zone land in order to have sufficient capacity, among other programs that may also be required. Even if a city re-zones the land to accommodate residential, market and development trends will ultimately dictate the approval and construction of residential units. The City's draft 2021-2029 Housing Element demonstrates that Irvine does not have sufficient capacity under the current General Plan to meet the new RHNA through vacant land capacity and will need to re-zone land and update the Genera Plan and Zoning Ordinance to accommodate the RHNA. With the proposed re-zoning and inclusion of new policies and programs, the City is able to identify sufficient capacity to accommodate the 6th Cycle RHNA.

The City's 6th Cycle RHNA has been significantly increased from the 5th Cycle RHNA of 12,149 units to 23,610 total units. The 6th Cycle RHNA will replace the current allocation when the Housing Element is updated, adopted by the City Council, and certified by the state before the statutory deadline. Table 1 below shows Irvine's RHNA allocation of housing units broken down by income category for the 2021-2029 planning period.

Table 1
2021-2029 Irvine Regional Housing Needs Allocation

| Income Category | RHNA |
|---|---|
| Category 1 (0% - 50% AMI[1]) (Extremely Very Low/Very Low) | 6,396 |
| Category 2 (51% - 80% AMI) (Low) | 4,235 |
| Category 3 (81% - 120% AMI) (Moderate) | 4,308 |
| Category 4 (over 120% AMI) (Above Moderate) | 8,671 |
| Total Units | 23,610 |

Note: [1] AMI refers to Area Median Income for Orange County.

Housing Element statute has been modified the past several years, adding new requirements that must be included in a jurisdiction's Housing Element update. This includes the addition of the Affirmatively Further Fair Housing (AFFH) section and the "no net loss" requirement in the site inventory. "No net loss" requires a jurisdiction to continuously maintain adequate sites throughout the planning period to accommodate its remaining unmet RHNA by each income category. Specifically, if a jurisdiction approves a development of a parcel identified in its Housing Element sites inventory with fewer units than shown in the Housing Element, it must either make findings that the Housing Element's remaining sites have sufficient capacity to accommodate the remaining unmet RHNA by each income level, or identify and make available sufficient sites to accommodate the remaining unmet RHNA for each income category. In addition to the "no net loss" requirement, the City must identify an adequate supply of above moderate or "market rate" units to ensure the affordable units are constructed. As a result of this requirement, the City must identify more sites and units than identified in the RHNA.

*Constraints*

A number of factors can constrain the development and improvement of housing. These include both governmental and non-governmental constraints, which are reviewed in the Housing Constraints section of the draft 2021-2029 Housing Element. State law requires the City to analyze land use controls, fees and exactions, on- and off-site improvement requirements, building codes, and enforcement thereof, permit and processing procedures, and potential constraints on the development or improvement of housing for persons with disabilities. The draft 2021-2029 Housing Element generally finds that the City land use controls do not create unnecessary constraints to housing development.

Non-governmental constraints must also be analyzed, including the availability and cost of land, as well as construction costs. These constraints are often out of the City's control but can result in housing that is not affordable to low- and moderate-income households.

*Goals, Policies, and Programs*

Based on the results of the public participation, housing needs assessment, sites inventory and analysis, and constraints, the draft 2021-2029 Housing Element establishes goals, policies, and programs to facilitate the provision of housing that fulfills the diverse needs of the community.

The draft 2021-2029 Housing Element establishes six goals, which are statements of community desires that are broad in both purpose and aim but are designed specifically to establish direction. Policies provide specific standards for achieving each goal, and are further articulated in the programs, which identify actions the City will implement to achieve each goal and policy.

Many of the goals, policies, and programs have not changed from the 2013-2021 Housing Element. Some have been modified to simplify, avoid redundancy, or reflect current practice, and are outlined in the Goals, Policies and Programs section. New goals, policies, and programs have been added to build upon Irvine's success in building affordable housing throughout the community and address the City's significant RHNA allocation. Some of the key proposed policies being considered include:

- An increase to the inclusionary zoning ordinance to mandate 20 percent of new housing projects are at affordable price points, rather than the current 15 percent mandate
- Target City, county, state, and certain privately owned sites for 100 percent affordable residential projects

- Coordinate efforts and enhance partnership with the Irvine Community Land Trust (ICLT)
- Increase the affordable in-lieu fee to reflect current costs
- Extend the term of affordability on affordable units set to expire in the next Housing Element Cycle (2021-2029)
- Introduce residential uses in targeted retail centers in the City to create mixed use environments
- Maximize density near the Irvine Transportation Center with a residential overlay, for transit-oriented development
- Expand the residential overlay and unit cap in the Irvine Business Complex
- Introduce residential overlay at religious and school sites
- Allow conversion of hotel and motel to residential units

*Site Inventory*

State law mandates that cities develop a sites inventory analysis to identify vacant land or land that can be redeveloped during the planning period. The inventory must include a map identifying parcels, general plan and zoning designation, acreage and unit capacity across affordability levels. The sites inventory analysis included in the draft 2021-2029 Housing Element demonstrates that the RHNA of 23,610 total housing units can be accommodated through a combination of the remaining vacant residential sites in Irvine and non-vacant sites that can be redeveloped with a residential component. This will require the City to complete a comprehensive update to the General Plan and Zoning Ordinance following the adoption of the Housing Element.

Per Housing Element statute and HCD's "Housing Element Site Inventory Guidebook", the City must identify adequate sites at the parcel level. Additionally, according to the guidebook, "the analysis of 'appropriate zoning' should not include residential buildout projections resulting from the implementation of a jurisdiction's inclusionary program or potential increase in density bonus, because these tools are not a substitute for addressing whether the underlying (base) zoning densities are appropriate to accommodate the RHNA for lower income households." This means, the City, despite having a successful inclusionary housing program, is unable to utilize the existing or proposed inclusionary housing program to meet the affordable RHNA allocation. Additional constraints to developing the site inventory include, but are not limited to:

- Density Realism: The City must show precedent for high density residential assumptions by providing documentation that nearby developments are at similar densities.
- Parcel Size: HCD will scrutinize affordable units on sites that are less than 0.5 acres or more than 10 acres.
- Affirmatively Furthering Fair Housing (AFFH): The City is required to spread affordable units throughout the City to ensure there is not a concentration of affordable units in one area.

A detailed breakdown of the residential development capacity by income category is provided in the Projected Housing Needs section of the draft 2021-2029 Housing Element. The City will accomplish this task while continuing Irvine's tradition of strategic and thoughtful planning. Additionally, the draft 2021-2029 Housing Element continues the community's commitment to a full spectrum of housing opportunities for all income groups at all stages of life.

*Quantified Objectives*

A component of the Housing Element includes quantified objectives for achieving the maximum number of units, by income level, to be constructed, rehabilitated, and conserved over the planning period. Staff has identified the City's housing needs, surveyed developable parcels, identified financial resources, analyzed constraints, and assessed appropriate programs and policies. As a result of this analysis an estimate was made of the maximum number of units that can reasonably be expected to be developed by the private sector. It is important to note that quantified objectives need not equal the RHNA allocation.

Review of Past Programs in the Previous Housing Element

The City must evaluate the results from housing programs implemented during the previous Housing Element. The review of past programs discusses the progress, effectiveness, and appropriateness of the previous Housing Element goals, objectives, policies, and programs.

*Public Participation*

Pursuant to California Government Code Section 65583(c)(9), local governments are required to "make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element." To meet these requirements, the City of Irvine has organized multiple activities over the last 10 months to engage with all economic segments of the community through a community outreach survey, two focus groups, three community workshops, a Planning Commission study session, a City Council scoping session, and stakeholder meetings with the development

community, property owners, non-profit organizations, public agencies, such as the Irvine Unified School District, affordable housing providers including the Irvine Community Land Trust, and special interest groups.

To promote the community engagement activities and events, the City used its website, social media accounts, press releases, mailers, interest list notifications, fliers, and public email system. The City also provided outreach materials in English and seven additional languages: Chinese (Traditional and Simplified), Korean, Vietnamese, Japanese, Farsi, Arabic, and Spanish to ensure the outreach materials reached the diverse segments of the community.

The City Council conducted a scoping session on February 9, 2021, and the Planning Commission conducted a study session on February 18, 2021, on the Housing Element update process. Input from the workshops and meetings with the public, City Council, and Planning Commission, as well as staff review of the current Housing Element and changes in state housing law were used to develop the draft document presented to the Planning Commission.

In preparing for the Sites Inventory Analysis, staff identified potential opportunity sites and mailed outreach letters to those property owners. The purpose of these mailers was to gauge interest of property owners in either converting their site for residential purposes or developing residential homes in combination with their existing use within the next eight years. In addition, staff met with major property owners, Irvine Company and FivePoint, to discuss potential opportunity sites for the Housing Element.

City staff held meetings with a variety of stakeholders including affordable housing developers and several meetings with the Irvine Community Land Trust (ICLT) on opportunities to coordinate and collaborate. The City hosted three community workshops throughout the month of April. On April 5, 2021, the City held a virtual community workshop with stakeholders in the Irvine Business Complex (IBC) and Spectrum areas, specifically property owners, commercial real estate brokers, the Building Industry Association (BIA), Irvine Chamber of Commerce, and the general public with an interest in these neighborhoods. On April 22, 2021, and April 29, 2021, the City held virtual community-wide workshops to present the 6$^{th}$ Cycle Housing Element Update. On April 22, 2021, 105 participants attended the workshop and on April 29, 2021, 92 participates attended the workshop.

In addition, staff utilized community survey and focus group results from City residents that are part of the City's, separate and ongoing, General Plan Update. The survey included questions focused on housing issues to support the Housing Element public engagement effort. The focus groups allowed for dedicated discussions that highlighted residents' perspectives on housing topics, including state-mandated housing and where such housing will be compatible in the City.

The City gathered feedback from all outreach activities and evaluated the findings to identify the issues and topics that were most pressing to the Irvine community. The City then used this information to help develop goals, policies, and proposed activities for the planning period.

Review Process

The Housing Element was forwarded to HCD for a mandatory 60-day review for consistency with state law and provisional certification on August 19, 2021. On October 18, 2021, the City received HCD's findings letter that outlined changes to the draft 2021-2029 Housing Element that are necessary to bring the housing element into compliance with Article 10.6 of the Government Code. HCD's required changes are outlined below including information on how staff has responded to ensure compliance with the Government Code. For full details, please reference HCD's findings letter for the City of Irvine dated October 18, 2021 (Attachment 1).

**A. Additional Narrative**

HCD finding: HCD has requested that the City provide additional narrative in the housing element on a variety of topics including the past performance of the 5th Cycle housing programs.

City response: The City has provided a more detailed narrative regarding the past performance of the 5th Cycle housing programs.

**B. Additional Documentation/Findings**

HCD finding: HCD has requested the City provide additional documentation of public outreach to affordable housing advocates and affordable housing property owners and operators.

City response: The City has provided additional documentation regarding the outreach conducted with affordable housing developers and operators. In addition, the City has included input pertaining to affordable housing and housing opportunities provided during focus groups conducted in February 2021. The City has also provided attendance records for the public workshops that documents the attendance and participation by affordable housing advocates.

HCD finding: HCD has requested the City provide additional documentation that there is sufficient dry utilities to meet the RHNA.

City response: The City has included the input received from the dry utility companies that there is sufficient capacity to meet the RHNA.

**C. Site Inventory**

HCD finding: HCD has determined that existing graduate student, family, and faculty residential at the University of California, Irvine (UCI) cannot be used toward meeting the 6th Cycle RHNA. These units must be removed from the site inventory. However, HCD has noted that future graduate student, family, and faculty residential can be counted toward the RHNA subject to the provision of proper documentation and agreements between UCI and the City,

City response: The City has removed the existing UCI units from the site inventory. A draft agreement between the City and UCI will be provided to HCD prior to final approval of the Housing Element.

HCD finding: HCD has requested the City provide documentation that demonstrates non-vacant sites will transition to residential in the next planning period.

City response: The City has provided trend analysis to demonstrate that during the 5th Cycle Housing Element planning period that non-vacant sites transitioned to residential. The City provided data from the Irvine Business Complex as documentation. Additionally, the City has identified emails and letters from property owners who have expressed interest in redeveloping non-residential sites to residential.

HCD finding: HCD has requested the City provide documentation that affordable housing units have been developed from parcels larger than 10 acres in size.

City response: The city has provided information on existing affordable housing projects that have been subdivided and developed from parcels larger than 10 acres in size.

**D. Revisions to the Housing Programs**

HCD finding: HCD has requested the City's programs be modified to include specific and clear commitments.

City response: The City has revised the housing programs to be more specific and clear in its commitments.

HCD finding: HCD has requested the City provide discrete timelines for selected programs in the draft Housing Element.

City response: The City has provided discrete timelines for the programs highlighted by HCD in the draft Housing Element.

HCD finding: HCD has requested that the City provide clear and specific commitments to ensure the units at-risk of converting to market-rate units in the planning period are preserved.

City response: The City has provided additional documentation on how the City will pursue clear and specific commitments to ensure the units at-risk of converting to market-units in the planning period are preserved.

The initial review by HCD must occur at least 90 days prior to the City Council taking final action on the Housing Element. The City is consistent with this requirement, as the initial submittal of the draft occurred on August 19, 2021. Upon incorporation of HCD feedback, staff is presenting the final draft 2021-2029 Housing Element to the Planning Commission followed by final review and City Council consideration of formal adoption concurrent with the resubmittal to HCD for its review. The City is taking advantage of the 120-day grace period following the October 15, 2021, deadline to adopt the final Housing Element. The entire 6th Cycle Housing Element cycle has been delayed at several levels, including the six-month delay at SCAG for the adoption of the final RHNA (March 2021), the delayed release of the Affirmatively Furthering Fair Housing (AFFH) guidelines by HCD (April 2021), and COVID. Upon submittal of the final Housing Element to HCD for certification, the state will have 90 days to confirm whether the Housing Element is consistent with HCD's provisional certification and thereby complies with state law.

**ENVIRONMENTAL REVIEW**

The project requires environmental review consistent with the California Environmental Quality Act (CEQA). The Housing Element is a policy-level document that does not create physical residential growth, but only identifies adequate and available sites for residential development during the 2021-2029 planning period. Therefore, a Negative Declaration has been prepared (Attachment 2).

A Notice of Intent to adopt the Initial Study/Negative Declaration was posted on November 15, 2021 for a thirty-day public review that will conclude on December 15, 2021.

A comprehensive Program Environmental Impact Report (PEIR) will be part of the forthcoming comprehensive General Plan Update that will address the required rezoning identified in the draft Housing Element update.

**ALTERNATIVES CONSIDERED**

The Planning Commission can provide feedback to be incorporated into the draft document, prior to the transmittal to HCD for the required 60-day review.

**FINANCIAL IMPACT**

The Community Development Department budget includes a work program to update the Housing Element. The program includes staff time and consultant services to research and prepare the updated Housing Element. The City will also rely on reimbursement from Senate Bill 2 and Local Early Action Plan (LEAP) grants to fund a portion of the Housing Element.

**REPORT PREPARED BY**: Marika Poynter, Principal Planner

**PC ATTACHMENTS:**

1. HCD Finding Letter dated October 18, 2021
2. Notice of Intent to adopt an Initial Study/Negative Declaration

# NOTICE OF INTENT TO ADOPT AN INITIAL STUDY/NEGATIVE DECLARATION

**NOTICE IS HEREBY GIVEN** that the City of Irvine is considering a recommendation that the project herein identified will have no significant environmental impact in compliance with Section 15070 of the California Environmental Quality Act (CEQA) Guidelines. Copies of the **PROPOSED NEGATIVE DECLARATION (ND)** and **INITIAL STUDY (IS)**, which support the proposed findings, are on file at the City of Irvine.

**State Clearinghouse No.:** (if applicable) N/A

**Project Title and File No.:** City of Irvine General Plan Housing Element 2021–2029 Update
File No. 00832121-PGA

**Project Applicant:** City of Irvine Community Development Department
1 Civic Center Plaza
Irvine, California 92606

**Project Location:** Citywide

**Project Description:** The City of Irvine Community Development Department is currently preparing a 6th Cycle update of its Housing Element for the 2021–2029 planning period pursuant to state requirements. The Housing Element Update includes a comprehensive analysis of the community's current and future housing needs and includes policies and actions to help facilitate the preservation, improvement, and development of housing to accommodate the City's share of the state-mandated Regional Housing Needs Assessment (RHNA) allocation by income levels. Although the City does not build the housing, the City's Housing Element creates a plan and regulatory framework, which provide opportunities for the private sector to do so where market conditions determine when and where housing is built.

**Information Available:** Copies of the **Draft ND** are available for your review at the Community Development Department, 1 Civic Center Plaza, Irvine (City Hall), during normal work hours. In addition, the IS/ND and other project information is accessible online at **www.cityofirvine.org/HEUpdate**.

**Citizen Involvement:** The Draft IS/ND is being circulated for a 30-day public review period as follows: **beginning on November 15, 2021, and ending on December 15, 2021.** All written comments on the Draft IS/ND must be received by the close of business on December 15, 2021, and can be emailed and/or mailed to:

**Melissa Chao, Senior Planner**
**City of Irvine, Community Development Department**
**1 Civic Center Plaza**
**Irvine, CA 92606**
**mchao@cityofirvine.org**

Following the close of the public review period, the Community Development Department will incorporate responses to comments received and prepare a Final IS/ND. The Final IS/ND and the Housing Element Update will be considered by the Planning Commission and City Council at noticed public hearings in the coming months.

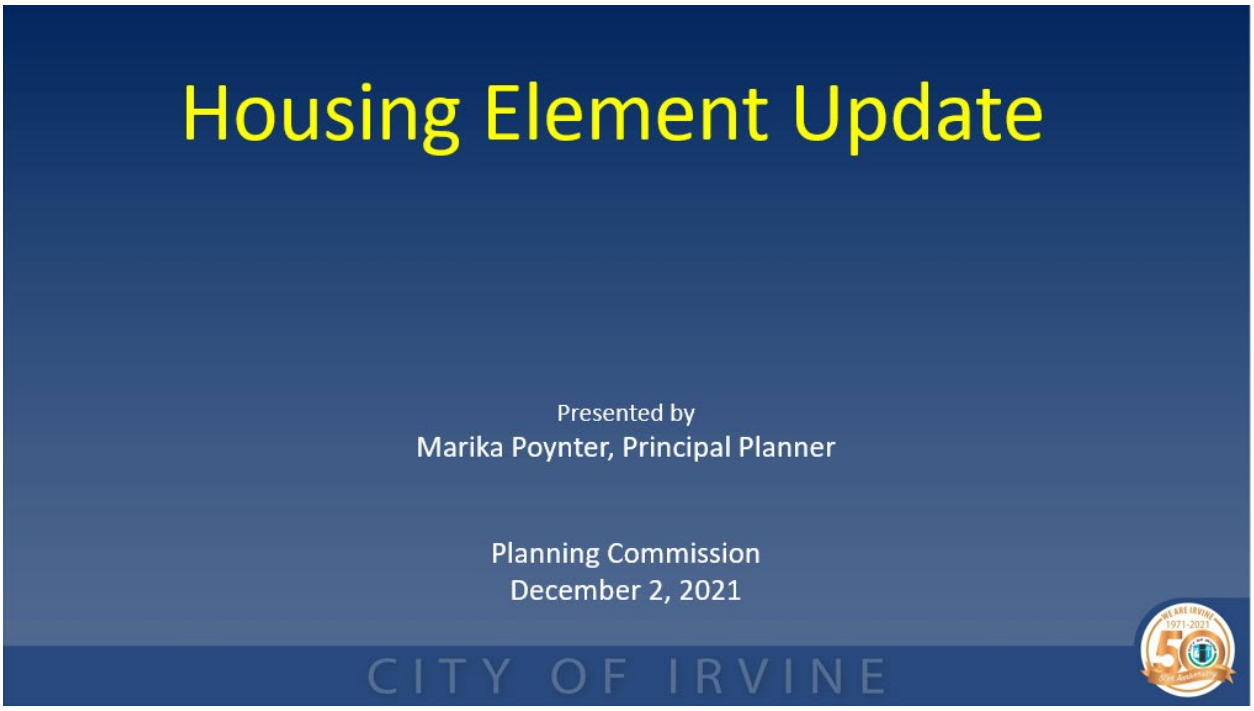
**City Contact:** Melissa Chao, Senior Planner
(949) 724-6395; mchao@cityofirvine.org

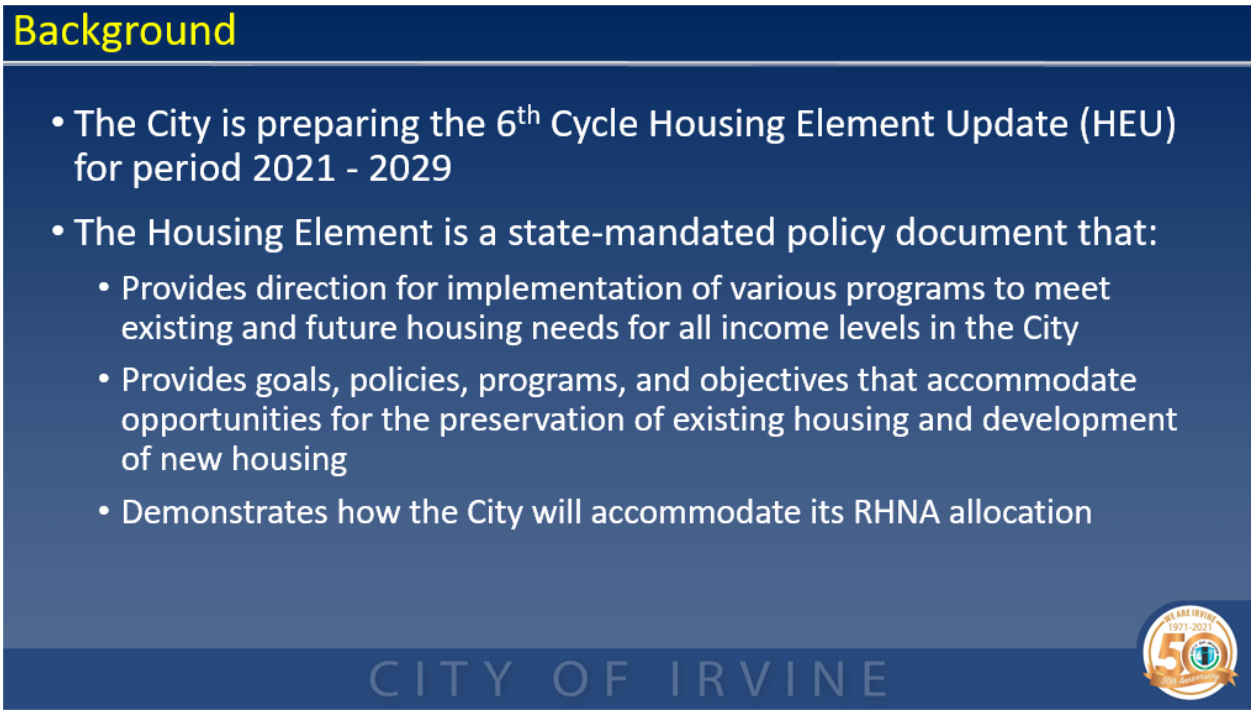
**Notice Date:** November 12, 2021

PC ATTACHMENT 2

FORM 45-05 (Rev. 10/2006)

## 4c. Presentation



## Background

- A city adopted HEU must be submitted to HCD by February 11, 2022 or face penalties.
- The City submitted the draft HEU on August 19, 2021, following three Planning Commission meetings, for the mandatory 60-day review by HCD.
- HCD provided the City with the findings letter on October 18, 2021.
- The City has prepared a revised version of the draft HEU to address HCD's findings.

CITY OF IRVINE

## Regional Housing Needs Assessment

| % of County Area Median Income (AMI) | Units |
|---|---|
| Category 1 (0 – 50 % AMI) | 6,396 |
| Category 2 (51 – 80% AMI) | 4,235 |
| Category 3 (81 – 120% AMI) | 4,308 |
| Category 4 (120% AMI or above; considered "market rate") | 8,671 |
| **TOTAL** | **23,610** |

- Buffer for "no net loss" for Categories 1 and 2 – City will apply it for Categories 1, 2, and 3
- Actual number needed is anticipated to exceed allocation
- Affirmatively Furthering Fair Housing (AFFH)

CITY OF IRVINE

## Site Inventory to Meet RHNA

| | Very Low | Low | Moderate | Above Moderate | Total |
|---|---|---|---|---|---|
| RHNA | 6,396 | 4,235 | 4,308 | 8,671 | 23,610 |
| Total New Units to Meet RHNA (Site Inventory) | **7,230** | **4,801** | **4,898** | **40,727** | **57,656** |
| Net Surplus | 1,850 | 949 | | | |
| No-Net Loss Buffer per HCD (15%-30%) | 29% | 22% | | | |

CITY OF IRVINE

## Draft Policy Recommendations

- Promote higher density residential and mixed use
  - Near train station – PA 32
  - Religious and school sites
  - Conversion of hotel / motel
  - I.B.C.
  - Targeted retail centers
- Transit Oriented Development
  - High density residential and mixed use in Great Park Neighborhoods – adjacent to the Irvine Station
- Consider increasing the inclusionary requirement to 20%

CITY OF IRVINE

## Draft Policy Recommendations

- Publicly–Owned Sites
  - Target City, County, State, and certain privately owned sites for 100% affordable residential projects
- Extend affordability on existing units
  - About 900 units set to expire in the next cycle
- Consider streamlining the affordable housing development process
  - Expedite the entitlement process
  - Evaluate the costs and benefits of reducing / deferring fees

CITY OF IRVINE

## HCD Findings/City Response

A. Additional Narrative:

HCD comment: HCD has requested that the City provide additional narrative in the housing element on a variety of topics, including past performance of the 5th Cycle housing programs.

City response: Provide additional narrative on the identified programs from the 5th Cycle Housing Element.

CITY OF IRVINE

## HCD Findings/City Response

B. Additional Documentation/Findings:

- Affirmatively furthering fair housing (AFFH) – Public Outreach

  HCD comment: Provide additional documentation of outreach to affordable housing advocates, affordable housing providers and developers.

  City response: Providing additional narrative on the workshops held with affordable housing developers and comments from the multiple public workshops and General Plan focus groups.

CITY OF IRVINE

## HCD Findings/City Response

C. Revisions to the Site Inventory

- University Housing

  HCD request: HCD has determined that existing graduate student, family, and faculty residential at UCI cannot be used toward meeting the 6th Cycle RHNA. These units must be removed from the site inventory.

  City response: The City has removed these units from the site inventory.

CITY OF IRVINE

## HCD Findings/City Response

C. Revisions to the Site Inventory

HCD request: HCD has requested the City provide documentation that demonstrates non-vacant sites will transition to residential in the next planning period.

City response: The City has provided trend analysis that demonstrates areas such as the Irvine Business Complex have converted to residential during the previous planning period. The City is also providing emails and letters of interest from property owners.

CITY OF IRVINE

## HCD Findings/City Response

C. Revisions to the Site Inventory

HCD request: HCD has requested the City provide documentation that affordable units have been developed from parcels larger than 10 acres in size.

City response: The City has provided documentation that existing affordable projects have been successfully developed from parcels larger than 10 acres.

CITY OF IRVINE

## HCD Findings/City Response

D. Revisions to the Housing Programs

HCD request: HCD has requested the City's programs be modified to include specific and clear commitments. Additionally, HCD requested the City provide discrete timelines for selected programs.

City response: The City has updated the programs to include more definitive commitments and provided updated and specific timelines for the selected programs.

CITY OF IRVINE

## AB 1398 Impact

- AB 1398 penalizes jurisdictions that do not adopt a HE that is found in substantial compliance by HCD by February 11, 2022.
- If a jurisdiction is unable to have an adopted HEU that is in substantial compliance by HCD by February 11, 2022 and relies on rezoning to meet the RHNA through the site inventory, will be required to complete the rezoning effort by October 15, 2022.
- If a jurisdiction is not able to complete the rezoning and associated environmental in this nine month period, HCD can decertify the jurisdiction's housing element.

CITY OF IRVINE

## Penalties for Non-Compliance

- Increased exposure to litigation
- Loss of permitting authority
- Financial penalties, including monthly fines from $10K - $100K
- Loss of eligibility for state and regional funding sources
- Court receivership
- SB 35 streamlined ministerial approval process
- Increased exposure to monitoring by the Housing Accountability Unit

CITY OF IRVINE

## Timeline

| Date | Action |
|---|---|
| August 19, 2021 | City submits HEU to HCD |
| August 19, 2021 – October 18, 2021 | HCD 60-day review |
| October 18, 2021 | City receives HCD comments on draft HEU |
| October 18, 2021 to mid-November 2021 | City reviews and addresses HCD comments |
| November 19, 2021 | Release of the revised HEU for 2 week public review |
| December 2 & 16, 2021 | Planning Commission public hearing* |
| December 3, 2021 | HCD 60-day review* (second submittal) |
| January 11 & 25, 2022 | City Council adoption hearings* |
| February 11, 2022 | Certification deadline |
| March 2022 – October 2024 | General Plan/Rezoning (with environmental) to support HEU |

* HCD 60-day review occurs concurrently with Planning Commission and City Council consideration

CITY OF IRVINE

# 4d. Comments Summary and Analysis

| Comments and Questions Received at December 2 PC Meeting | Who | Responses and How Comment was Addressed in HE (if applicable) |
|---|---|---|
| Rpresentative of about 3,500 working class men and women skilled and trained construction workforce. There are about 250 constructions workers in the Regional Council that reside in Irvine.<br><br>Please consider adding language regarding skilled workforce language to the HEU | Leonard DeLaRosa, representative Southwest Regional Council of Carpenters (in person) | Comment noted. |
| Looking for several clarifications:<br>1. Site inventory specifies specific allocations of affordable housing for specific sites. Requesting flexibility to move units around. For example, site in Spectrum area yet no affordable housing is allocated in Planning Area 32 even though about 15,000 units total are assumed.<br>2. Inclusionary housing ordinance increasing from 15 to 20 percent (9/6/5 breakdown) is pending study. General apprehension, but understand that study will address. Inconsistent wording in the draft HEU document – will change vs. will study. Want clarifcation that the study will be completed before an changes are made to the inclusionary housing. | Jeff Davis, Irvine Company (in person) | Comment noted. |

| | | |
|---|---|---|
| You have our letter which is more detailed. | | |
| Understand that policies and land use are intertwined to make it viable.<br><br>In comparision to other cities, Irvine has made tremendous progress on developing market and some affordable residential units (City is leader).<br><br>Current policies have produced approximately 25 percent more moderate and market rate units than very low and low units.<br><br>Recommend increase in affordable housing in-lieu fee. Ensure the inclusionary housing ordinance is raised to ensure parity with affordable housing moving forward with market rate given the incentives provided for market rate housing.<br><br>Recognize the challenges to make housing opportunities for everybody in the community. People can't afford to live in the community. Encouraging and making policies stronger for affordable housing for everybody. | Cesar Covarrubias, Executive Director of the Kennedy Commission<br>(via Zoom) | Comment noted |
| Irivne is a top housing builder in the State (only LA and San Diego surpasses Irvine).<br><br>Irvine is less dense than its northern counterparts and is less affordable. Believes Irvine is overproducing market rate units and underproducing affordable rate housing. A bit of a monopoly on the market rate units. | Alejandra Reyes, Irvine resident and UCI faculty member specializing on housing policy topics<br>(via Zoom) | Comment noted. |

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| Irvine has got to do better and provide more affordable housing options. Daughters have grown up in Irvine, but don't know the world. Need exposure to all people. We have ethnic diversity, but our youth are diisadvantaged because of lack of exposure to socioeconomic diversity.<br><br>Need an Irvine that appeals to everyone and is affordable. Make Irvine a much better, fairer, more interesting, and more diverse City. | John Irvine, Irvine resident of Woodbridge with two daughters in middle school and Woodbridge High School (via Zoom) | Comment noted. |
| Did we receive the skilled workfoce language on the dias tonight? Asked Leonard DeLaRosa what skilled and trained workforce means.<br><br>Support flexibility in site inventory if it doesn't mess up our timeline to meet the Feb. 11, 2022 deadline. Please highlight language in draft HEU.<br><br>Irvine moderate and above Moderate units approved 25 time more than very low and Low units. | Commissioner Gaido | Leonard DeLaRosa responded that skilled and trained workforce is one that has gone through an accredited apprenticeship program where the SWCCC program is recognized from the State (safety procedures, construction, development, engineering, and blue print reading).<br><br>Southwest Regional Council developed Career Connection which is training program for high schoolers. Teach cirriculum covering wood framing, metal stud framing, dry wall, acoustical, and doors. Giving someone the ability to work in construciton with a good job in terms of wages and benefits.<br><br>Staff responded that the State requires jurisdictions to identify specific sites and can only use for two HEU cycles. Only viable possibilities we identified. The flexibility in the existing language in the draft HEU can be highlighted. |

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| | | Staff reponded that Irvine's HE Annual Progress Report shows we constructed approximately 907 very low units. In comparision, approximately 1,000 very low affordable units were constructed by 34 other jurisdictions in the region during the same period. However, progress is measured against RHNA, not in comparision with other jurisdictions.<br><br>Staff responded we can address the Southwest Regional Council's request regarding skilled workforce separate from the HEU such as during the General Plan Update, Zoning Ordinance Amendement, or future implementation plan. |
| HEU is a goal Irvine is striving for.<br><br>The upcoming GPU work effort can contemplate skilled labor and the inclusionary housing study that is forthcoming.<br><br>Today we are addressing HCD's exceptions (comments) letter.<br><br>City must meet the deadline at this point and cannot afford any interuptions because we can no longer issue any building permits and that would hurt everyone. | Chair Pierson | Comment noted. |
| Confirm that there is a fair amount of flexibiltiy such as changing sites.<br><br>Financially it makes more sense to concentrate affordable housing. Cap and trade funds are available for TOD developments (e.g., 100 units of high density) . Need to be | Commissioner Limb | Staff reponded that sites can be mixed and matched including different levels of affordability. Greater detail will be provided in the upcoming GPU work effort.<br><br>Leonard DeLaRosa responded generally skilled workforce involves prevailing wages and |

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| flexible to take advantage of funding and maximize resources to get more units.<br><br>Presume that skilled workforce generally involves prevailing wages and union jobs. Not sure the City has authority to require skilled labor. | | union jobs. It depends on the funding source. Federal and State funding generally involves prevailing wage vs. private. |
| Strict timeline to meet the February 11, 2022 deadline (i.e., adopted by City Council and receive certification by HCD) to meet AB 1398. Hence the concurrent review process between Planning Commission and City Council.<br><br>Why UCI housing not counted?<br><br>Does extending the term of affordability count?<br><br>Flexibility for City and developer in dealing with the State agency | Vice Chair Huang | Staff responded that if we make changes then we would have to re-release for public review. We can amend the adopted HEU within certain limits in the future.<br><br>Staff responded that HCD's rationale for not counting UCI units is that SCAG already reduced the number of units related to university housing in the RHNA allocation. So it would be double counting.<br><br>Staff responded extending the term of affordability for existing units is credited against the RHNA (i.e., decrease from initial allocation). |
| It is obvious we are on a split critical path withconcurrent review by the Planning Commission and City Council and HCD.<br><br>Understand flexibility in the HEU document. Concerned that this flexibility will be continued forward in the GPU and related ZOA where we will have tremondous time to talk through the actual details of implementation, inclusionary housing, negotiate skilled and trained workforce (where we don't step over the line of our authority) | Chair Pierson | Comment noted. |

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| Don’t like State saying we can not take advantage of the Unviersity Housing despite it impacts everything in the City.<br><br>Continued the public hearing to December 16, 2021 meeting (voted 4-0 with Commissioner Knowland absent) | | |

## 4e. Public Notice

# PUBLIC NOTICE
## PLANNING COMMISSION HEARING
## December 2, 2021

**DESCRIPTION:** The draft 2021-2029 Housing Element is Irvine's "housing plan" and is a required chapter in the General Plan. Irvine, along with all California cities and counties, is required to adequately plan and meet the housing needs of everyone in the community. All cities and counties are required to update their Housing Element every eight years for certification by the California Department of Housing and Community Development. The 2021-2029 Housing Element cycle must identify enough potentially developable sites suitable for residential use to meet Irvine's Regional Housing Needs Assessment allocation of 23,610 housing units. The Housing Element must provide goals, objectives, policies, and implementation programs demonstrating how Irvine will meet its existing and future housing needs for all income levels. The Housing Element must also address recent housing legislation adopted in response to the state's housing crisis.

**LOCATION:** Citywide.

**INFORMATION:** Copies of the staff report will be available for review after 5 p.m. on Thursday, **November 18, 2021**, online at *cityofirvine.org/planningcommission.* Copies of the draft 2021-2029 Housing Element and associated Initial Study/Negative Declaration are available at the City's dedicated Housing Element webpage at *cityofirvine.org/housing-element-update*.

**INVOLVEMENT:** Do you have any comments? Questions? Concerns? You are invited to participate in a public hearing to be held by the City of Irvine Planning Commission on **Thursday, December 2, 2021, at 5:30 p.m.** or soon thereafter, in the City Council Chamber at Irvine City Hall, One Civic Center Plaza, Irvine. You may also participate through the "Zoom" application. Details for "Zoom" will be posted online at least 24 hours in advance of the hearing at *cityofirvine.org/planningcommission*.

For any public hearing or public meeting that is scheduled after September 30, 2021, a person's ability to participate and provide verbal comments via teleconference will be contingent on the Governor of California extending teleconferencing accommodations by new executive order or contingent on the California Legislature enacting a statute authorizing the same. Members of the public are encouraged to be informed as to teleconferencing accommodations, if any, available after September 30, 2021. If teleconferencing accommodations are not extended, any person may participate in a public hearing or public meeting, and provide verbal comments therefor, by attending the meeting in person at Irvine City Hall.

**NOTE:** If, in the future, you wish to challenge this application in court, you may be limited to raising only those issues that you or someone else raised in written correspondence received by the City at, or before, the public hearing.

**CONTACT:** For more information or to submit comments in advance of the meeting, please contact Marika Poynter, Principal Planner, by email at mpoynter@cityofirvine.org or by phone at 949-724-6456.

**AMERICANS WITH DISABILITIES ACT COMPLIANCE:** It is the intention of the City of Irvine to comply with the Americans with Disabilities Act in all respects. If you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Community Development Department at 949-724-6465 or planningcommission@cityofirvine.org. Notification 48 hours prior to the hearing will enable the City to make reasonable arrangements ensuring accessibility to the hearing. (28 CFR 35. 102-35. 104 ADA Title II)

**CASE NUMBER(s):** 00832121-PGA

**PUBLICATION:** *Irvine World News*
*Orange County Register*

**PUBLICATION DATE:** November 11, 2021
November 15, 2021

# 4f. Affidavits of Publication

**Irvine World News**
1771 S. Lewis Street
Anaheim, CA 92805
714-796-2209

5191001

IRVINE, CITY OF- LEGALS
1 CIVIC CENTER PLZ
ATTN: ACCOUNTS PAYABLE
IRVINE, CA 92606-5208

## AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA, } **SS.**
County of Orange

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the Irvine World News, a newspaper that has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, on August 23, 1990, Case No. A-154653 in and for the City of Irvine, County of Orange, State of California; that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

**11/11/2021**

I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct:

Executed at Anaheim, Orange County, California, on Date: November 11, 2021.

Signature

## PROOF OF PUBLICATION

Legal No. **0011499675**

## AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA, )
) ss.
County of Orange )

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of **The Orange County Register**, a newspaper of general circulation, published in the city of Santa Ana, County of Orange, and which news-paper has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, under the date of November 19, 1905, Case No. A-21046, that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

November 15, 2021

"I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct":

Executed at Santa Ana, Orange County, California, on

Date: November 15, 2021

Sandra Campos

Signature

**The Orange County Register**
**2190 S. Towne Centre Pl.**
**Anaheim, CA 92806**

## PROOF OF PUBLICATION

**PUBLIC NOTICE**
**PLANNING COMMISSION HEARING**
**December 2, 2021**

**DESCRIPTION:** The draft 2021-2029 Housing Element is Irvine's "housing plan" and is a required chapter in the General Plan. Irvine, along with all California cities and counties, is required to adequately plan and meet the housing needs of everyone in the community. All cities and counties are required to update their Housing Element every eight years for certification by the California Department of Housing and Community Development. The 2021-2029 Housing Element cycle must identify enough potentially developable sites suitable for residential use to meet Irvine's Regional Housing Needs Assessment allocation of 23,610 housing units. The Housing Element must provide goals, objectives, policies, and implementation programs demonstrating how Irvine will meet its existing and future housing needs for all income levels. The Housing Element must also address recent housing legislation adopted in response to the state's housing crisis.

**LOCATION:** City wide.

**INFORMATION:** Copies of the staff report will be available for review after 5 p.m. on Thursday, November 18, 2021, online at cityofirvine.org/planningcommission. Copies of the draft 2021-2029 Housing Element and associated Initial Study/Negative Declaration are available at the City's dedicated Housing Element webpage at cityofirvine.org/housing-element-update.

**INVOLVEMENT:** Do you have any comments? Questions? Concerns? You are invited to participate in a public hearing to be held by the City of Irvine Planning Commission on **Thursday, December 2, 2021, at 5:30 p.m.** or soon thereafter, in the City Council Chamber at Irvine City Hall, One Civic Center Plaza, Irvine. You may also participate through the "Zoom" application. Details for "Zoom" will be posted online at least 24 hours in advance of the hearing at cityofirvine.org/planningcommission.

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**NOTE:** If, in the future, you wish to challenge this application in court, you may be limited to raising only those issues that you or someone else raised in written correspondence received by the City at, or before, the public hearing.

**CONTACT:** For more information or to submit comments in advance of the meeting, please contact Marika Poynter, Principal Planner, by email at mpoynter@cityofirvine.org or by phone at 949-724-6456.

**AMERICANS WITH DISABILITIES ACT COMPLIANCE:** It is the intention of the City of Irvine to comply with the Americans with Disabilities Act in all respects. If you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Community Development Department at 949-724-6465 or planningcommissioners@cityofirvine.org. Notification 48 hours prior to the hearing will enable the City to make reasonable arrangements ensuring accessibility to the hearing. (28 CFR 35. 102-35. 104 ADA Title II)

**CASE NUMBER(s):** 03832121-PGA

**PUBLICATION:** Irvine World News OC Register **PUBLICATION DATE:** Nov. 11, 2021 Nov. 15, 2021

# 5a. Planning Commission December 16, 2021 Meeting Agenda

# AGENDA

## PLANNING COMMISSION
## REGULAR MEETING

**December 16, 2021**
**5:30 PM**
**City Council Chamber**
One Civic Center Plaza
Irvine, CA 92606


Jeff Pierson
Chair

Stephen Huang
Vice Chair

Christine Knowland
Chair Pro Tem

Jong Limb
Commissioner

Mary Ann Gaido
Commissioner


### PARTICIPATION AT PLANNING COMMISSION MEETINGS

MEETINGS ARE AVAILABLE TO ATTEND IN-PERSON IN THE CITY COUNCIL CHAMBER OR WATCHED LIVE THROUGH THE "ZOOM" APPLICATION. INFORMATION FOR "ZOOM" CAN BE FOUND ONLINE AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. YOU MAY SUBMIT COMMENTS ON ANY AGENDA ITEM OR ON ANY ITEM NOT ON THE AGENDA, IN WRITING VIA MAIL TO "ATTN: PLANNING COMMISSION," ONE CIVIC CENTER PLAZA, IRVINE, CA 92606; BY EMAIL TO PLANNINGCOMMISSION@CITYOFIRVINE.ORG; OR THROUGH E-COMMENT AT CITYOFIRVINE.ORG/PLANNINGCOMMISSION. E-COMMENTS SUBMITTED AT LEAST TWO HOURS PRIOR TO THE COMMENCEMENT OF THE MEETING WILL BE DISTRIBUTED TO THE PLANNING COMMISSION AT THE MEETING. YOU MAY ALSO PROVIDE LIVE COMMENTS VIA "ZOOM." FOR MORE INFORMATION, VISIT CITYOFIRVINE.ORG/PLANNINGCOMMISSION.

**REQUEST TO SPEAK IN PERSON:** IF YOU WOULD LIKE TO ADDRESS THE PLANNING COMMISSION ON A SCHEDULED AGENDA ITEM – INCLUDING A REGULAR BUSINESS ITEM, A PUBLIC HEARING ITEM, OR PUBLIC COMMENTS – PLEASE REGISTER BY COMPLETING THE ELECTRONIC FORM AVAILABLE ON THE KIOSK AT THE ENTRANCE TO THE CITY COUNCIL CHAMBER. PLEASE IDENTIFY ON THE FORM YOUR NAME AND THE ITEM ON WHICH YOU WOULD LIKE TO SPEAK. THE REQUEST TO SPEAK FORM ON THE KIOSK ASSISTS THE CHAIR IN ENSURING THAT ALL PERSONS WISHING TO ADDRESS THE PLANNING COMMISSION ARE RECOGNIZED. IT ALSO ENSURES THE ACCURATE IDENTIFICATION OF MEETING PARTICIPANTS IN THE PLANNING COMMISSION MINUTES. YOUR NAME WILL BE CALLED AT THE TIME THE MATTER IS HEARD BY THE PLANNING COMMISSION. CITY POLICY IS TO LIMIT PUBLIC TESTIMONY TO UP TO FIVE MINUTES PER SPEAKER ON AGENDIZED ITEMS, AND THREE MINUTES DURING GENERAL PUBLIC COMMENTS (UNLESS THE TIME LIMIT IS EXTENDED BY THE CHAIR), WHICH INCLUDES THE PRESENTATION OF ELECTRONIC OR AUDIO-VISUAL INFORMATION. SPEAKERS MAY NOT YIELD THEIR TIME TO OTHER PERSONS.

**PLEASE TAKE NOTICE THAT** THE ORDER OF SCHEDULED AGENDA ITEMS BELOW AND/OR THE TIME THEY ARE ACTUALLY HEARD, CONSIDERED AND DECIDED MAY BE MODIFIED BY THE CHAIR DURING THE COURSE OF THE MEETING, SO PLEASE STAY ALERT.

PLEASE NOTE: THE PLANNING COMMISSION IS MAKING EVERY EFFORT TO FOLLOW THE SPIRIT AND INTENT OF THE BROWN ACT AND OTHER APPLICABLE LAWS REGULATING THE CONDUCT OF PUBLIC MEETINGS, IN ORDER TO MAXIMIZE TRANSPARENCY AND PUBLIC ACCESS. FOR QUESTIONS OR ASSISTANCE, PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AT 949-724-6465, OR VIA EMAIL AT PLANNINGCOMMISSION@CITYOFIRVINE.ORG. IT WOULD BE APPRECIATED IF WRITTEN COMMUNICATIONS OF PUBLIC COMMENTS RELATED TO ITEMS ON THE AGENDA, OR ITEMS NOT ON THE AGENDA, ARE PROVIDED PRIOR TO THE COMMENCEMENT OF THE MEETING.

**CALL TO ORDER**

**ROLL CALL**

**PLEDGE OF ALLEGIANCE**

**INTRODUCTIONS**

**ADDITIONS AND DELETIONS TO THE AGENDA**

Additions to the agenda are limited by the California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda must be acted upon prior to the next Planning Commission meeting.

**PUBLIC COMMENTS**

**COMMISSION BUSINESS**

**1. MINUTES**

**RECOMMENDED ACTION:**
Approve minutes of the November 18, 2021 Regular Planning Commission Meeting.

**PUBLIC HEARINGS**

**2. GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE**

**RECOMMENDED ACTION:**
1. Conduct the public hearing.
2. Adopt RESOLUTION NO. 21-3846 - A RESOLUTION OF THE IRVINE PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE THE 2021-2029 HOUSING ELEMENT IN ITS CURRENT FORM, AND RECOMMENDING THAT THE CITY COUNCIL APPROVE CORRESPONDING GENERAL PLAN AMENDMENT 00832121–PGA IN FURTHERANCE THEREOF

**3. CONDITIONAL USE PERMIT MODIFICATION WITH ADMINISTRATIVE RELIEF FROM PARKING STANDARDS FOR MOMENTOUS SPORTS CENTER IN PLANNING AREA 10 (WALNUT)**

**RECOMMENDED ACTION:**

1. Conduct the public hearing.
2. Adopt Resolution No. 21-3847 – A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, APPROVING CONDITIONAL USE PERMIT 00789713-PCPM WITH ADMINISTRATIVE RELIEF FROM PARKING STANDARDS FOR MOMENTOUS SPORTS CENTER, A COMMUNITY FACILITY LOCATED AT 14522 AND 14524 MYFORD ROAD IN PLANNING AREA 10 (WALNUT); FILED BY MOMENTOUS SPORTS CENTER, LP

**4. MODIFICATION TO AN APPROVED MASTER PLAN, SPECIFIC TO 45 RESIDENTIAL LOTS, INCLUDING A REQUEST FOR AN ALTERNATIVE REAR SETBACK STANDARD FOR CERTAIN LOTS, LOCATED IN TRACT 17798, NEIGHBORHOOD 1 OF PLANNING AREA 1 (ORCHARD HILLS)**

**RECOMMENDED ACTION:**

1. Conduct the public hearing.
2. Adopt Resolution No. 21-3844 – A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING MASTER PLAN MODIFICATION 00850498-PMP, SPECIFIC TO 45 RESIDENTIAL LOTS, INCLUDING A REQUEST FOR AN ALTERNATIVE REAR SETBACK STANDARD FOR CERTAIN LOTS, LOCATED IN TRACT 17798, NEIGHBORHOOD 1 OF PLANNING AREA 1 (ORCHARD HILLS); FILED BY HUNSAKER & ASSOCIATES ON BEHALF OF IRVINE COMPANY COMMUNITY DEVELOPMENT

**5. PARK PLAN MODIFICATION FOR THE SOFI IRVINE APARTMENT COMPLEX LOCATED IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)**

**RECOMMENDED ACTION:**

1. Conduct the public hearing.
2. Adopt RESOLUTION NO. 21-3845 – A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING PARK PLAN MODIFICATION (FILE NO. 00850219-PPK) FOR THE SOFI IRVINE APARTMENT COMPLEX LOCATED IN PLANNING AREA 36 (IRVINE BUSINESS COMPLEX); FILED BY PROGRESSIVE IMAGES IN ARCHITECTURE AND PLANNING, ON BEHALF OF PMI SUMMERLYN LLC

## STAFF REPORTS

## PLANNING COMMISSION REPORTS

## ADJOURNMENT

### NOTICE TO THE PUBLIC

The Irvine Planning Commission consists of five residents of the City who are appointed by Irvine City Councilmembers. The Commission meets regularly on the first and third Thursday of each month in the City Council Chamber at the Irvine Civic Center located at One Civic Center Plaza. Meetings begin at 5:30 p.m., unless otherwise noted. Meeting agendas and approved minutes are kept current on the City website at cityofirvine.org/planningcommission
.

The Planning Commission is responsible for providing input to the City Council on long-range planning. Irvine's long-range planning goals are embodied in the General Plan. The General Plan and the amendments to it are reviewed by the Planning Commission and adopted by the City Council. The General Plan is implemented through the City's development regulations.

The Planning Commission has the authority to approve or deny applications concerning development within the City. The category of applications includes Tentative Tract Maps, Conditional Use Permits, Master Plans, Administrative Relief and Variances. The Planning Commission also makes recommendations to the City Council on all applications for amendments to the Zoning Ordinance.

An agenda is provided for each Planning Commission meeting, which lists the items submitted for consideration. Prior to the listed agenda items, the Commission may hold a study session to receive information or meet with another committee. A study session is open to the public; however, no public testimony is taken and no decisions are made. Following a study session, the regular meeting will begin at 5:30 p.m. At this time, the Commission allows oral communication from the public to address the Commission on items not listed on the agenda. See information for Speaker's Card/Request to Speak on the first page.

The items on the agenda are arranged in three categories: Consent Calendar: These are relatively minor in nature, do not have any outstanding issues or concerns, and do not require a public hearing. All consent calendar items are considered by the Commission as one item and a single vote is taken for their approval, unless an item is pulled from the consent calendar for individual discussion. There is no public discussion of consent calendar items unless requested by the Commission. Public Hearings: This category is for case applications that require, by law, a hearing open to public comment because of the discretionary nature of the request. Public hearings are formally conducted and public input/testimony is requested at a specific time. This is your opportunity to speak on the item(s) that concern you. If, in the future, you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues which you (or someone else) raised orally at the public hearing or in written correspondence received by the City at or before the hearing. Commission Business: Items in this category are general in nature and may require Commission action. Public input may be received at the request of the Commission. See information for Speaker's Card/Request to Speak on the first page.

**At 10 p.m.,** the Planning Commission will determine which of the remaining agenda items can be considered and acted upon prior to 11 p.m., and will continue all other items for which additional time is required until a future Commission meeting. All meetings are scheduled to terminate at 11 p.m.

## STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the Community Development Department and are available for public inspection and copying once the agenda is publicly posted, (at least 12 days prior to a regular Planning Commission meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org/planningcommission* at least 12 days prior to the scheduled Planning Commission meeting.

## APPEALS

Planning Commission decisions may be appealed to the City Council in accordance with Zoning Ordinance Chapter 2-5. Planning Commission actions on a subdivision map may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-110. Planning Commission determinations regarding an interpretation of the City's Subdivision Ordinance may be appealed to the City Council in accordance with Irvine Municipal Code Section 5-5-1004.H.

## SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the Planning Commission regarding any item on this agenda after the posting of the agenda will be available for public review in the Community Development Department during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

## SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

### MEDIA TYPES AND GUIDELINES

1. Written Materials/Handouts: Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the Planning Commission. Please provide 10 copies of the information to be submitted and file with the Recording Secretary at the time of arrival to the meeting. This information will be disseminated to the Planning Commission at the time testimony is given.

2. Large Displays/Maps/Renderings: Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

3. Electronic Documents/Audio-Visuals: Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Community Development Department at 949-724-6465 no later than noon on the day of the scheduled meeting.

## CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the Planning Commission liaison at 949-724-6465.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II).

## MEETING SCHEDULE

Regular meetings of the Planning Commission are held on the first and third Thursdays of each month at 5:30 p.m. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- Front Entrance of City Hall
- University Park Center (Culver/Michelson)
- Walnut Village Center (Culver/Walnut)
- Northwood Town Center (Irvine Blvd./Yale)
- City's web page at cityofirvine.org/planningcommission

I hereby certify that the agenda for the regular Planning Commission meeting was posted in accordance with law in the posting book located in the Public Safety lobby and at the entrance to the Civic Center, One Civic Center Plaza, Irvine, California on December 2, 2021 by 7 p.m. as well as on the City's web page.

Laya Espinosa
Commission Liaison

# 5b. Staff Report

## REQUEST FOR PLANNING COMMISSION ACTION

**MEETING DATE:** December 16, 2021

**TITLE:** GENERAL PLAN – DRAFT 2021-2029 HOUSING ELEMENT UPDATE

Director of Community Development

### RECOMMENDED ACTION

1. Conduct the public hearing.
2. Adopt RESOLUTION NO. 21-3846 - A RESOLUTION OF THE IRVINE PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE THE 2021-2029 HOUSING ELEMENT IN ITS CURRENT FORM, AND RECOMMENDING THAT THE CITY COUNCIL APPROVE CORRESPONDING GENERAL PLAN AMENDMENT 00832121–PGA IN FURTHERANCE THEREOF

### EXECUTIVE SUMMARY

State law requires all cities to update the Housing Element of its General Plan every eight years. It further requires the current update to be completed by October 15, 2021, however, statute allows for a 120-day grace period. The City's Housing Element was adopted by the City Council in 2013 for the 2013-2021 planning period. This update will address the 2021-2029 planning period. The draft 2021-2029 Housing Element was submitted to the California Department of Housing and Community Development (HCD) for the required 60-day review. HCD provided the City with a findings letter on October 18, 2021 that identified modifications required for the draft 2021-2029 Housing Element to be certified by HCD before the February 11, 2022, deadline.

At the time of the agenda publication, the December 2, 2021 meeting has not yet concluded. An update on the December 2, 2021 Irvine Planning Commission discussion will be provided at the December 16, 2021, meeting.

The agenda report from the December 2, 2021, meeting with a more detailed history and analysis of the Housing Element Update is included as PC Attachment 1.

### COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

**PUBLIC REVIEW**

The revised draft Housing Element Update was posted for a two-week public review on Friday, November 19, 2021. Following the two-week review, the revised draft Housing Element was submitted to HCD for a 60-day review on Friday, December 3, 2021. The City will continue to accept public comments on the draft Housing Element Update through the City Council hearings in January 2022.

**ENVIRONMENTAL REVIEW**

The project requires environmental review consistent with the California Environmental Quality Act (CEQA). The Housing Element is a policy-level document that does not create physical residential growth, but only identifies adequate and available sites for residential development during the 2021-2029 planning period. Therefore, a Negative Declaration has been prepared.

A Notice of Intent to adopt the Initial Study/Negative Declaration was posted on November 15, 2021 for a thirty-day public review that will conclude on December 15, 2021.

A comprehensive Program Environmental Impact Report (PEIR) will be part of the forthcoming comprehensive General Plan Update that will address the required rezoning identified in the draft Housing Element update.

**ALTERNATIVES CONSIDERED**

The Planning Commission can provide additional feedback to be incorporated into the draft document that was transmitted to HCD for the required 60-day review on December 3, 2021.

**FINANCIAL IMPACT**

The Community Development Department budget includes a work program to update the Housing Element. The program includes staff time and consultant services to research and prepare the updated Housing Element. The City will also rely on reimbursement from Senate Bill 2 and Local Early Action Plan (LEAP) grants to fund a portion of the Housing Element.

**REPORT PREPARED BY**: Marika Poynter, Principal Planner

**PC ATTACHMENTS:**

1. December 2, 2021 Planning Commission Report
2. Resolution 21-3846

PLANNING COMMISSION RESOLUTION NO. 21-3846

A RESOLUTION OF THE IRVINE PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE THE DRAFT 2021-2029 HOUSING ELEMENT, AND RECOMMENDING THAT THE CITY COUNCIL APPROVE CORRESPONDING GENERAL PLAN AMENDMENT 00832121-PGA IN FURTHERANCE THEREOF

WHEREAS, Government Code Section 65580 *et seq*. (Housing Element Law) requires that every city prepare and periodically update the housing element of the general plan; every city is mandated to include statutory requirements in the housing element, and every city is required to submit a draft of its housing element to the California Department of Housing and Community Development (HCD) for review and comment as to whether the city's draft 2021-2029 Housing Element substantially complies with Housing Element Law; and

WHEREAS, the City of Irvine's (City's) Housing Element will cover the 2021-2029 planning period and plan for the provision of housing accessible to all income categories; and

WHEREAS, the City's draft 2021-2029 Housing Element was structured to adhere to the Housing Element Building Blocks created by HCD to assist jurisdictions in preparing the document; and

WHEREAS, a Scoping Session for the City's draft 2021-2029 Housing Element, designated as General Plan Amendment 00832121-PGA (General Plan Amendment), was held before the City Council on February 9, 2021; and

WHEREAS, a Study Session for the City's draft 2021-2029 Housing Element, designated as General Plan Amendment 00832121-PGA (General Plan Amendment), was held before the Planning Commission on February 18, 2021; and

WHEREAS, public workshops were held on April 5, 2021, April 22, 2021, and April 29, 2021 to receive input from community stakeholders and residents relative to the Housing Element update; and

WHEREAS, the Planning Commission reviewed the draft 2021-2029 Housing Element on July 1, 2021, July 15, 2021, and August 5, 2021 to provide minor amendments to the draft 2021-2029 Housing Element prior to submitting the document to the California Department of Housing and Community Development (HCD) for a mandatory 60-day review period on August 19, 2021; and

WHEREAS, HCD provided findings to the City of Irvine on the draft 6th Cycle Housing Element on October 18, 2021 that have been addressed by the City in a revised second version of the Housing Element prior to a required 2 week public review

PC ATTACHMENT 2

from November 19, 2021 to December 3, 2021 and resubmittal of the Housing Element for a second mandatory 60-day review period on December 3, 2021; and

WHEREAS, General Plan Amendment 00832121-PGA is considered a "project" under the California Environmental Quality Act , Public Resources Code Section 21000 *et seq*. (CEQA) and implementing regulations in Title 14 of the California Code of Regulations, Section 15000 *et seq*. (CEQA Guidelines); and

WHEREAS, pursuant to Article 6 of the CEQA Guidelines, it has been determined that after reviewing the entire project record, there is no substantial evidence in light of the whole record that the project will have a significant effect on the environment and a Negative Declaration has been prepared in accordance with CEQA, and posted for public review from November 15, 2021 to December 15, 2021; and

WHEREAS, notice of the Planning Commission public hearing on the City's draft 2021-2029 Housing Element was made pursuant to Government Code section 65353 and Sections 2-11-7 and 2-23-4 of the Irvine Zoning Code; and

WHEREAS, the Planning Commission conducted the public hearing on December 2, 2021 and continued the matter to December 16, 2021 to consider the revisions to the draft 2021-2029 Housing Element per HCD's findings; and

WHEREAS, the Planning Commission of the City of Irvine has considered information presented by the Community Development Department, including but not limited to, the draft 2021-2029 Housing Element and all other documents and information referenced in this Resolution, and other interested parties at a public hearing held on December 16, 2021.

NOW, THEREFORE, the Planning Commission of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. Pursuant to Article 6 and Section 15070 of the CEQA Guidelines, it has been determined that there is no substantial evidence that the project could have a significant effect on the environment. A Negative Declaration has, therefore, been prepared according to CEQA. Prior to approving this project, the Planning Commission, utilizing its independent judgement, has reviewed and considered the information contained in the Negative Declaration and Initial Study. In addition, the Planning Commission considered comments during the public review process.

SECTION 2. In accordance with Section 7 of the City of Irvine CEQA Procedures, the Planning Commission finds that the Negative Declaration has been completed in compliance with CEQA, the State CEQA Guidelines, and the City's CEQA Procedures. The Negative Declaration adequately addresses the general environmental setting of the proposed project, its environmental impacts, alternatives, and mitigation measures (if applicable) related to each impact.

SECTION 3. The Planning Commission recommends that the City Council find that the findings required by Section 2-11-8 of the City of Irvine Zoning Code for approval of a General Plan Amendment have been made as follows:

1. The proposed General Plan Amendment is consistent with other elements of the City's General Plan pursuant to Government Code Section 65300.5:

   The 2021-2029 Housing Element is a general plan amendment required by Housing Element Law. Furthermore, the proposed General Plan Amendment is consistent with the other elements of the City of Irvine General Plan.

2. The proposed General Plan Amendment responds to changes in state and/or federal law pursuant to Government Code Section 65300.9. The 2021-2029 Housing Element has been initiated in response to state law and the requirements of Housing Element Law.

3. The proposed general plan amendment has been referred to the County of Orange and any adjacent cities abutting or affected by the proposed action and any other federal agency whose operations or lands may be affected by the proposed decision pursuant to Government Code Section 65352.

   Notification of a public hearing for the proposed General Plan Amendment was sent to the County of Orange and several adjacent cities that may be affected by the proposed action.

4. The proposed General Plan Amendment will not be detrimental to the public health, safety, and welfare of the community.

   The 2021-2029 Housing Element will not result in any surrounding uses or activities that would impact the public health, safety, or welfare of the community. The General Plan Amendment implementing the Housing Element will ensure the provision of housing accessible to all income categories and will ensure consistency with applicable provisions of the Zoning Code.

SECTION 4. The Planning Commission hereby recommends the City Council approve the 2021-2029 Housing Element in its amended form that has addressed and incorporated the findings from HCD, as presented to the Planning Commission on the date of this Resolution and on file with the Community Development Department.

SECTION 5. The draft 2021-2029 Housing Element is consistent, in accordance with Government Code Section 65302.3, with the Airport Land Use Plan adopted by the airport land use commission of the County of Orange pursuant to Public Utilities Code Section 21675.

SECTION 6. The Planning Commission of the City of Irvine recommends that the City Council approve the 2021-2029 Housing Element in its current form, which has addressed and has incorporated findings from HCD and recommends that the City Council approve the corresponding General Plan Amendment 00832121-PGA in furtherance thereof.

SECTION 7. The Planning Commission directs the Director of Community Development (or his designee) to transmit a copy of this recommendation to the City Council in compliance with Government Code Section 65354.

PASSED AND ADOPTED by the Planning Commission of the City of Irvine at a regular meeting held on the 16th day of December, 2021, by the following roll call vote:

AYES: Commissioners:

NOES: Commissioners:

ABSENT: Commissioners:

ABSTAIN: Commissioners:

CHAIR OF THE PLANNING
COMMISSION FOR THE CITY OF IRVINE

SECRETARY OF THE PLANNING
COMMISSION FOR THE CITY OF IRVINE

## 5c. Presentation

# Housing Element Update

Presented by
Marika Poynter, Principal Planner

Planning Commission
December 16, 2021

CITY OF IRVINE

## Background

- A city adopted HEU must be submitted to HCD by February 11, 2022 or face penalties (AB 1398).
- The City submitted the draft HEU on August 19, 2021, following three Planning Commission meetings, for the mandatory 60-day review by HCD.
- HCD provided the City with the findings letter on October 18, 2021.
- The City resubmitted the revised version of the HEU to HCD on December 3, 2021.

CITY OF IRVINE

## Background

- The HEU was posted and advertised for public review since July 2021. The revised HEU was posted for an exclusive two-week public review on November 19, 2021, prior to resubmittal to HCD.
- The HEU was reviewed at the Planning Commission meetings of:
  - July 1, 2021
  - July 15, 2021
  - August 5, 2021
  - December 2, 2021

CITY OF IRVINE

## AB 1398 Impact

- AB 1398 penalizes jurisdictions that do not adopt a HE that is found in substantial compliance by HCD by February 11, 2022.
- If a jurisdiction is unable to have an adopted HEU that is in substantial compliance by HCD by February 11, 2022 and relies on rezoning to meet the RHNA through the site inventory, it will be required to complete the rezoning effort by October 15, 2022.
- If a jurisdiction is not able to complete the rezoning and associated environmental in this nine-month period, HCD can decertify the jurisdiction's housing element.

CITY OF IRVINE

## Penalties for Non-Compliance

- Increased exposure to litigation
- Loss of permitting authority
- Financial penalties, including monthly fines from $10K - $100K
- Loss of eligibility for state and regional funding sources
- Court receivership
- SB 35 streamlined ministerial approval process
- Increased exposure to monitoring by the Housing Accountability Unit

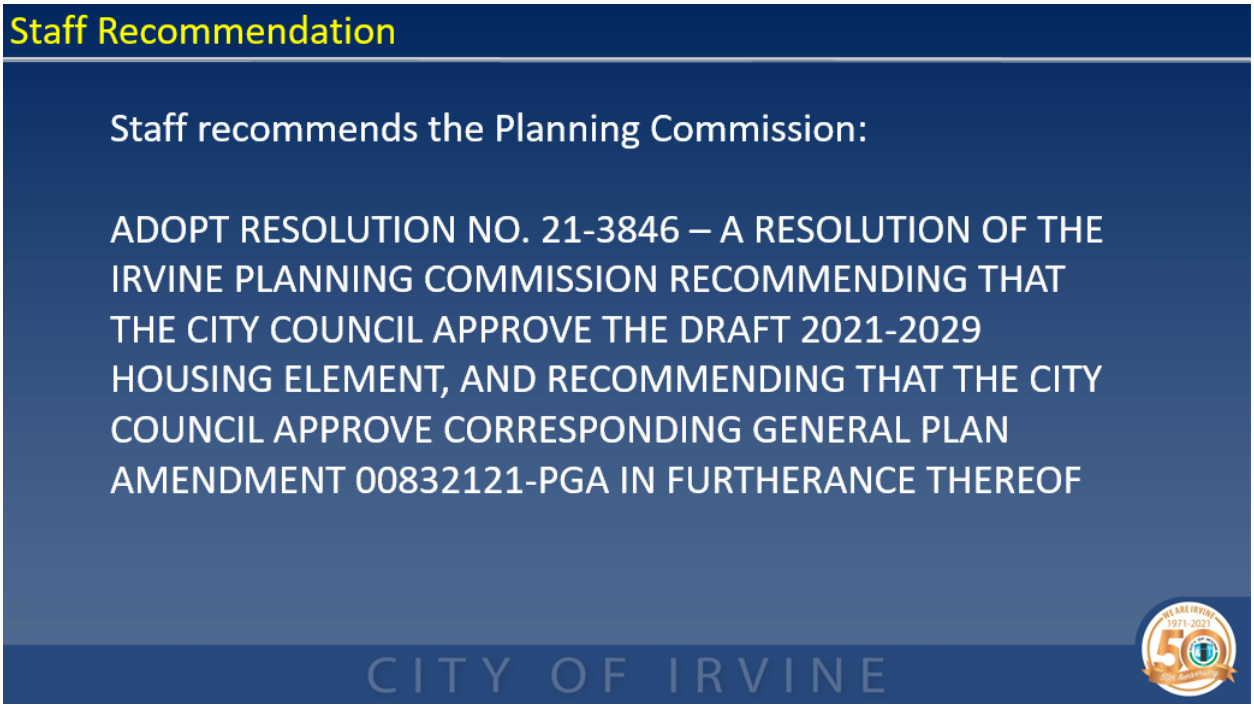
CITY OF IRVINE

## Timeline

| Date | Action |
|---|---|
| August 19, 2021 | City submits HEU to HCD |
| August 19, 2021 – October 18, 2021 | HCD 60-day review |
| October 18, 2021 | City receives HCD comments on draft HEU |
| October 18, 2021 to mid-November 2021 | City reviews and addresses HCD comments |
| November 19, 2021 | Release of the revised HEU for 2-week public review |
| December 2 & 16, 2021 | Planning Commission public hearing* |
| December 3, 2021 | HCD 60-day review* (second submittal) |
| January 11 & 25, 2022 | City Council adoption hearings* |
| February 11, 2022 | Certification deadline |
| March 2022 – October 2024 | General Plan/Rezoning (with environmental) to support HEU |

* HCD 60-day review occurs concurrently with Planning Commission and City Council consideration

CITY OF IRVINE




**5d. Comments Summary and Analysis -** *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*

## 6a. City Council January 11, 2022 Meeting Agenda - *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*

## 6b. Staff Report

## 6c. Presentation

## 6d. Comments Summary and Analysis

## 6e. Public Notice

## 6f. Affidavit of Publication

## 7a. City Council January 25, 2022 Meeting Agenda (TBD if needed) - *DUE TO PUBLICATION DEADLINES, PLEASE SEE PROJECT CASE FILE 00832121-PGA*

## 7b. Staff Report

## 7c. Presentation