ADDENDUM TO THE PLANNING AREA 12 PROJECT FINAL ENVIRONMENTAL IMPACT REPORT (SCH No. 93071051)

FOR THE

INNOVATION OFFICE PARK PROJECT

Zone Change (Case No. 00800352-PZC)
Master Plan (Case No. 00808253-PMP)
Modification to Approved Master Plan 00775712-PMPC (Case No. 00816048-PMPC)
Vesting Tentative Parcel Map (VTPM 2019-177) (Case No. 00816106-PTP)

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1.0 INTRODUCTION

1.1 Purpose of Addendum

This document (referred to herein as the "Addendum") is an Addendum to the *Planning Area 12 Final Environmental Impact Report* (PA 12 EIR) that was certified by the Irvine City Council in June 1994 (State Clearinghouse [SCH] No. 93071051), (referred to herein as the "PA 12 EIR"). This Addendum is prepared pursuant to the California Environmental Quality Act (CEQA), California *Public Resources Code* (PRC) Section 21000 et seq., the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq. [CEQA Guidelines]), and the City of Irvine (City)'s CEQA Manual (June 2012).

The PA 12 EIR evaluated the potential construction-related and operational impacts resulting from the development of the approximately 1,250-acre Planning Area 12 (PA 12) Project (further described below and referred to herein as the "Approved PA 12 Project"). The PA 12 EIR and this Addendum serve as the environmental review documentation for the currently proposed Project (referred to as "Innovation Office Park"), which includes the following components, further described in Section 3.0, below: (1) Zone Change (Case No. 00800352-PZC), which would result in an overall reduction in non-residential development intensity in PA 12; (2) a new Master Plan (Case No. 00808253-PMP) for 620,200 square feet (sf), which includes the 4.2-acre eastern portion of the approved Master Plan 00775712-PMPC, approved in August 2019; and, (3) Vesting Tentative Parcel Map (Case No. VTPM 2019-177) (00816106-PTP), which replaces existing Parcel Map (PM) 97-184, and revises Parcel 4 of existing PM 2019-104. Additionally, a modification to approved Master Plan 00775712-PMPC is proposed (Case No. 00816048-PMPC). These actions collectively would allow for the development of the 1,045,000-sf Innovation Office Park office campus and associated roadway and infrastructure improvements.

The proposed Project is not a new or separate project compared to the Approved PA 12 Project. As identified in Section 3.4 of the PA 12 EIR "[i]ndividual tentative parcel or tract maps and master plans may also be processed at a future time for smaller parcels having particular development characteristics or needs," and "[t]his EIR will be reviewed / used in conjunction with subsequent approval by the City." Further, the PA 12 EIR noted that development of the new uses within PA 12 would occur in incremental phases, based largely on economic considerations, infrastructure improvements, market demands, and other planning considerations, and buildout may take 15 to 25+ years. Therefore, master plans were anticipated future actions implementing the Approved PA 12 Project, with the expectation that the PA 12 EIR would serve as the required environmental documentation pursuant to CEQA. The proposed Project does not change the type of land uses allowed as part of the Approved PA 12 Project, including office uses.

It should be noted that implementation of approved Master Plan 00775712-PMPC was addressed in the *Addendum to the Planning Area 40 / Planning Area 12 General Plan Amendment and Zone Change Final Environmental Impact Report (SCH No. 2000071014) for the Planning Area 12 Master Plan*

(00775712-PMPC) and Vesting Tentative Parcel Map 2019-104 (00776756-PTP) (2019 Addendum), which was approved by the City in August 2019, and is hereby incorporated by reference. As identified above, in addition to the proposed development described above, the Project Applicant is requesting approval of a Modification to approved Master Plan 00775712-PMPC. The proposed modifications, described in Section 3.4, below, are within the physical impact area addressed in the 2019 Addendum, and do not require further analysis in this Addendum. Similarly, the construction of certain infrastructure improvements to support the proposed Project was also addressed in the 2019 Addendum (e.g., roadway extension from Walnut Avenue, this roadway is now referred to as "Progress" from Sand Canyon Avenue to Jeffrey Road, and associated intersection improvements at Jeffrey Avenue and Interstate (I)-5, water quality basin) and do not require further analysis in this Addendum (refer to the discussion of construction activities in Section 3.5 of this Addendum).

This Addendum has been prepared specifically to address the potential environmental impacts resulting from implementation of the on-site structures and supporting uses, roadways, and parking areas identified in the proposed new Master Plan (00808253-PMP); required off-site utility infrastructure; and anticipated landscape enhancements that would be made in the area, as described in Section 2.0, Project Description, of this Addendum. This Addendum also encompasses any and all future subsequent approvals for development of the proposed Project.

1.2 Basis for Addendum

Section 15164(a) of the CEQA Guidelines states, "The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred." Pursuant to Section 15162 of the CEQA Guidelines, no subsequent EIR may be required for the proposed Project unless the City determines, on the basis of substantial evidence, that one or more of the following conditions are met:

A. When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

   (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

   (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

   (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As discussed in this Addendum, the City, as the lead agency, has determined that none of the conditions listed above (and set forth in Section 15162 of the CEQA Guidelines) with respect to the proposed Project have occurred, an Addendum is the appropriate level of environmental review. (See Section 15164(a) of the CEQA Guidelines.)

1.3 Previous Approvals and Environmental Documentation

The Approved PA 12 Project addressed in the PA 12 EIR consisted of a Zone Change to replace the Development Reserve zoning designation with specific zoning designations that were consistent with the General Plan land use designations for PA 12 at that time. The Zone Change included the proposed Zoning Map and accompanying text to guide future development within PA 12. Specifically, the PA 12 EIR addressed the impacts from the Zone Change that established land use regulations for the development of: 4,050 new residential units; 1,105,000 square feet of new commercial uses; 2,871,080 square feet of new industrial uses; 470,000 square feet of new non-residential multi-uses; 535,400 square feet of new institutional uses; and 339 acres of conservation / open space uses (including a proposed 18-hole golf course). A variety of uses existing at the time when the PA 12 EIR was prepared were included within the envisioned buildout of PA 12. Therefore, the primary focus of the analysis included in the PA 12 EIR was the potential new development that would occur with the ultimate implementation of the proposed zoning. With the Approved PA 12 Project, the Project site was zoned General Industrial, and the adjacent site developed with Traveland retained a zoning of Vehicle Related Commercial.

It is important to note that the PA 12 EIR addressed potential impacts associated with buildout of PA 12, based on the maximum densities / intensities allowed by the proposed zoning. The phasing of development and specific timing and nature of improvements associated with the Approved PA 12 Project were not determined. Such information is to be formulated as part of more detailed project planning (i.e., Master Plans). As previously identified, the PA 12 EIR anticipated that buildout of PA 12 may take 15 to 25 + years. As outlined in Section 3.4 of the PA 12 EIR, in addition to the Zone Change, the City of Irvine anticipated that the PA 12 EIR would be reviewed / used in conjunction

with subsequent approvals by the City, including: master tentative tract maps, tentative parcel or tract maps and master plans, conditional use permits, grading permits, and building permits. Further, it was anticipated the PA 12 EIR would be used in conjunction with other approvals by responsible agencies including approvals for utility / infrastructure improvements.

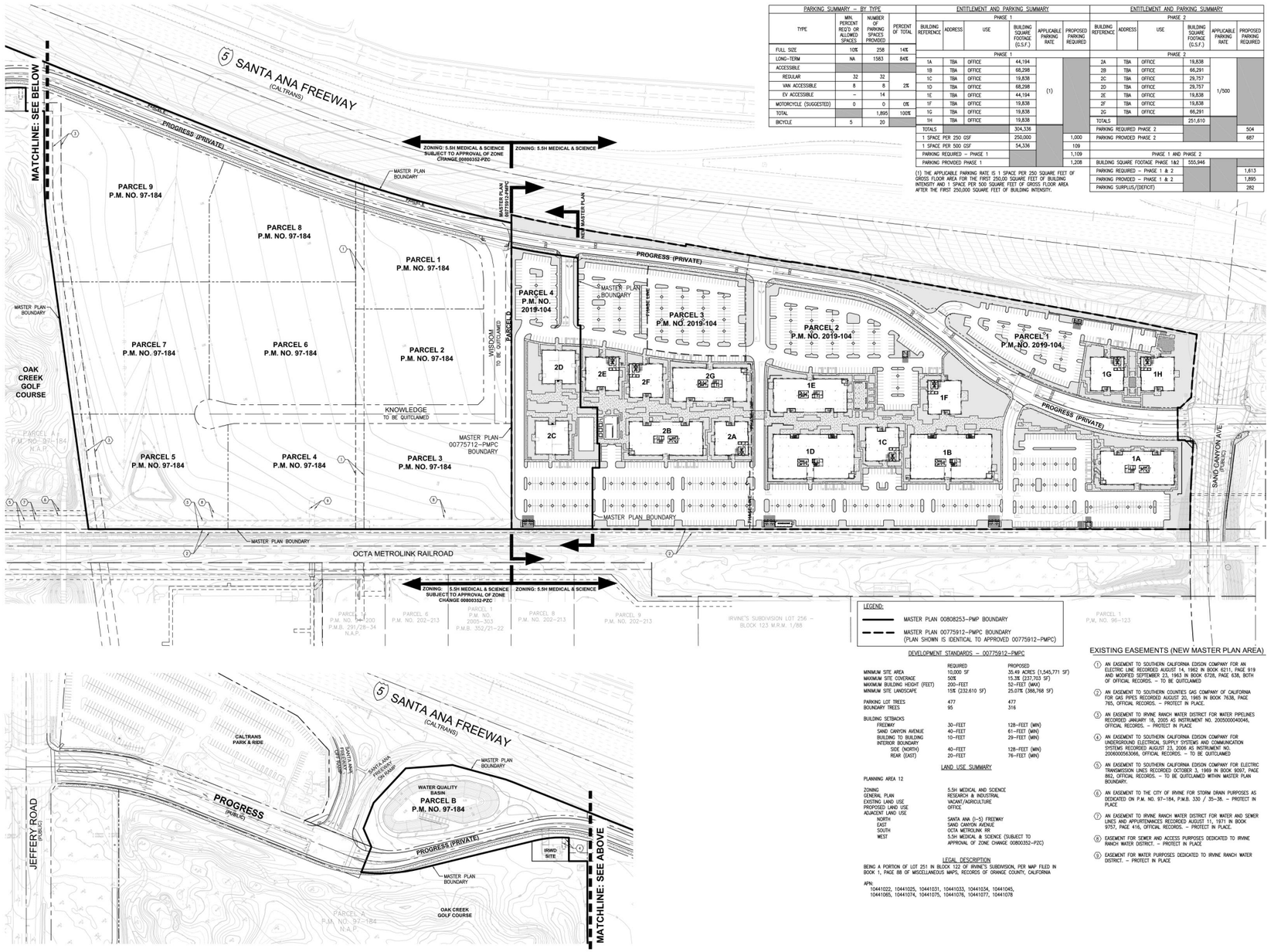
As discussed in Section 6.0, Environmental Assessment, of this Addendum, the PA 12 EIR concluded that most of the environmental impacts resulting from the proposed PA 12 zone change and subsequent actions would be less than significant or reduced to a level that is considered less than significant through either the adoption of mitigation measures (MMs), which were included in the *Mitigation Monitoring Program for the Planning Area 12 EIR* (PA 12 EIR MMP), or incorporation of the City of Irvine policies and standard conditions of approval (SCs). However, the loss of agricultural land, and air quality impacts (construction-related and operational impacts), were identified as significant and unavoidable in the PA 12 EIR. For those impact areas, the City adopted a Statement of Overriding Considerations.

PA 12, including development evaluated in the PA 12 EIR, is largely built out, or approved development is under construction. Following is a summary of subsequent approvals and associated environmental reviews particularly relevant to the proposed Project.

- **Parcel Map (PM) 97-184.** PM 97-184 is the existing parcel map for the Project site and was approved in 1997. PM 97-184 divides the site into 9 (numbered) parcels and includes public streets (Walnut Avenue extension, Knowledge and Wisdom) to provide access to the parcels (refer to Exhibit 1). The PA 12 EIR provided environmental clearance for approval of PM 97-184.

- **2008 General Plan Amendment (GPA) and Zone Change for PA 40 and PA 12.** The City of Irvine approved the GPA and Zone Change for PA 40 and PA 12 Project in 2008. The *Planning Area 40 / Planning Area 12 General Plan Amendment and Zone Change Final Environmental Impact Report* (2008 PA 40 / 12 EIR) was certified by the Irvine City Council in August 2008 (State Clearinghouse [SCH] No. 2000071014). The 2008 PA 40 / PA 12 GPA and Zone Change Project included various actions relevant to PA 12, but specifically did not include any actions associated with the current Project site. The zoning for the adjacent site to the east (the approved Master Plan for Innovation Office Park [00775712-PMPC] site) was changed from Vehicle Related Commercial to the current zoning of 5.5H Medical and Science, and a maximum building intensity of 575,000 sf was allocated to the PA 12 site per City Council Ordinance No. 08-12. No development anticipated by the 2008 GPA and Zone Change for PA 12 was developed.

- **2019 PA 12 Master Plan 00775712-PMPC and Vesting Tentative Parcel Map 2019-104.** In 2019, the City of Irvine approved Master Plan 00775712-PMPC and VTPM 2019-104 to allow for the development of an approximately 35.5-acre office campus on the previous Traveland site (adjacent to and east of the current Project site), as anticipated by the 2008 GPA and Zone Change for PA 12. The overall approved / existing site plan in relation to the Project site



PARKING SUMMARY – BY TYPE			
TYPE	MIN. PERCENT REQ'D OR ALLOWED SPACES	NUMBER OF PARKING SPACES PROVIDED	PERCENT OF TOTAL
FULL SIZE	10%	258	14%
LONG-TERM	NA	1583	84%
ACCESSIBLE			
REGULAR	32	32	
VAN ACCESSIBLE	8	8	2%
EV ACCESSIBLE	–	14	
MOTORCYCLE (SUGGESTED)	0	0	0%
TOTAL		1,895	100%
BICYCLE	5	20	

ENTITLEMENT AND PARKING SUMMARY – PHASE 1						
BUILDING REFERENCE	ADDRESS	USE	BUILDING SQUARE FOOTAGE (G.S.F.)	APPLICABLE PARKING RATE	PROPOSED PARKING REQUIRED
PHASE 1					
1A	TBA	OFFICE	44,194	(1)	
1B	TBA	OFFICE	68,298		
1C	TBA	OFFICE	19,838		
1D	TBA	OFFICE	68,298		
1E	TBA	OFFICE	44,194		
1F	TBA	OFFICE	19,838		
1G	TBA	OFFICE	19,838		
1H	TBA	OFFICE	19,838		
TOTALS			304,336		
1 SPACE PER 250 GSF			250,000		1,000
1 SPACE PER 500 GSF			54,336		109
PARKING REQUIRED – PHASE 1					1,109
PARKING PROVIDED PHASE 1					1,208

(1) THE APPLICABLE PARKING RATE IS 1 SPACE PER 250 SQUARE FEET OF GROSS FLOOR AREA FOR THE FIRST 250,00 SQUARE FEET OF BUILDING INTENSITY AND 1 SPACE PER 500 SQUARE FEET OF GROSS FLOOR AREA AFTER THE FIRST 250,000 SQUARE FEET OF BUILDING INTENSITY.

ENTITLEMENT AND PARKING SUMMARY – PHASE 2					
BUILDING REFERENCE	ADDRESS	USE	BUILDING SQUARE FOOTAGE (G.S.F.)	APPLICABLE PARKING RATE	PROPOSED PARKING REQUIRED
PHASE 2					
2A	TBA	OFFICE	19,838	1/500	
2B	TBA	OFFICE	66,291		
2C	TBA	OFFICE	29,757		
2D	TBA	OFFICE	29,757		
2E	TBA	OFFICE	19,838		
2F	TBA	OFFICE	19,838		
2G	TBA	OFFICE	66,291		
TOTALS			251,610		
PARKING REQUIRED PHASE 2					504
PARKING PROVIDED PHASE 2					687
PHASE 1 AND PHASE 2					
BUILDING SQUARE FOOTAGE PHASE 1&2			555,946		
PARKING REQUIRED – PHASE 1 & 2					1,613
PARKING PROVIDED – PHASE 1 & 2					1,895
PARKING SURPLUS/(DEFICIT)					282

LEGEND:
- MASTER PLAN 00808253–PMP BOUNDARY
- MASTER PLAN 00775912–PMPC BOUNDARY (PLAN SHOWN IS IDENTICAL TO APPROVED 00775912–PMPC)

DEVELOPMENT STANDARDS – 00775912–PMPC

	REQUIRED	PROPOSED
MINIMUM SITE AREA	10,000 SF	35.49 ACRES (1,545,771 SF)
MAXIMUM SITE COVERAGE	50%	15.3% (237,703 SF)
MAXIMUM BUILDING HEIGHT (FEET)	200–FEET	52–FEET (MAX)
MINIMUM SITE LANDSCAPE	15% (232,610 SF)	25.07% (388,768 SF)
PARKING LOT TREES	477	477
BOUNDARY TREES	95	316
BUILDING SETBACKS		
FREEWAY	30–FEET	128–FEET (MIN)
SAND CANYON AVENUE	40–FEET	61–FEET (MIN)
BUILDING TO BUILDING	10–FEET	29–FEET (MIN)
INTERIOR BOUNDARY		
SIDE (NORTH)	40–FEET	128–FEET (MIN)
REAR (EAST)	20–FEET	76–FEET (MIN)

LAND USE SUMMARY

PLANNING AREA 12	
ZONING	5.5H MEDICAL AND SCIENCE
GENERAL PLAN	RESEARCH & INDUSTRIAL
EXISTING LAND USE	VACANT/AGRICULTURE
PROPOSED LAND USE	OFFICE
ADJACENT LAND USE	
NORTH	SANTA ANA (I–5) FREEWAY
EAST	SAND CANYON AVENUE
SOUTH	OCTA METROLINK RR
WEST	5.5H MEDICAL & SCIENCE (SUBJECT TO APPROVAL OF ZONE CHANGE 00800352–PZC)

LEGAL DESCRIPTION

BEING A PORTION OF LOT 251 IN BLOCK 122 OF IRVINE'S SUBDIVISION, PER MAP FILED IN BOOK 1, PAGE 88 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA

APN:
10441022, 10441025, 10441031, 10441033, 10441034, 10441045, 10441065, 10441074, 10441075, 10441076, 10441077, 10441078

EXISTING EASEMENTS (NEW MASTER PLAN AREA)

1. AN EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY FOR AN ELECTRIC LINE RECORDED AUGUST 14, 1962 IN BOOK 6211, PAGE 919 AND MODIFIED SEPTEMBER 23, 1963 IN BOOK 6726, PAGE 638, BOTH OF OFFICIAL RECORDS. – TO BE QUITCLAIMED
2. AN EASEMENT TO SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA FOR GAS PIPES RECORDED AUGUST 20, 1965 IN BOOK 7638, PAGE 765, OFFICIAL RECORDS. – PROTECT IN PLACE.
3. AN EASEMENT TO IRVINE RANCH WATER DISTRICT FOR WATER PIPELINES RECORDED JANUARY 18, 2005 AS INSTRUMENT NO. 20050000040048, OFFICIAL RECORDS. – PROTECT IN PLACE.
4. AN EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS RECORDED AUGUST 23, 2006 AS INSTRUMENT NO. 20060000563066, OFFICIAL RECORDS. – TO BE QUITCLAIMED
5. AN EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY FOR ELECTRIC TRANSMISSION LINES RECORDED OCTOBER 3, 1989 IN BOOK 9097, PAGE 862, OFFICIAL RECORDS. – TO BE QUITCLAIMED WITHIN MASTER PLAN BOUNDARY.
6. AN EASEMENT TO THE CITY OF IRVINE FOR STORM DRAIN PURPOSES AS DEDICATED ON P.M. NO. 97–184, P.M.B. 330 / 35–38. – PROTECT IN PLACE.
7. AN EASEMENT TO IRVINE RANCH WATER DISTRICT FOR WATER AND SEWER LINES AND APPURTENANCES RECORDED AUGUST 11, 1971 IN BOOK 9757, PAGE 416, OFFICIAL RECORDS. – PROTECT IN PLACE.
8. EASEMENT FOR SEWER AND ACCESS PURPOSES DEDICATED TO IRVINE RANCH WATER DISTRICT. – PROTECT IN PLACE
9. EASEMENT FOR WATER PURPOSES DEDICATED TO IRVINE RANCH WATER DISTRICT. – PROTECT IN PLACE

Source(s): Stantec (05-11-2020)

Exhibit 1

Not to Scale

Existing Parcel Map 97-184

Lead Agency: City of Irvine

(PM 97-104) is shown on Exhibit 1. While the building intensity allocated to the site remains at 575,000 sf, the approved Master Plan 00775712-PMPC includes 556,000 sf of office uses. In addition to development of the office campus, the approved Master Plan includes off-site improvements associated with roadway and intersection improvements, as well as installation or relocation of utility lines, and associated infrastructure improvements (including a water quality basin). Roadway improvements including extensions of Walnut Avenue and Burt Road to allow for vehicular access between Jeffrey Road to the west and Sand Canyon Avenue to the east; this roadway is now referred to as "Progress" from Sand Canyon Avenue to Jeffrey Road. Intersection improvements include the I-5 Southbound Ramp at Progress, Sand Canyon Avenue at Burt Road, and Jeffrey Road at Walnut Avenue. As previously identified, the approved Master Plan and VTPM 2019-104 were addressed in the 2019 Addendum. The office campus, associated uses and infrastructure improvements (including an off-site water line extending south under the railroads tracks), are currently under construction and are not further analyzed in this Addendum.

1.4 Evaluation of Environmental Impacts and Summary of Findings

This Addendum compares the anticipated environmental effects of the proposed Project with those disclosed in the PA 12 EIR for the Approved PA 12 Project and is based on the topical issues included in the current environmental checklist included in CEQA Guidelines Appendix G. Specifically, the CEQA Environmental Checklist Form is used to review the potential environmental effects of the proposed Project for each of the following areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use / Planning
- Mineral Resources
- Noise
- Population / Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

For each topical issue, this Addendum identifies the Mitigation Measures (MMs) and Standard Conditions (SCs) from the PA 12 EIR that are applicable to the proposed Project. It should be noted that although the PA 12 EIR MMP did not specifically incorporate SCs, the SCs that are applicable to the proposed Project are identified and included in the updated Mitigation Monitoring and Reporting Program (MMRP) for the proposed Project, which is included in Appendix A of this Addendum. Based on the analysis presented in Section 6.0, Environmental Assessment, of this Addendum, the proposed Project would not result in any of the conditions that would require preparation of a supplemental or subsequent EIR pursuant to Sections 15162 or 15163 of the CEQA Guidelines. These conditions include substantial changes that require major revisions,

substantial changes with respect to circumstances regarding previous approvals, new information of substantial importance that was not previously known, or new or increased severity of significant impacts that were not previously addressed in the PA 12 EIR.

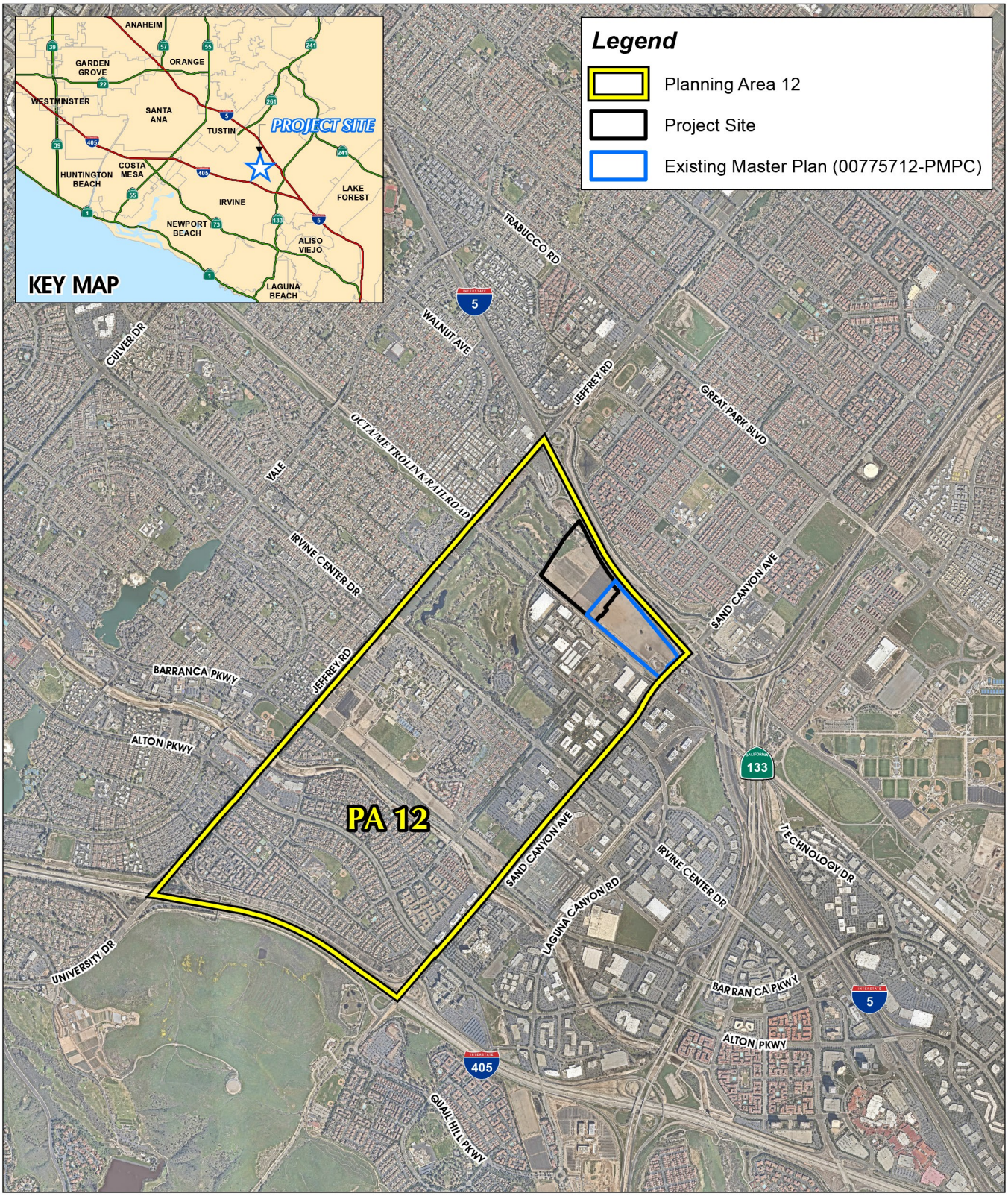
2.0 PROJECT LOCATION AND EXISTING SETTING

Under existing conditions, PA 12 encompasses approximately 1,229 acres and is generally bound by Jeffrey Road to the west, I-5 to the north, I-405 to the south, and Sand Canyon Avenue to the east (refer to Exhibit 2). The Project site is bound by I-5 to the north, the approved Master Plan 00775712-PMPC area to the east, the Orange County Transportation Authority (OCTA) / Metrolink railroad to the south, and the Oak Creek Golf Club to the west. The proposed Project (new Master Plan [00808253-PMP] and VTPM 2019-177) encompass approximately 42.2 acres, which includes approximately 36.5 acres associated with the proposed building site and approximately 5.7 acres associated with the previously approved water quality basin, roadway extension (Progress) and landscape areas that were also included as part of the approved Master Plan and are under construction. It should also be noted that the 36.5 acres associated with the proposed building site includes approximately 4.2 acres that overlaps with the approved Master Plan. Therefore, the additional development area not addressed in the 2019 Addendum encompasses approximately 32.3 acres. Refer to Exhibit 3, which depicts the respective proposed Project components.

As shown on the Exhibit 3, the currently proposed Project also involves landscape / streetscape enhancements within the Caltrans park-and-ride lot east of Jeffrey Road and north of Walnut Avenue, and landscape enhancements near the I-5 / Walnut Avenue on- and -off ramps. These improvements are within Caltrans right-of-way. Additionally, the proposed Project involves installation of an off-site recycled water line to the south of the proposed building site.

The area within the proposed building site limits (shown in Exhibit 3), which includes the eastern portion of approved Master Plan (4.2 acres), was recently mass graded in conjunction with the approved office development to the east and as allowed by prior approval of PM 97-184. The Project site is relatively flat with a gentle slope from northeast to southwest. This area is used for construction staging, as anticipated in the 2019 Addendum. The current mass graded elevations at the site vary from 184 feet above mean sea level (msl) in the northeast portion of the site to 159 feet msl in the southwest portion of the site. There are two temporary desilting basins with outlet structures located along the railroad at the southeastern corner of the proposed Project site, and off-site near the Oak Creek Golf Club. The Project site is largely devoid of vegetation, except for a few disturbed / ruderal plant species. Eucalyptus trees on the golf course property are immediately west of the Project site. Various utilities are located on and near the Project site, including northerly-trending 66-kilovolt (kV) and 12-kV SCE overhead power lines, which would be replaced with underground systems as part of the proposed Project. The 66kV line head westerly along the northerly edge of the RR track towards Jeffrey Road. The 12kV continues south across the Railroad.

The proposed landscape enhancement areas are developed and highly disturbed areas that are either currently under construction or landscaped entirely with ornamental vegetation including ground



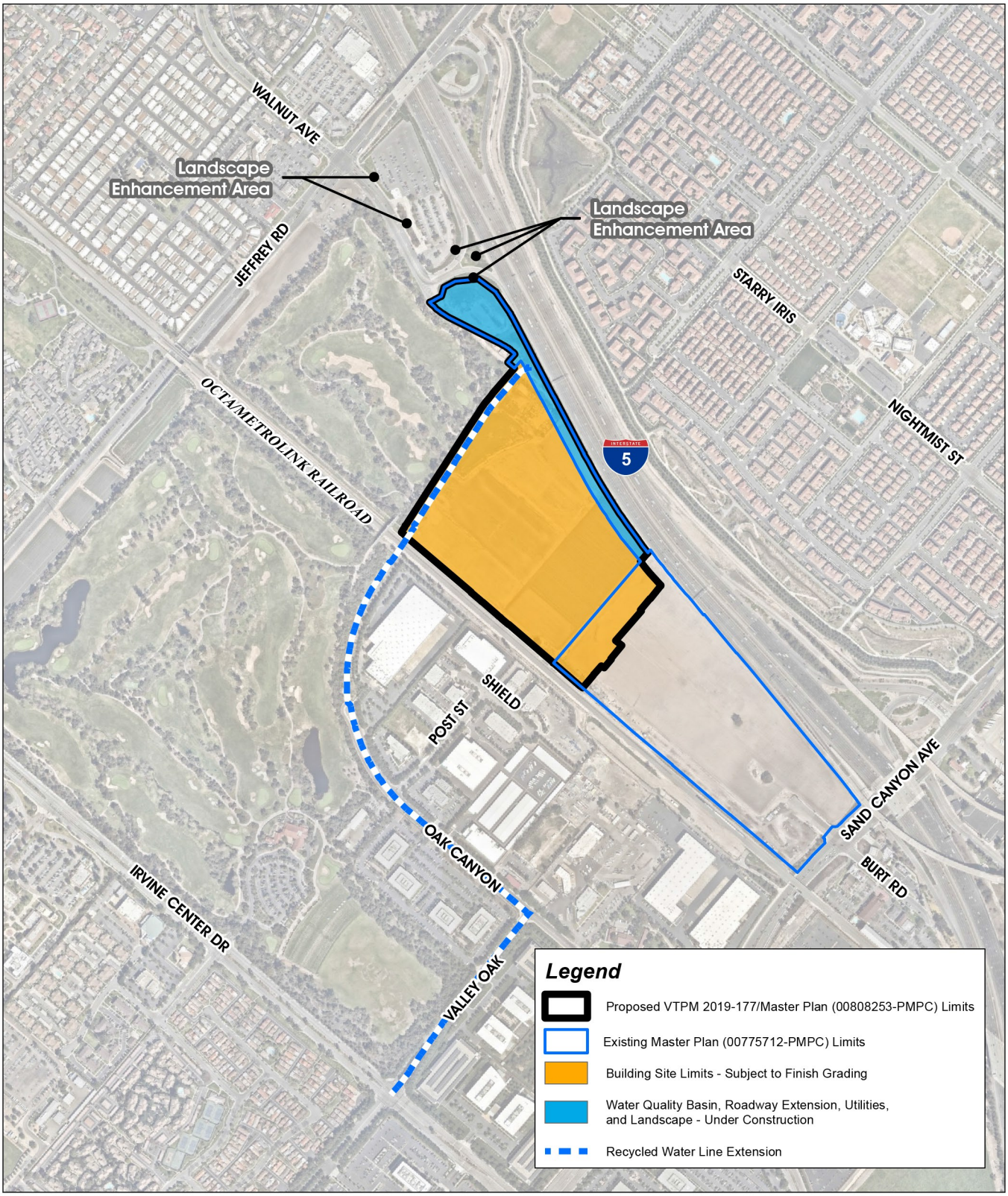
Source(s): ESRI, Nearmap Imagery (2019), OC Landbase (2018)

Exhibit 2

0 750 1,500 3,000
Feet

Local Vicinity and Regional Location Map

Lead Agency: City of Irvine



Source(s): ESRI, Nearmap Imagery (2019), OC Landbase (2018)

Exhibit 3

0 225 450 900
Feet

Project Features

Lead Agency: City of Irvine

cover, shrubs and trees. The off-site recycled water line extension area includes a paved road alignment from Valley Oak north of Irvine Center Drive and continues to Oak Canyon from Valley Oak to the cul-de-sac where the utility alignment continues north through a vacant area until it extends under the railroad tracks and enters the Project site. All of the vegetated areas are planted with ornamental species. No native habitat occurs in these areas.

As previously identified, the Project site is currently zoned 5.4B General Industrial and has a General Plan land use designation of Research and Industrial; offices uses are allowed under these designations.

3.0 PROJECT DESCRIPTION

The Project Applicant is requesting approval of the following actions, which are described below:

- Zone Change (Case No. 00800352-PZC)
- Master Plan for Innovation Office Park (Case No. 00808253-PMP), which includes the eastern 4.2-acre portion of approved Master Plan 00775712-PMPC
- Vesting Tentative Parcel Map (VTPM 2019-177) (Case No. 00816106-PTP), which replaces existing PM 97-184 and modifies Parcel 4 of PM 2019-104
- Modification to the approved Master Plan 00775712-PMPC (Case No. 00816048-PMPC)

3.1 Zone Change (Case No. 00800352-PZC)

The following amendments to Chapter 9-12 (PA 12) of the Irvine Zoning Ordinance are proposed as part of the Project:

- **Revise the Zoning Ordinance Map, *Planning Area 12 Oak Creek***, for the Project site to change the zoning district from 5.4B General Industrial to 5.5H Medical and Science. The change in the zoning district designation would facilitate opportunities for design flexibility and integration with development on adjacent parcels otherwise arbitrarily limited by the existing boundary line between the two zoning districts even though office is a permitted use in both districts.
- **Revise Section 9-12-3, *Statistical Analysis***, to reduce the intensity (allowed square footage) for the 4.2 Community Commercial and 5.4B General Industrial zoning districts, and increase the intensity in the 5.5H Medical and Science zoning district to accommodate the proposed development. There would be an overall reduction of 381,277 sf[1] in PA 12.

[1] The building intensity (allowed square footage) for PA 12 identified in the Irvine Zoning Ordinance is refined by land use in the Irvine Transportation Analysis Model, Version 15 (ITAM 15), which is the basis for the trip generation estimates presented in Section 6.17, Transportation, of this Addendum. Based on ITAM 15, there would be an overall reduction in building intensity of 538,477 sf in PA 12.

- 4.2 Community Commercial – reduction from 955,000 sf to 700,000 sf (a reduction of 255,000 sf)
- 5.4B General Industrial – reduction from 2,871,081 sf to 2,274,804 sf (a reduction of 596,277 sf)
- 5.5H Medical and Science – increase from 732,200 sf to 1,202,200 sf (an increase of 470,000 sf.

- **Modify the Current Trip Monitoring Program** to simplify the process for tracking the consistency of the land uses in the Spectrum 7 portion of PA 12 (as reflected on Exhibit F in the City of Irvine Zoning Code Section 9-12-7)[2] with the underlying traffic study for the development area. The traffic study for the proposed Zone Change includes specific land use types and related intensity for each Irvine Transportation Assessment Model (ITAM) Traffic Analysis Zone (TAZ) based on the existing and proposed uses on each parcel in Spectrum 7. The requirement for a Trip Allocation and Monitoring Report would be replaced with a Development Monitoring Report. The proposed development monitoring would provide a program and procedure for the City to review and ensure that any applications for building permits and / or changes to the existing land uses are consistent with the Spectrum 7 traffic study land use assumptions.

Additionally, other applicable sections of the Zoning Ordinance would be revised to reflect similar changes for PA 12 as those noted above, or to cross reference to Chapter 9-12. This includes Chapter 2-17, *Master* Plan, and Chapter 3-37, *Zoning District Land Use Regulations and Development Standards.*

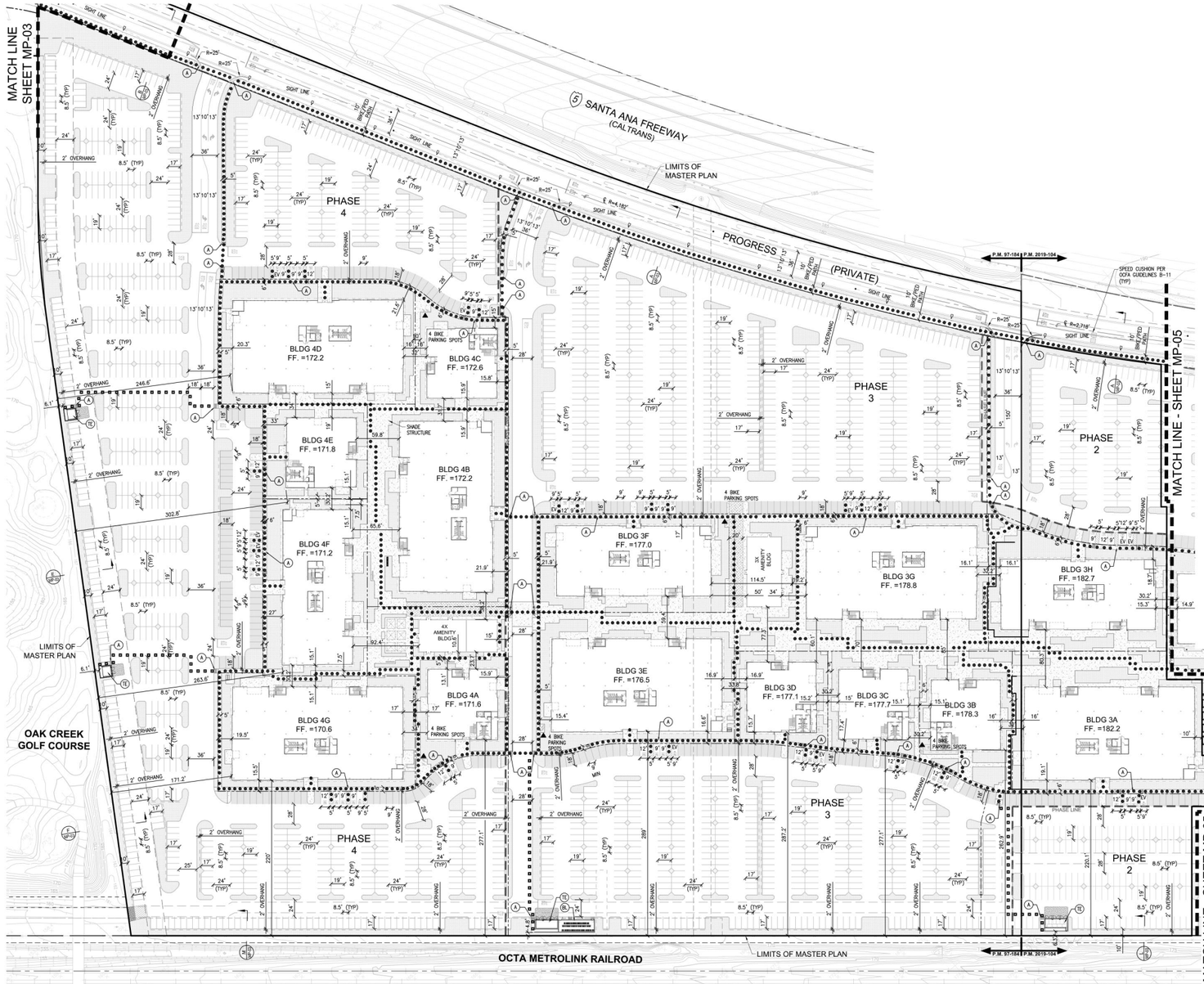
3.2 New Master Plan (Case No. 00808253-PMP)

The proposed Project consists of a proposed new Master Plan (00808253-PMP) for the development of an office campus. The proposed office campus is located within the expanded 5.5H Medical and Science zoning district, to be facilitated by the proposed Zone Change. With the proposed Zone Change, the 5.5H Medical and Science zoning district in PA 12 would have a maximum building intensity of 1,202,200 sf; 1,045,000 sf is allocated to the Project site and adjacent area covered by approved Master Plan 00775712-PMPC. In addition to development of the proposed office campus, the proposed Project involves off-site improvements including landscape enhancements and roadway and intersection improvements, as well as installation of the new recycled water line extending south of the Project site. Following is a description the proposed physical development.

3.2.1 Proposed Buildings / Structures

The site plan for the proposed Project is provided on Exhibits 4a and 4b. As shown, the proposed office campus consists of 15 two-story buildings with surrounding parking lots, and two amenity buildings. The proposed structures have been designed to comply with the development standards set forth in Section 3-37-54 of the Zoning Ordinance for the 5.5H Medical and Science zoning district.

[2] Spectrum 7 is generally located in the northeasterly portion of PA12 and extends from I-5 to Barranca Parkway along the west side of Sand Canyon Avenue.



LEGEND

- MASTER PLAN BOUNDARY
- PHASING LINE
- ACCESSIBLE PATH OF TRAVEL (4' WIDE MIN, 5% MAX RUNNING SLOPE, 2% MAX CROSS SLOPE)
- TRASH ENCLOSURE PATH OF TRAVEL (4' WIDE MIN, 5% MAX RUNNING SLOPE, 2% MAX CROSS SLOPE)
- BICYCLE PARKING
- BL — BIKE LOCKER
- TE — TRASH ENCLOSURE
- A — CURB RAMP/TRUNCATED DOMES – PER COI STD PLAN 202 & DETAIL H/MP-06
- STREET LIGHT
- SIDEWALK
- LANDSCAPE AREA
- FULL SIZE PARKING STALL
- LONG TERM PARKING STALL
- ACCESSIBLE PARING STALL
- EV EV — ACCESSIBLE ELECTRIC VEHICLE (EV) CHARGING STALL*
- FIRE TRUCK ACCESS ROAD (20' WIDE x 150' LONG)

* ADDITIONAL EV STALLS & CAV STALL SHALL BE PROVIDED WITH THE PRECISE GRADING PERMIT BUT WILL NOT REDUCE THE OVERALL PARKING COUNT

NEW MASTER PLAN DEVELOPMENT STANDARDS

	REQUIRED	PROPOSED
MINIMUM SITE AREA	10,000 SF	36.46 AC (1,588,064 SF)
MAXIMUM SITE COVERAGE	50%	21.0% (333,697 SF)
MAXIMUM BUILDING HEIGHT (FEET)	200-FEET	52-FEET (MAX)
MINIMUM SITE LANDSCAPE	15% (238,210 SF)	40.0% (635,940 SF)
PARKING LOT TREES	30% OF PARKING AREA (427,111 FS)	36% COVERAGE (511,139 SF)
BOUNDARY TREES	150	492
BUILDING SETBACKS		
FREEWAY (NORTH)	30-FEET	252-FEET (MIN)
SAND CANYON AVENUE (EAST)	40-FEET	1,780-FEET (MIN)
BUILDING TO BUILDING	10-FEET	20-FEET (MIN)
INTERIOR BOUNDARY		
SIDE	40-FEET	5-FEET (MIN)*
REAR	20-FEET	5-FEET (MIN)*
ACCESSORY STRUCTURES		6.1-FEET (MIN)*

* A VARIANCE HAS BEEN REQUESTED FROM SETBACK STANDARD.

LAND USE SUMMARY

PLANNING AREA 12	
ZONING	5.5H MEDICAL AND SCIENCE (SUBJECT TO APPROVAL OF ZONE CHANGE 00800352-PZC)
GENERAL PLAN	RESEARCH & INDUSTRIAL
EXISTING LAND USE	VACANT/AGRICULTURE
PROPOSED LAND USE	OFFICE
ADJACENT LAND USE	
NORTH	SANTA ANA (I-5) FREEWAY
EAST	5.5H MEDICAL AND SCIENCE
SOUTH	OCTA METROLINK RR
WEST	OAK CANYON GOLF COURSE

LEGAL DESCRIPTION

PARCEL 4 OF P.M. NO. 2019-104, P.M.B. 403/38-43 AND PARCEL 1 THROUGH 9, INCLUSIVE, B, D, E, AND A PORTION OF PARCEL C TOGETHER WITH ALL OF WALNUT AVENUE, WISDOM, AND KNOWLEDGE OF P.M. 97-184 P.M.B. 330 / 35-38 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA

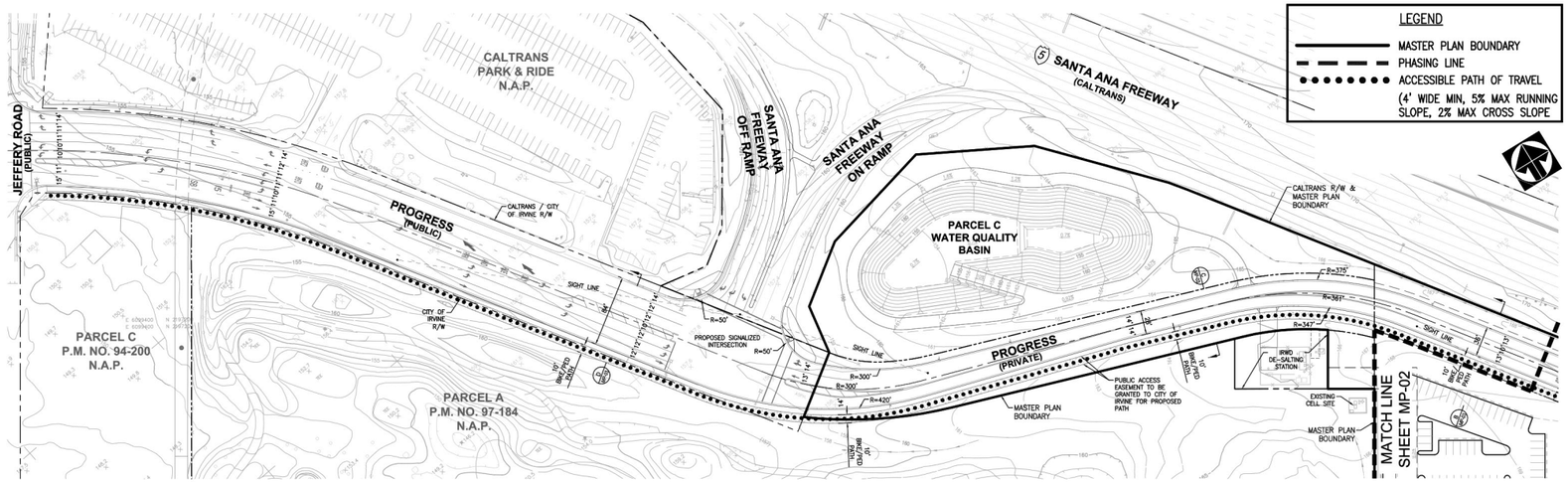
APN:
44634101, 44634102, 44634103, 44634104, 44634105, 44634106, 44634107, 44634108, 44634109, 44634110, 46634201, 46634202, 10441065

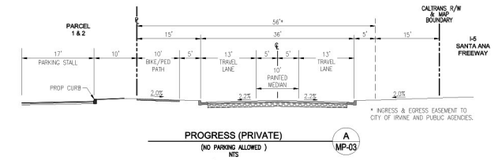
Source(s): Stantec (06-30-2020)

Exhibit 4a

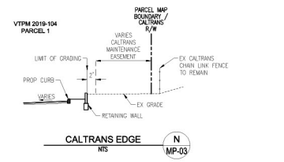
Not to Scale

Proposed Site Plan

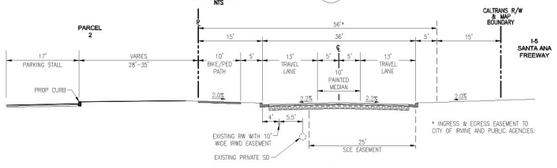




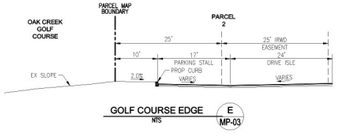
PROGRESS (PRIVATE) (NO PARKING ALLOWED) NTS — A MP-03



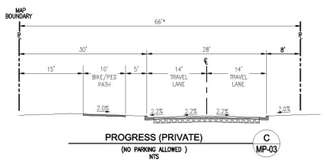
CALTRANS EDGE NTS — N MP-03



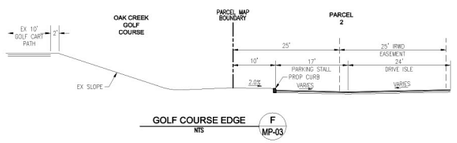
PROGRESS (PRIVATE) (NO PARKING ALLOWED) NTS — B MP-03



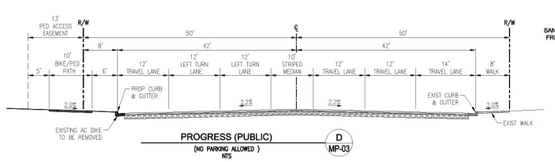
GOLF COURSE EDGE NTS — E MP-03



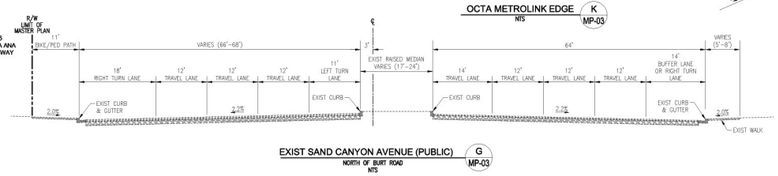
PROGRESS (PRIVATE) (NO PARKING ALLOWED) NTS — C MP-03



GOLF COURSE EDGE NTS — F MP-03

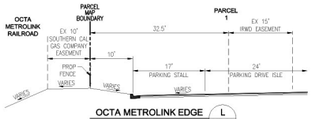


PROGRESS (PUBLIC) (NO PARKING ALLOWED) NTS — D MP-03

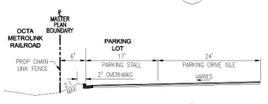


EXIST SAND CANYON AVENUE (PUBLIC) NORTH OF BURT ROAD NTS — G MP-03

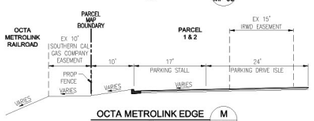
OCTA METROLINK EDGE NTS — J MP-03



OCTA METROLINK EDGE NTS — L MP-03



OCTA METROLINK EDGE NTS — K MP-03



OCTA METROLINK EDGE NTS — M MP-03

MASTER PLAN CASE NO. 00808253-PMP

ENTITLEMENT AND PARKING SUMMARY — PHASE 3

BUILDING REFERENCE	ADDRESS	USE	BUILDING SQUARE FOOTAGE (G.S.F.)	APPLICABLE PARKING RATE	PROPOSED PARKING REQUIRED
PHASE 3					
3A	250	OFFICE	61,700		
3B	300	OFFICE	18,600		
3C	320	OFFICE	18,600		
3D	330	OFFICE	18,600	(1)	
3E	340	OFFICE	61,700		
3F	350	OFFICE	41,800		
3G	310	OFFICE	61,700		
3H	260	OFFICE	41,800		
3X	TBD	AMENITY	5,000		
		SUB-TOTAL	329,500		
OTHER	N/A	FACILITIES	2,000		
TOTAL			331,500		
1 SPACE PER 250 GSF			250,000		1,000
1 SPACE PER 500 GSF			79,500		159
PARKING REQUIRED – PHASE 3					1,159
PARKING PROVIDED PHASE 3					1,153

ENTITLEMENT AND PARKING SUMMARY — PHASE 4

BUILDING REFERENCE	ADDRESS	USE	BUILDING SQUARE FOOTAGE (G.S.F.)	APPLICABLE PARKING RATE	PROPOSED PARKING REQUIRED
PHASE 4					
4A	400	OFFICE	18,600		
4B	430	OFFICE	61,700		
4C	450	OFFICE	18,600		
4D	460	OFFICE	61,700	1/500	
4E	440	OFFICE	18,600		
4F	420	OFFICE	41,800		
4G	410	OFFICE	61,700		
4X	TBD	AMENITY	5,000		
		SUB-TOTAL OFFICE	287,700		
OTHER	N/A	FACILITIES	1,000		
TOTALS			288,700		
PARKING REQUIRED PHASE 4					576
PARKING PROVIDED PHASE 4					1,054
PHASE 3 AND PHASE 4					
OFFICE/AMENITY SQ. FT. PHASE 3&4			617,200		
OTHER SQUARE FOOTAGE PHASE 3&4			3,000		
TOTAL SQUARE FOOTAGE PHASE 3&4			620,200		
PARKING REQUIRED – PHASE 3 & 4					1,735
PARKING PROVIDED – PHASE 3 & 4					2,207
PARKING SURPLUS/(DEFICIT)					472

(1) THE APPLICABLE PARKING RATE IS 1 SPACE PER 250 SQUARE FEET OF GROSS FLOOR AREA FOR THE FIRST 250,00 SQUARE FEET OF BUILDING INTENSITY AND 1 SPACE PER 500 SQUARE FEET OF GROSS FLOOR AREA AFTER THE FIRST 250,000 SQUARE FEET OF BUILDING INTENSITY.

PHASE 3 & 4 PARKING SUMMARY – BY TYPE

TYPE	MIN. PERCENT REQ'D OR ALLOWED SPACES	NUMBER OF PARKING SPACES PROVIDED	PERCENT OF TOTAL
FULL SIZE	10%	245	11%
LONG-TERM	NA	1,919	87%
ACCESSIBLE	43	43	2%
REGULAR	–	29	
VAN ACCESSIBLE	8	14	
EV ACCESSIBLE	–	11	
MOTORCYCLE (SUGGESTED)	0	0	0%
TOTAL		2,207	100%
BICYCLE	5	20	

Source(s): Stantec (06-30-2020)

Exhibit 4b

Not to Scale

Proposed Site Plan

Lead Agency: City of Irvine

The size of the office buildings would range from approximately 18,600 sf to 61,700 sf, and the amenity buildings would be approximately 5,000 sf.

The architecture for the proposed Project would be consistent with the office development being constructed as part of approved Master Plan 00775712-PMPC. Representative building and accessory structure elevations are provided on Exhibits 5a through 5d and three-dimensional building perspectives are provided on Exhibit 6. The two-story office buildings would have a maximum height of 33.5-feet at the top of the parapet with an additional 6.5 feet for a mechanical screen. As required by Section 9-12-7 of the Zoning Ordinance, the architectural style for the proposed Project would be unified, clean, and contemporary. In general, the architectural style consists of modern industrial design. The primary form of the proposed buildings would be painted plaster walls with building articulation creating variation in vertical planes. The buildings would have a consistent material palette including use of aluminum window frames, metal panels and painted steel stairs. Low-reflective windows / glazing would be used. Operable windows and roll-up doors are provided to increase natural ventilation for building occupants. The main building entrance at each building would be easily identifiable to assist with wayfinding.

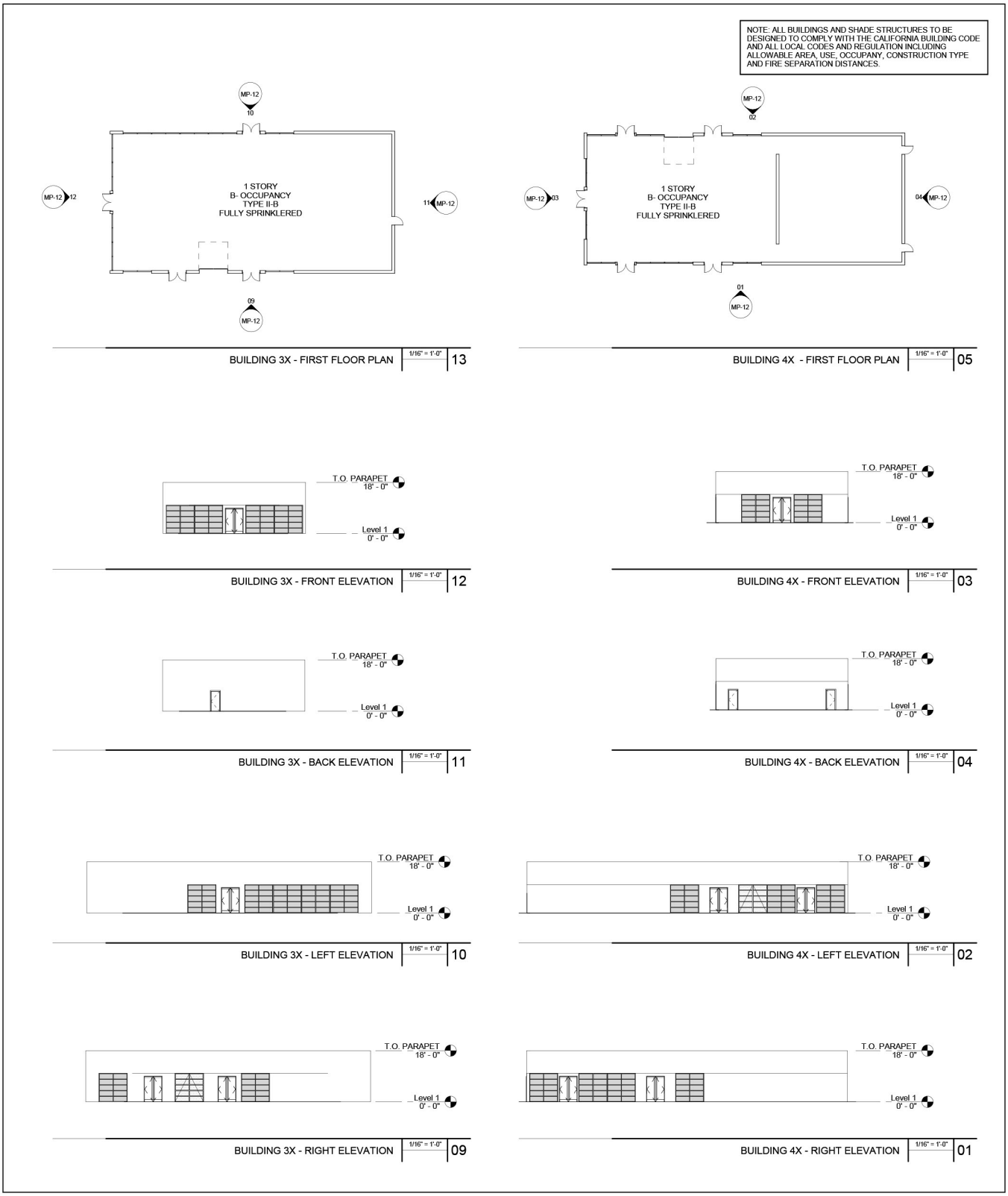
The proposed Project would comply with the California Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the Title 24 California Green Building Standards Code (CALGreen Code). Notably, the design, construction, and operation of the proposed Project would incorporate a series of green building strategies, which would include, but would not be limited to the following: use of a high efficiency window system to allow for natural daylighting; installation of skylights located near the center of the buildings to bring natural daylight into the interior of the buildings; use of highly efficient exterior envelope construction consisting of a combination of solid and window walls; installation of light emitting diode (LED) interior and exterior lighting system; use of natural ventilation for office space; provision of photovoltaic (PV) system-ready roofs and electric vehicle (EV) charging stations; plumbing system ready for use of recycled water for flushing of toilets and urinals; and planting of drought resistant plant material irrigated by recycled water.

Other proposed on-site structural features include trash enclosures, shade structures in the outdoor spaces surrounding the buildings, amenity structures, and bicycle storage / locker facilities.

3.2.2 Landscape / Hardscape, and Lighting

The conceptual landscape plan for the proposed Project is provided on Exhibits 7a and 7b. There would be approximately 14.46 acres of landscaping within the proposed Project site, exceeding the required 5.3 acres. As shown, trees and shrubs would be planted throughout the proposed Project site for shade, accent, and screening. Landscaping would also be provided along the Project roadways.

The proposed Project would include walkways and landscaped areas, outdoor lighting, seating areas, and open outdoor shade structures around and between the proposed buildings. The shade structures would have seating areas and spaces for building tenants to convene and meet. Site landscape sections showing the edge condition at the golf course and at Progress are provided on Exhibit 8.



Source(s): LPA (05-11-2020)

Exhibit 5a

Not to Scale

Representative Building Elevations

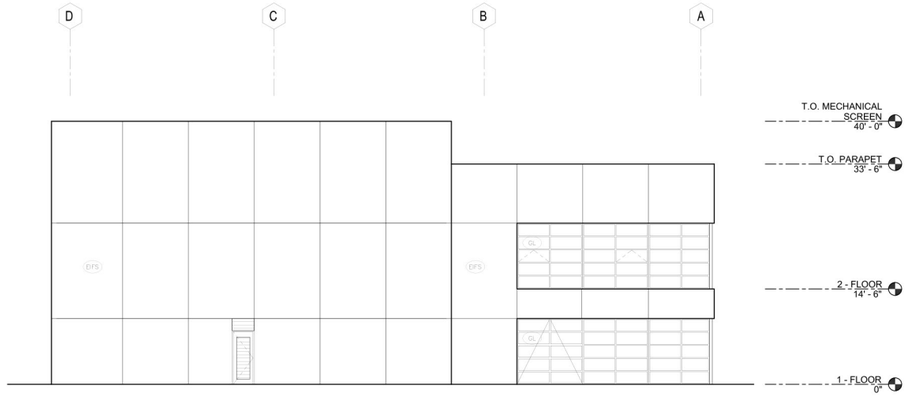
Lead Agency: City of Irvine

ELEVATION - SHADE STRUCTURE 1 | 1/16" = 1' - 0" | 10

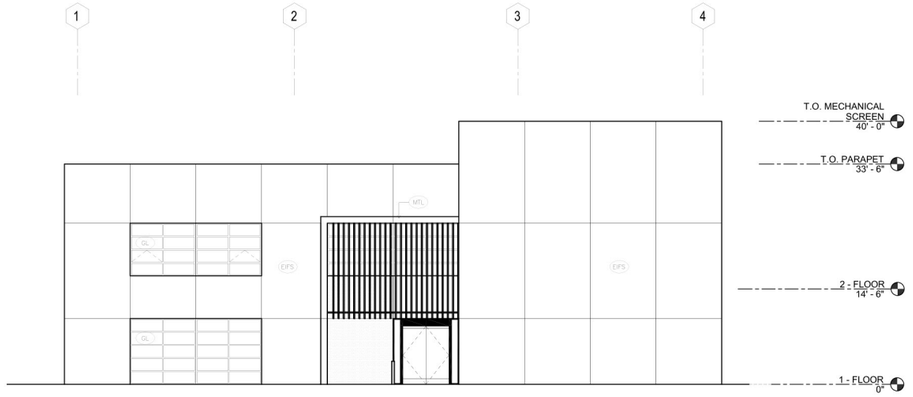
ELEVATION - SHADE STRUCTURE 1 | 1:10 | 09

ELEVATION - SHADE STRUCTURE 2 | 1/16" = 1' - 0" | 05

ELEVATION - SHADE STRUCTURE 2 | 1:10 | 04



BUILDING - SMALL - SIDE ELEVATION | 1/8" = 1'0" | 06



BUILDING - SMALL - PARKING ELEVATION | 1/8" = 1'0" | 02
1C, 1F, 1G, 1H, 2A, 2C, 2D, 3B, 3C, 3D, 4A, 4C, 4E

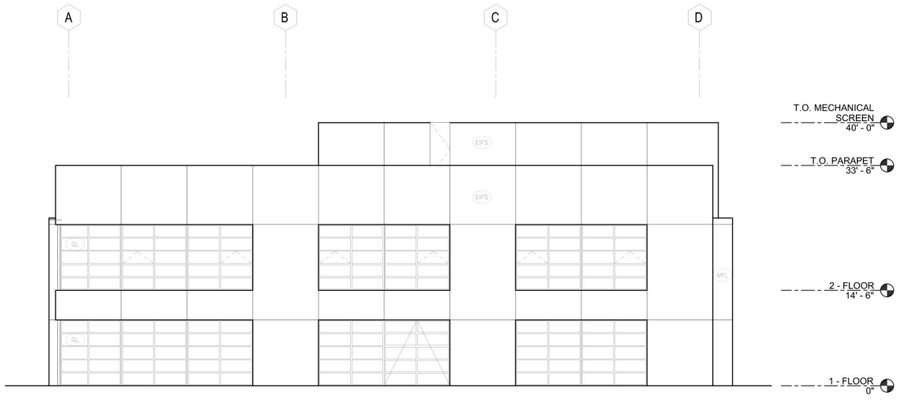
NOTE:
1. ALL BUILDINGS AND SHADE STRUCTURES TO BE DESIGNED TO COMPLY WITH THE CALIFORNIA BUILDING CODE AND ALL LOCAL CODES AND REGULATION INCLUDING ALLOWABLE AREA, USE, OCCUPANY, CONSTRUCTION TYPE AND FIRE SEPARATION DISTANCES.
2. ALL SIGNAGE CONCEPTUAL ONLY

MATERIAL LEGEND

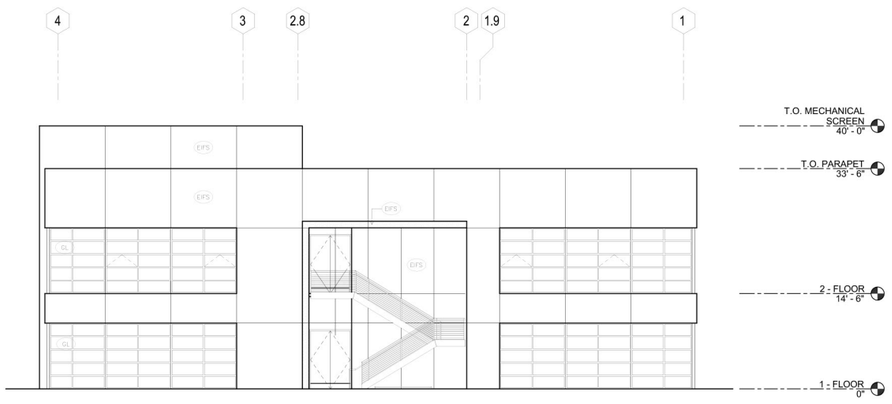
EIFS EXTERIOR INSULATED FINISH SYSTEM SMOOTH TROWELED FINISH (COLOR: WHITE)

GL VISION GLAZING IGU (CLEAR GLASS WITH LOW-E COATING) WITH ALUMINUM FRAME (COLOR: DARK BRONZE)

MTL METAL PANEL (COLOR: DARK BRONZE)



BUILDING - SMALL - SIDE ELEVATION | 1/8" = 1'0" | 08



BUILDING - SMALL - PROMENADE ELEVATION | 1/8" = 1'0" | 04

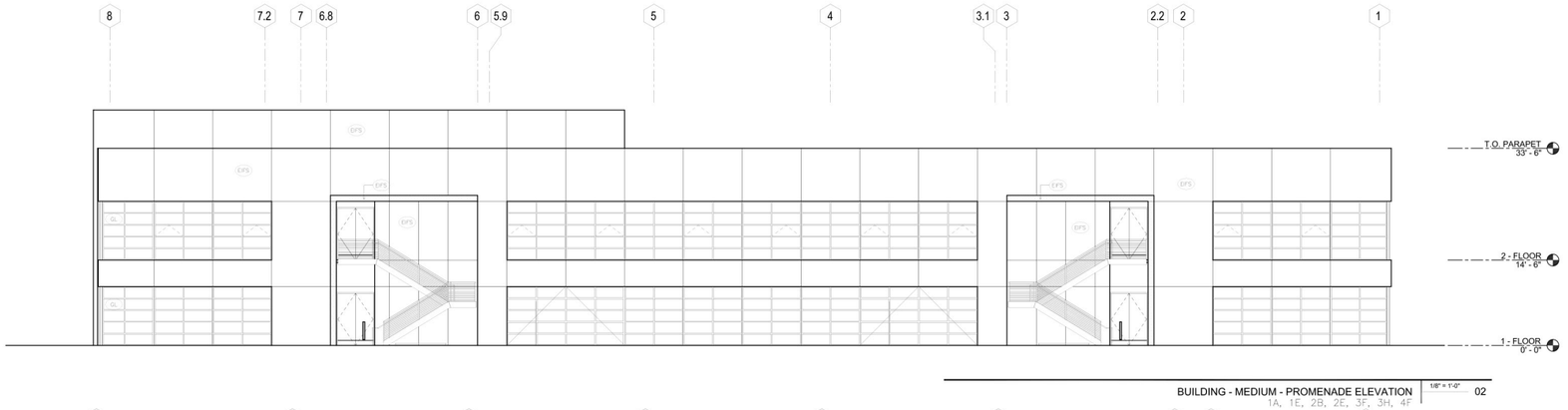
Source(s): LPA (06-30-2020)

Exhibit 5b

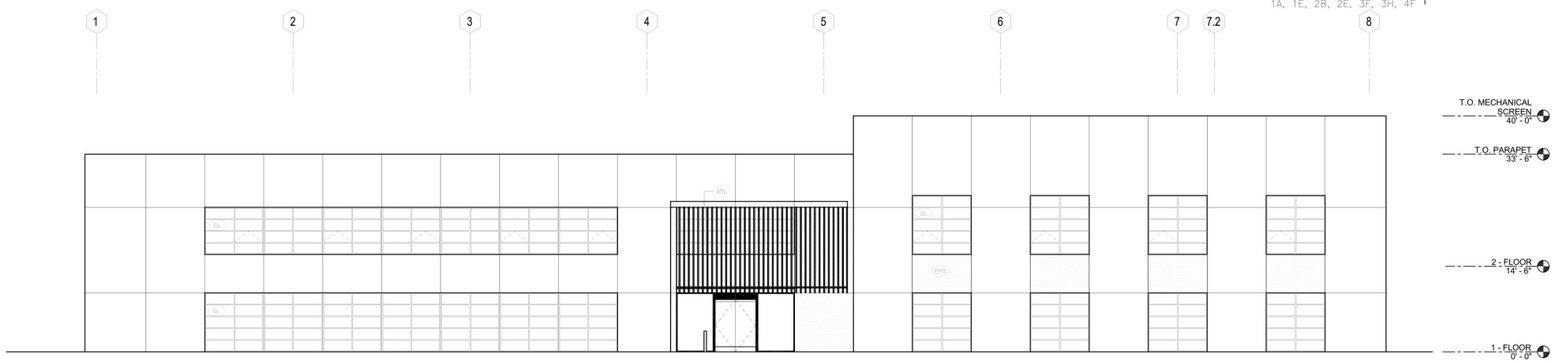
Not to Scale

Representative Building Elevations

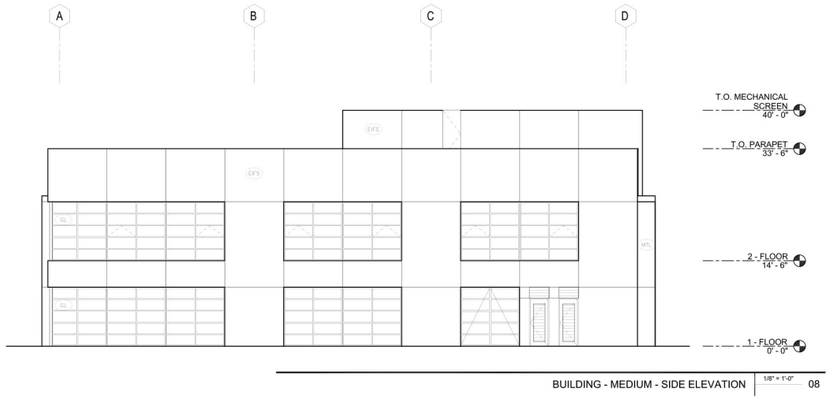
Lead Agency: City of Irvine



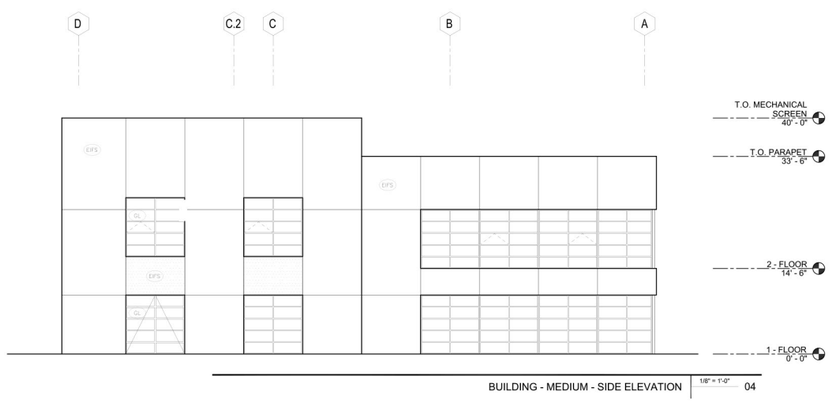
BUILDING - MEDIUM - PROMENADE ELEVATION 1/8" = 1'-0" 02
1A, 1E, 2B, 2E, 3F, 3H, 4F



BUILDING - MEDIUM - PARKING ELEVATION 1/8" = 1'-0" 03



BUILDING - MEDIUM - SIDE ELEVATION 1/8" = 1'-0" 08



BUILDING - MEDIUM - SIDE ELEVATION 1/8" = 1'-0" 04

NOTE:
1. ALL BUILDINGS AND SHADE STRUCTURES TO BE DESIGNED TO COMPLY WITH THE CALIFORNIA BUILDING CODE AND ALL LOCAL CODES AND REGULATION INCLUDING ALLOWABLE AREA, USE, OCCUPANY, CONSTRUCTION TYPE AND FIRE SEPARATION DISTANCES.
2. ALL SIGNAGE CONCEPTUAL ONLY

MATERIAL LEGEND

EIFS EXTERIOR INSULATED FINISH SYSTEM SMOOTH TROWELED FINISH (COLOR: WHITE)

GL VISION GLAZING IGU (CLEAR GLASS WITH LOW-E COATING) WITH ALUMINUM FRAME (COLOR: DARK BRONZE)

MTL METAL PANEL (COLOR: DARK BRONZE)

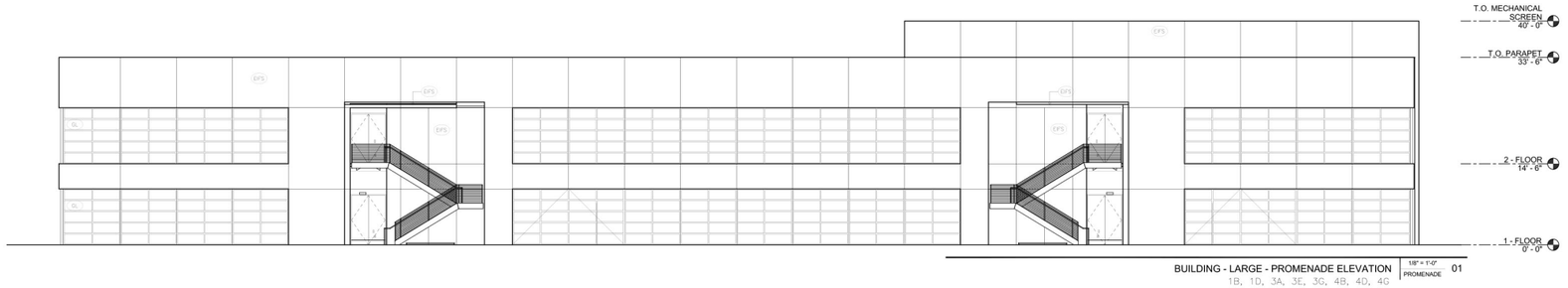
Source(s): LPA (06-30-2020)

Exhibit 5c

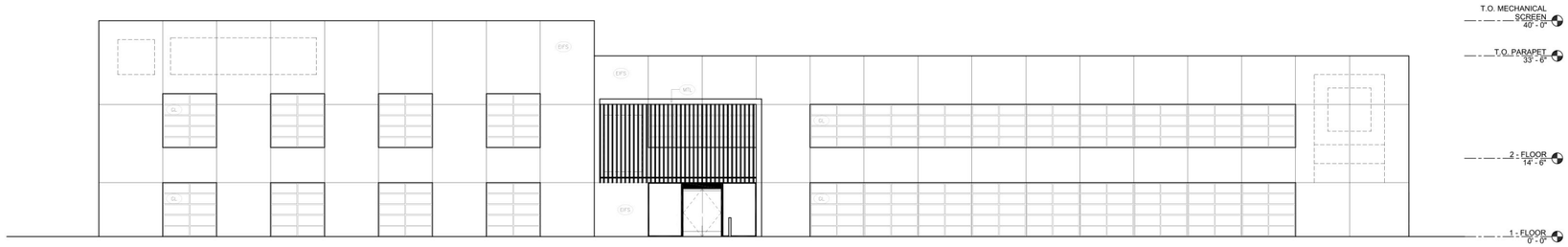
Not to Scale

Representative Building and Structure Elevations

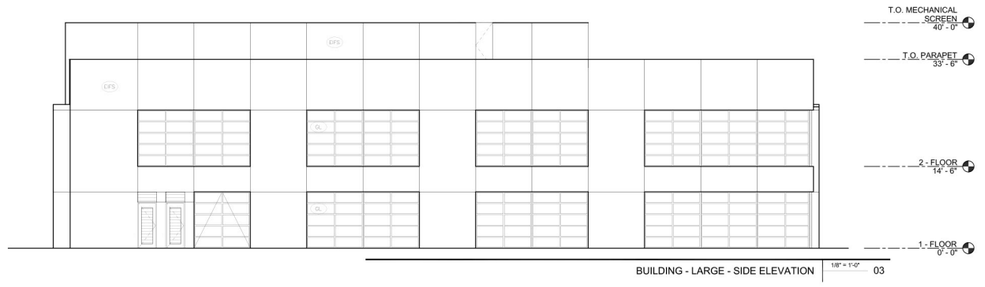
Lead Agency: City of Irvine



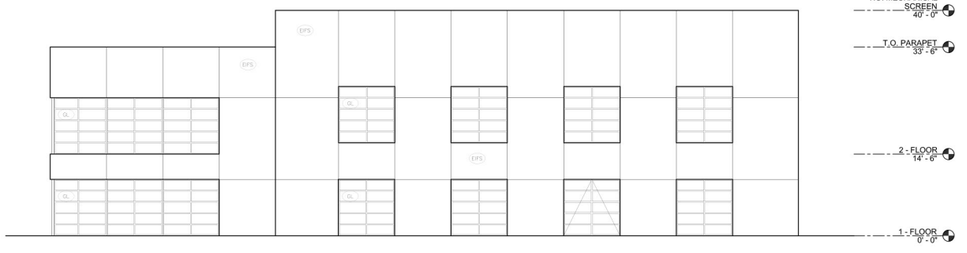
BUILDING - LARGE - PROMENADE ELEVATION 1/8" = 1'-0" PROMENADE 01
1B, 1D, 3A, 3E, 3G, 4B, 4D, 4G



BUILDING - LARGE - PARKING ELEVATION 1/8" = 1'-0" 02



BUILDING - LARGE - SIDE ELEVATION 1/8" = 1'-0" 03



NOTE:
1. ALL BUILDINGS AND SHADE STRUCTURES TO BE DESIGNED TO COMPLY WITH THE CALIFORNIA BUILDING CODE AND ALL LOCAL CODES AND REGULATION INCLUDING ALLOWABLE AREA, USE, OCCUPANY, CONSTRUCTION TYPE AND FIRE SEPARATION DISTANCES.
2. ALL SIGNAGE CONCEPTUAL ONLY

MATERIAL LEGEND

EIFS EXTERIOR INSULATED FINISH SYSTEM SMOOTH TROWELED FINISH (COLOR: WHITE)

GL VISION GLAZING IGU (CLEAR GLASS WITH LOW-E COATING) WITH ALUMINUM FRAME (COLOR: DARK BRONZE)

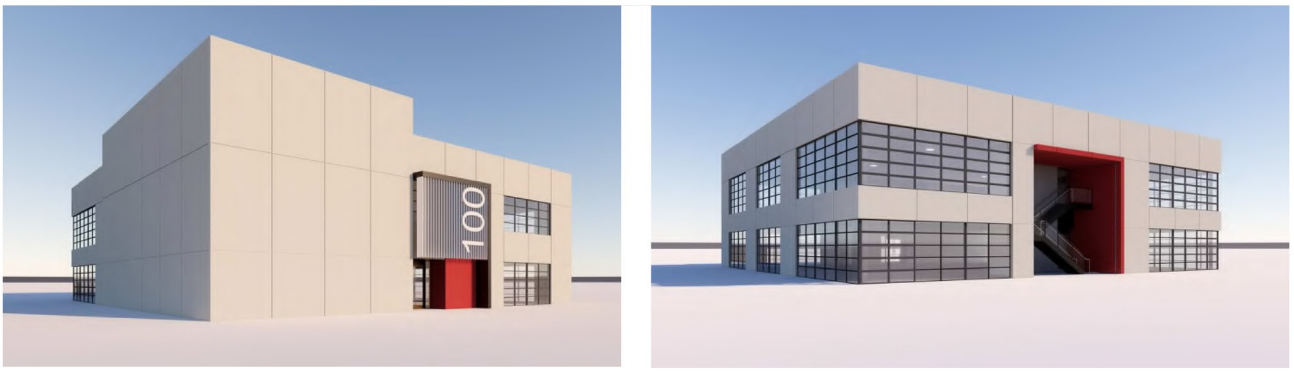
MTL METAL PANEL (COLOR: DARK BRONZE)

Source(s): LPA (06-30-2020)

Exhibit 5d

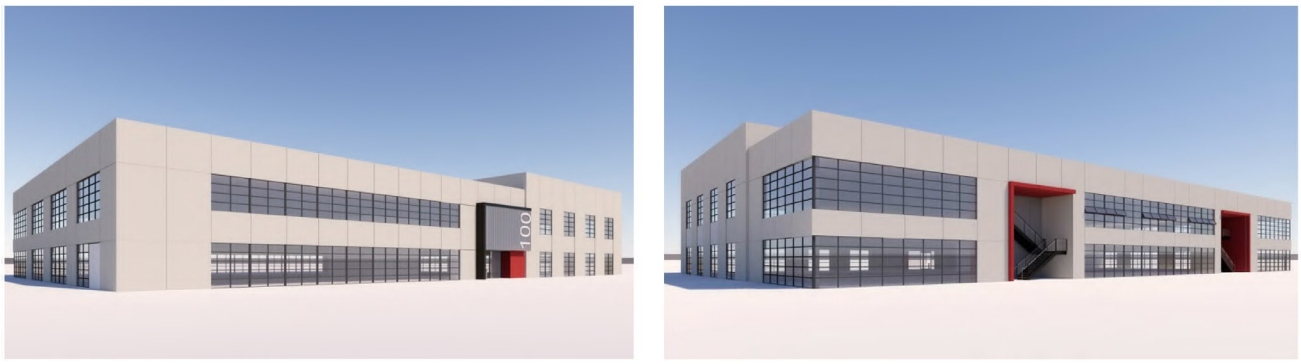
Not to Scale

Representative Building and Structure Elevations



3D PERSPECTIVE - SMALL NTS 01

3D PERSPECTIVE - MEDIUM NTS 03



3D PERSPECTIVE - LARGE NTS 05

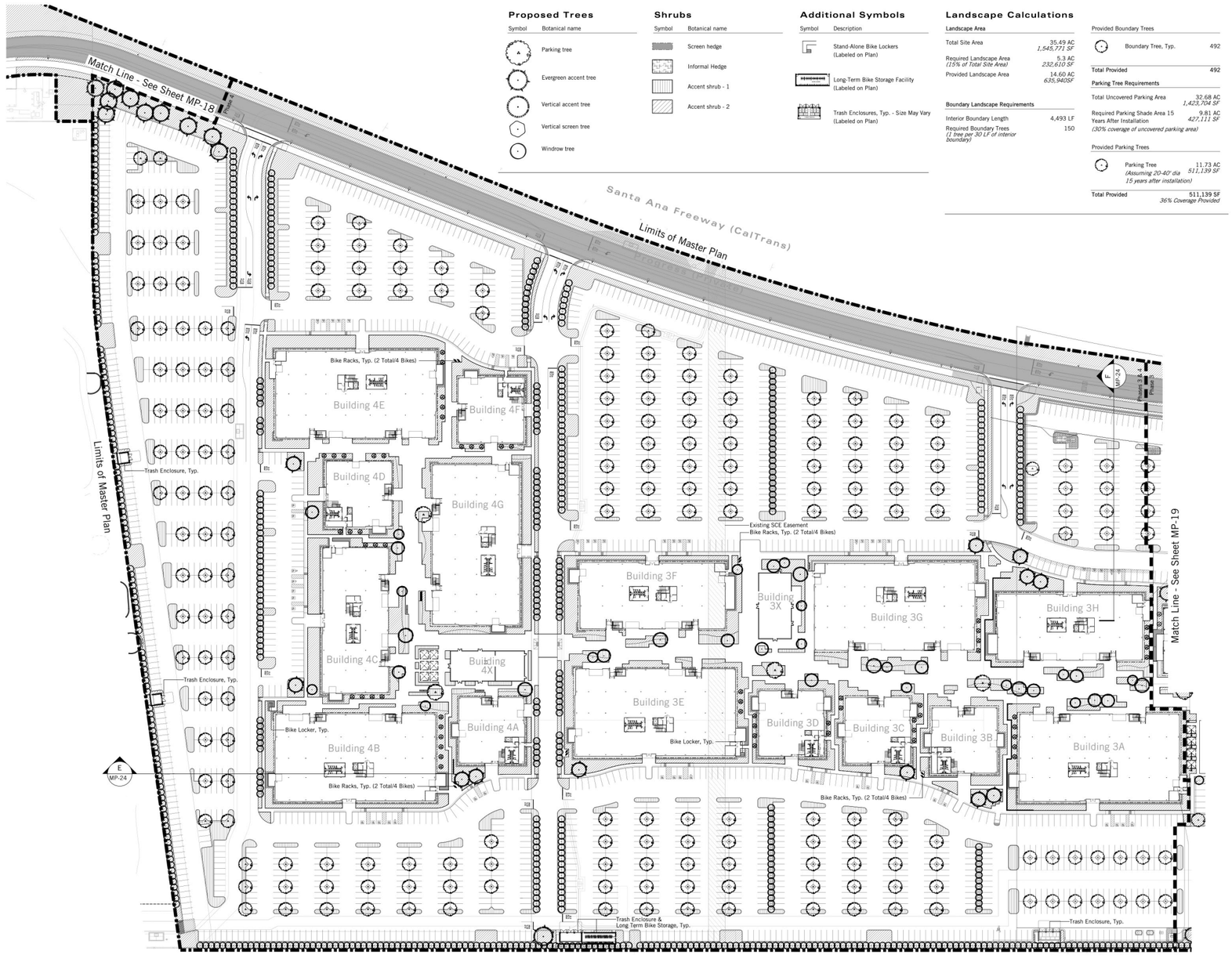
Source(s): LPA (05-11-2020)

Exhibit 6

Not to Scale

Three-Dimensional Building Perspectives

Lead Agency: City of Irvine



Proposed Trees

Symbol	Botanical name
	Parking tree
	Evergreen accent tree
	Vertical accent tree
	Vertical screen tree
	Windrow tree

Shrubs

Symbol	Botanical name
	Screen hedge
	Informal Hedge
	Accent shrub - 1
	Accent shrub - 2

Additional Symbols

Symbol	Description
	Stand-Alone Bike Lockers (Labeled on Plan)
	Long-Term Bike Storage Facility (Labeled on Plan)
	Trash Enclosures, Typ. - Size May Vary (Labeled on Plan)

Landscape Calculations

Landscape Area

Total Site Area	35.49 AC *1,545,771 SF*
Required Landscape Area *(15% of Total Site Area)*	5.3 AC *232,610 SF*
Provided Landscape Area	14.60 AC *635,940SF*

Boundary Landscape Requirements

Interior Boundary Length	4,493 LF
Required Boundary Trees *(1 tree per 30 LF of interior boundary)*	150

Provided Boundary Trees

Boundary Tree, Typ.	492
Total Provided	**492**

Parking Tree Requirements

Total Uncovered Parking Area	32.68 AC *1,423,704 SF*
Required Parking Shade Area 15 Years After Installation *(30% coverage of uncovered parking area)*	9.81 AC *427,111 SF*

Provided Parking Trees

Parking Tree *(Assuming 20-40' dia 15 years after installation)*	11.73 AC *511,139 SF*
Total Provided	**511,139 SF** *36% Coverage Provided*

Source(s): Burton Studio (06-30-2020)

Exhibit 7a

Not to Scale

Conceptual Landscape Plan

Lead Agency: City of Irvine

Proposed Trees

Symbol	Botanical name
	Parking tree
	Evergreen accent tree
	Vertical accent tree
	Vertical screen tree
	Windrow tree

Shrubs

Symbol	Botanical name
	Screen hedge
	Informal Hedge
	Accent shrub - 1
	Accent shrub - 2

Additional Symbols

Symbol	Description
	Stand-Alone Bike Lockers (Labeled on Plan)
	Long-Term Bike Storage Facility (Labeled on Plan)
	Trash Enclosures, Typ. - Size May Vary (Labeled on Plan)

Landscape Calculations

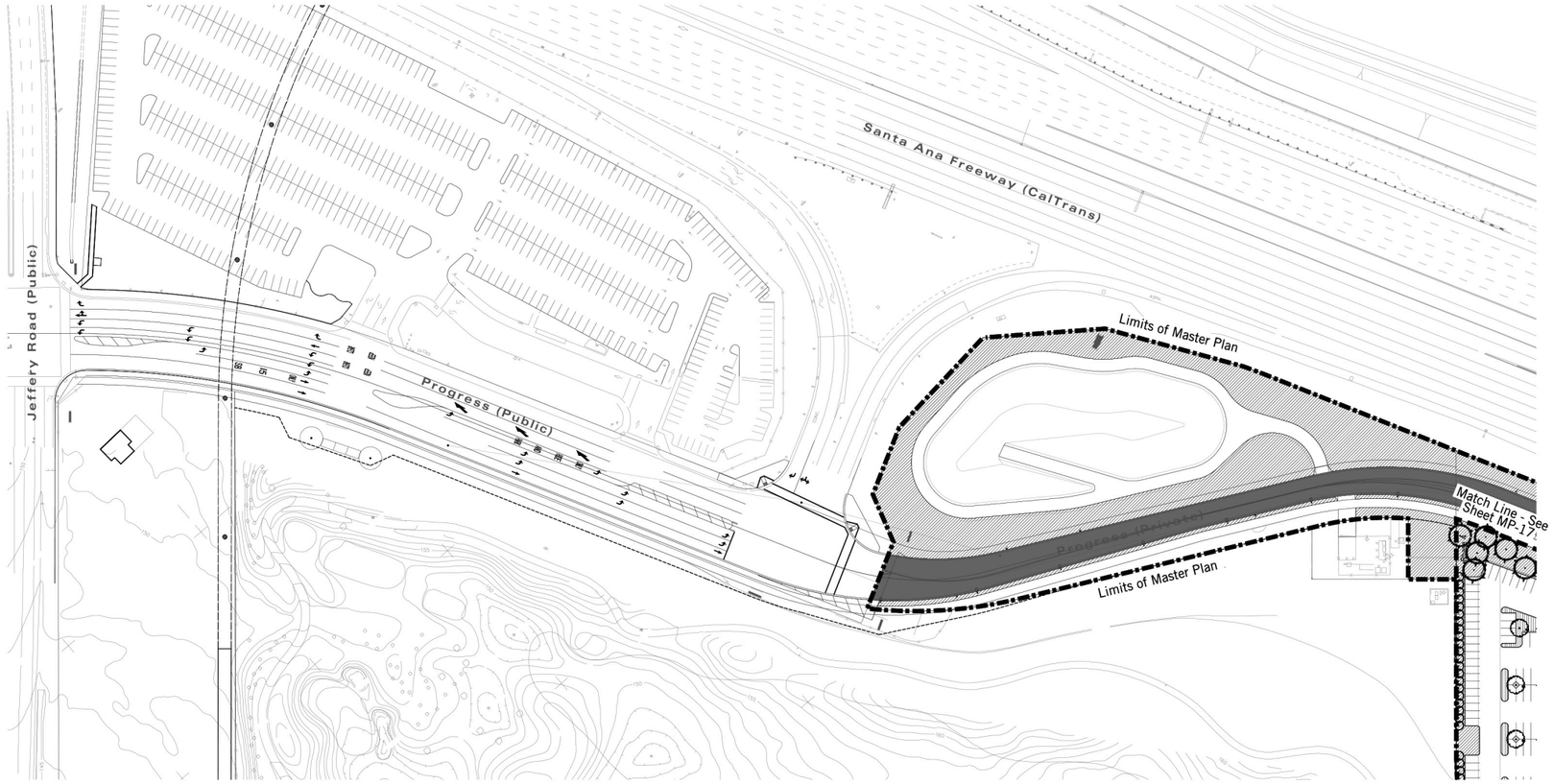
Landscape Area	
Total Site Area	35.49 AC *1,545,771 SF*
Required Landscape Area *(15% of Total Site Area)*	5.3 AC *232,610 SF*
Provided Landscape Area	14.60 AC *635,940SF*

Boundary Landscape Requirements	
Interior Boundary Length	4,493 LF
Required Boundary Trees *(1 tree per 30 LF of interior boundary)*	150

Provided Boundary Trees	
Boundary Tree, Typ.	492
Total Provided	492

Parking Tree Requirements	
Total Uncovered Parking Area	32.68 AC *1,423,704 SF*
Required Parking Shade Area 15 Years After Installation *(30% coverage of uncovered parking area)*	9.81 AC *427,111 SF*

Provided Parking Trees		
Parking Tree *(Assuming 20-40' dia 15 years after installation)*	11.73 AC *511,139 SF*
Total Provided	511,139 SF *36% Coverage Provided*

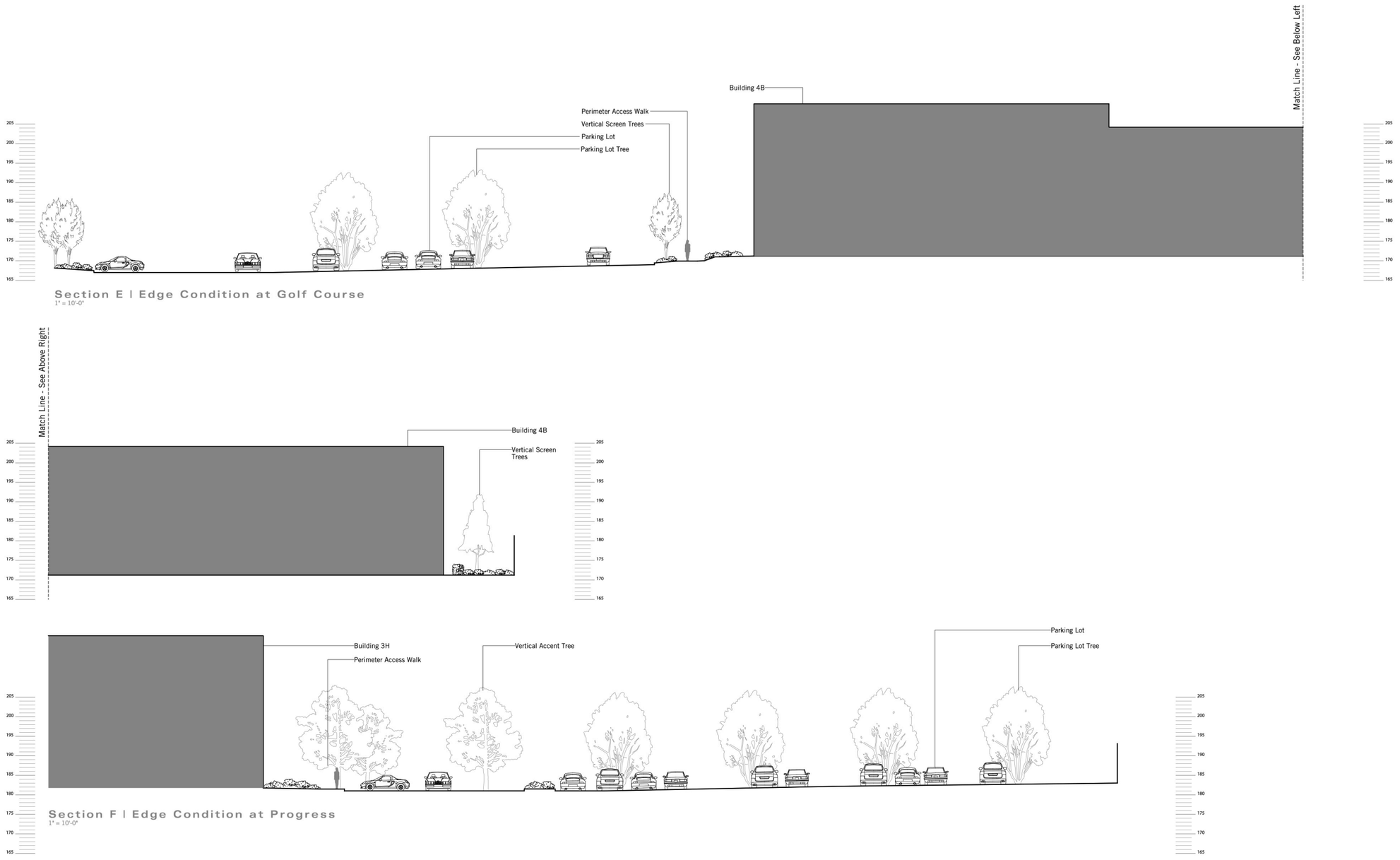


Source(s): Burton Studio (06-30-2020)

Exhibit 7b

Not to Scale

Conceptual Landscape Plan



Source(s): Burton Studio (05-11-2020)

Exhibit 8

Not to Scale

Conceptual Site Landscape Sections

There are existing fences along the northern and southern property boundaries separating the proposed Project site from the railroad (OCTA / Metrolink) and I-5 (Caltrans). These fences would remain in place with implementation of the proposed Project.

3.2.3 Circulation and Parking

Vehicular Circulation and Parking

Vehicular access to the Project site would be provided by a continuous two-lane (one lane in each direction) privately maintained access road ("Progress") that will extend from Sand Canyon Avenue at Burt Road to the Jeffrey Road / I-5 southbound ramps at Progress (Walnut Avenue). The construction of Progress is a project design feature (PDF) associated with the approved Master Plan 00775712-PMPC and VTPM 2019-104; this segment of Progress has been constructed. As shown on Exhibits 4a and 4b, there would be three driveways along Progress that would go into the Project site's parking lots.

Also as part of the approved Master Plan 00775712-PMPC and VTPM 2019-104, the existing segment of Walnut Avenue between Jeffrey Road and the I-5 southbound ramps, which is proposed to be renamed Progress, would be modified to accommodate the Progress extension east of the ramps and to improve access to the existing park and ride lot located between Jeffrey Road and the I-5 southbound ramps. Intersection improvements are being made as part of the previous approvals at the following intersections: I-5 Southbound Ramp / Progress, Sand Canyon Avenue / Burt Road, and Jeffrey Road / Walnut Avenue-Progress. It should be noted that a concept striping plan developed in the VTPM 2019-104 traffic study, completed in June 2019, was reviewed by the City and Caltrans, and comments from both agencies have been incorporated into the current design. The concept was refined through the testing of multiple iterations of roadway lane configurations to optimize traffic flow through the corridor while maintaining access to the park-and-ride lot. The conceptual design at the intersections of I-5 Southbound Ramp / Progress and Jeffrey Road and Walnut Avenue / Progress have been refined; these refinements require modifications to Project Design Feature (PDF) TR-1 from the 2019 Addendum, as presented Section 6.17, Transportation, of this Addendum. In summary, and as shown on Exhibit 4b: (1) the Jeffrey Road / Walnut Avenue-Progress intersection design has been modified to replace the westbound right turn overlap with a second right-turn lane from westbound Progress to northbound Jeffrey Road, and (2) at the I-5 Southbound Ramp / Progress intersection, a separate single left-turn lane and double right-turn lanes would be provided from the southbound I-5 off-ramp to Progress. Modified PDF TR-1 has been included in the updated PA 12 EIR MMRP for the proposed Project, which would be approved with this Addendum.

As shown on Exhibit 4a, parking would be provided on-site in surface parking lots. Full-size, long-term, and accessible (i.e., regular, van accessible, and electric vehicle [EV]) spaces would be provided. The amount of parking provided would exceed the parking requirements set forth in the Zoning Ordinance.

Pedestrian and Bicycle Facilities

Access to the Project site for pedestrians and bicyclists would be provided via the previously approved 10-foot-wide combination pedestrian and bicycle path on the south side of Progress, which is currently under construction, and the existing sidewalk on the north side of Walnut Avenue (to be renamed Progress). These pedestrian and bicycle facilities would accommodate non-vehicular modes of transportation from the eastern Project site boundary to Jeffrey Road (refer to Exhibit 9). As shown on Exhibits 4a and 4b, there would be accessible paths of travel throughout the Project site that would connect to the pedestrian and bicycle facilities along Progress. The planned pedestrian and bicycle facilities within the Project site and adjacent to the Project site would provide access to nearby recreational facilities, schools, public amenities, bus stops, and provide an alternative mode of transportation for future employees in the Project area. The planned pedestrian and bicycle facilities would also provide direct linkages to the residential areas to the north, south, and west of the proposed Project site and to the Irvine Spectrum areas located southeast of Sand Canyon Avenue. Bicycle lockers and bicycle parking spaces would also be provided on-site for future tenants and visitors.

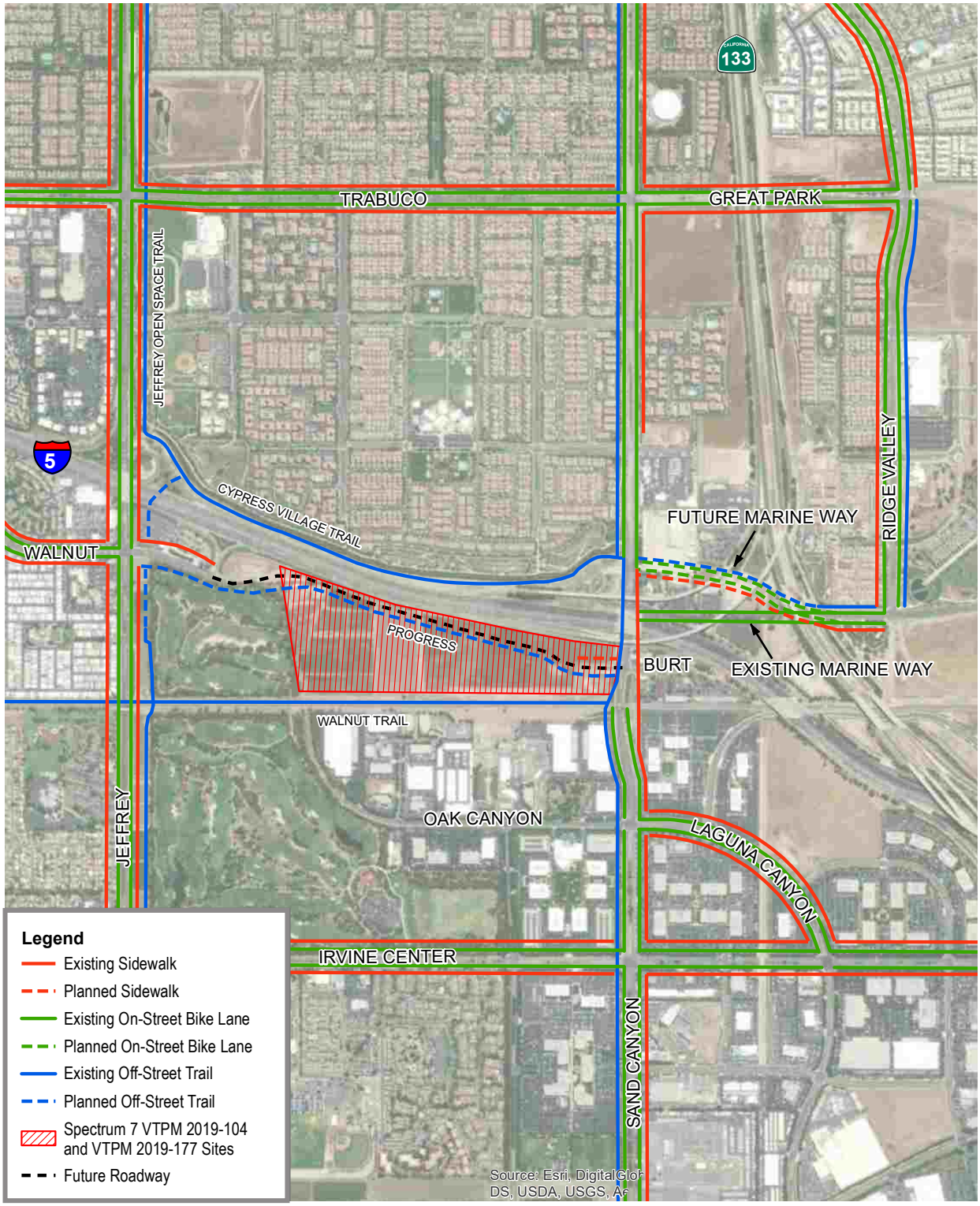
3.2.4 Utility Infrastructure

Implementation of the proposed Project would involve construction of on-site and off-site infrastructure necessary to serve the proposed office uses. Following is a description of the existing and proposed utility infrastructure. The proposed utility infrastructure is conceptual and subject to refinements during final design including specifications required by the utility provider.

- **Domestic Water.** Irvine Ranch Water District (IRWD) provides domestic water service to the proposed Project site. As shown on Exhibit 10, there are existing 12-inch domestic water lines in Burt Road just west of Sand Canyon Avenue and south of the railroad right-of-way. The line south of the Railroad has already been extended under the railroad to the project area as part of the previous project. The proposed Project involves installation of a new domestic water system (8- to 12-inch lines), which would serve the proposed office buildings via connections to the existing water system.

- **Sewer.** IRWD provides sewer / wastewater services to the proposed Project site. As shown on Exhibit 10, there is an existing 12-inch sewer line that extends through the Project site and conveys off-site flow from areas east of Sand Canyon Avenue. Additionally, new and relocated sewer lines are being constructed for the office development to the east. The proposed Project involves the installation of new 8-inch sewer lines to connect the proposed buildings to the existing system located along the southerly side of the Project site.

- **Recycled Water.** IRWD provides recycled water service to the proposed Project site. Recycled water would be used for landscape irrigation and restroom toilets and urinals. Dual-plumbing is planned for the proposed buildings. As shown on Exhibit 10, there is an existing 12-inch recycled water line in Walnut Avenue, which has been extended to serve the adjacent office project and provides stubs for a future connection to the proposed Project, and 6- to 10-inch



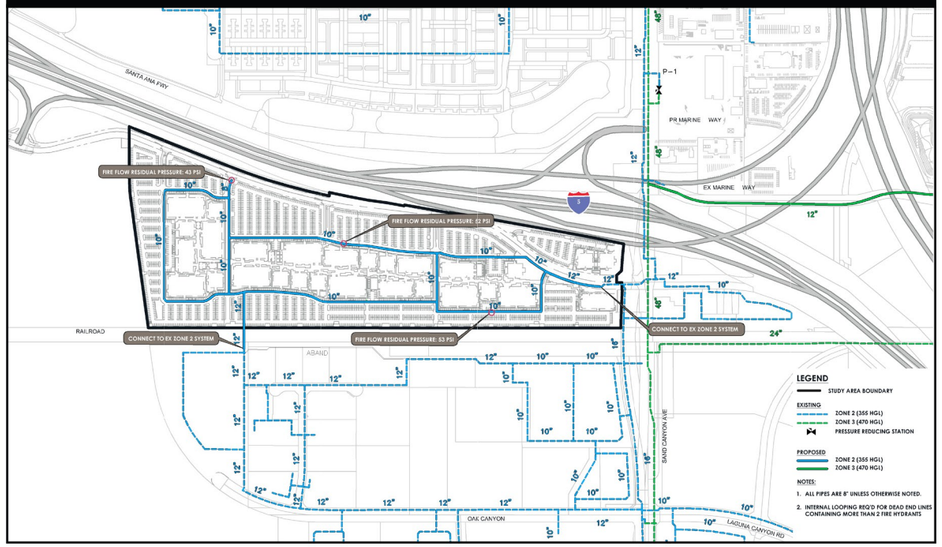
Source(s): Stantec (06-17-2020)

Exhibit 9

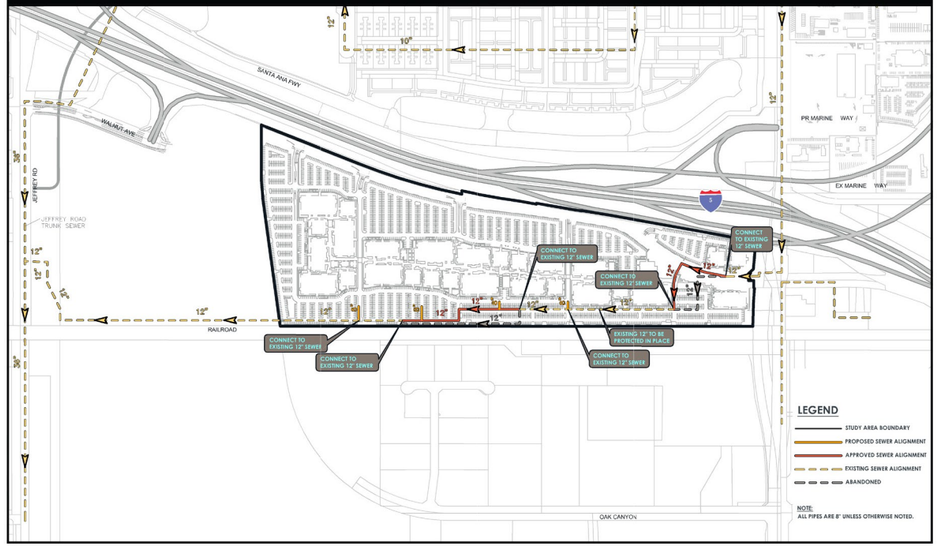
Not to Scale

Pedestrian and Bicycle Facilities in the Project Area

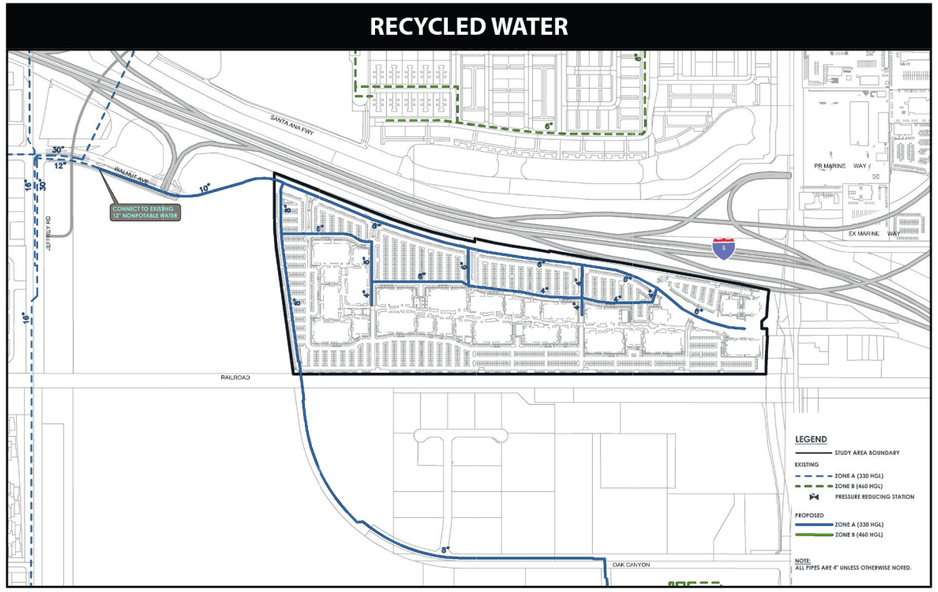
DOMESTIC WATER



SEWER



RECYCLED WATER



Source(s): Stantec (03-10-2020)

Exhibit 10

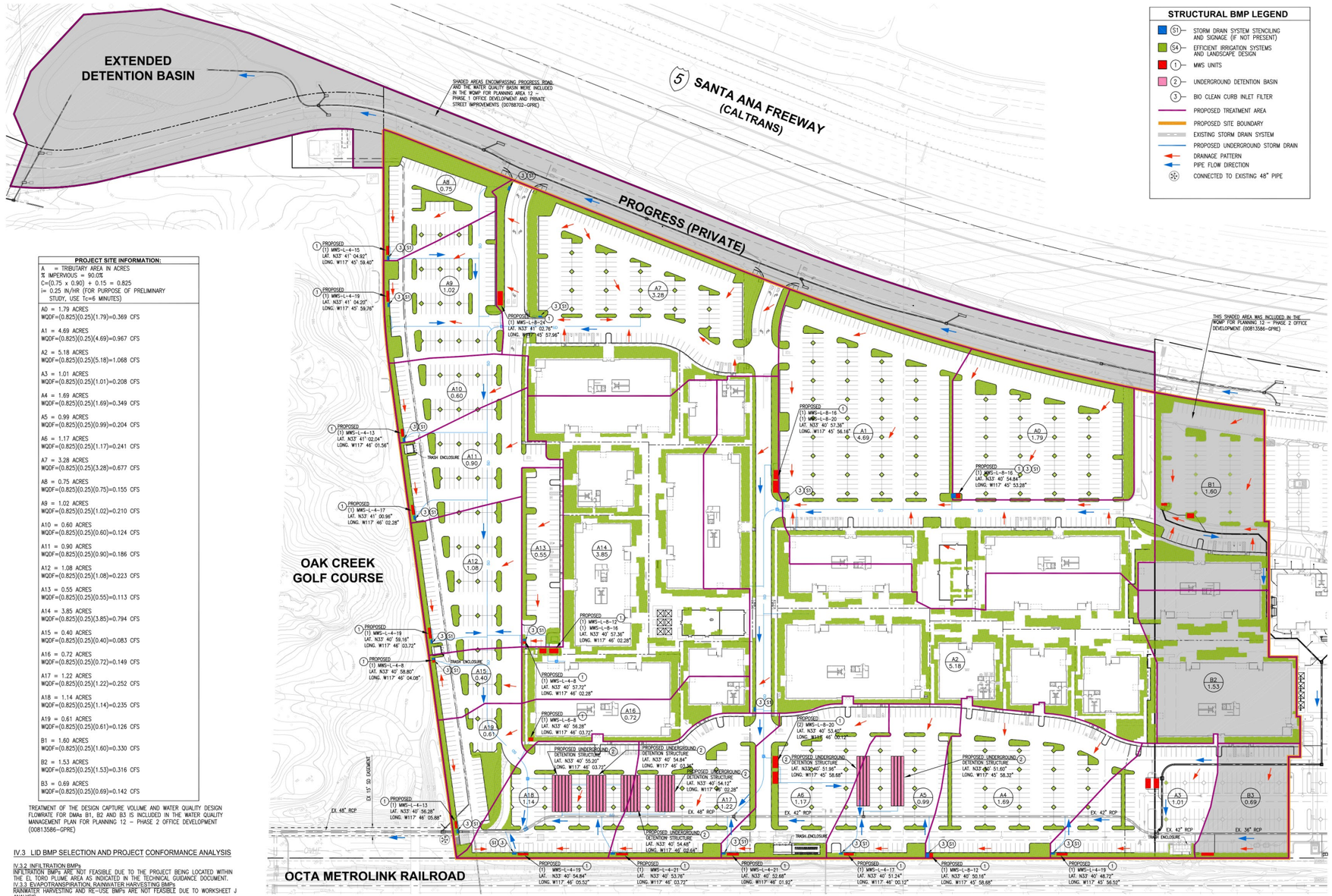
Not to Scale

Conceptual Water and Sewer Utility Plan

recycled water lines in Progress. There is also an existing 24-inch recycled water line in Irvine Center Drive, south of the Project site. The proposed Project includes the installation of 4- to 8-inch recycled water lines on-site, which would connect to existing lines. Additionally, IRWD is requiring the construction of a new recycled water line to provide a loop between the pipelines on Walnut Avenue and Irvine Center Drive. A separate study (i.e., Regional Recycled Water Study) determined that the future pipeline loop may be 8-inch diameter to provide redundancy for the proposed service area. The proposed Project includes the installation of the new recycled water line extending south from the Project site; the alignment would be installed in an existing vacant area extending from the railroad tracks to the Oak Canyon cul-de-sac, and then in the Oak Canyon and Valley Oak roadway alignments.

- **Storm Drain and Water Quality Best Management Practices (BMPs).** Under the existing condition, runoff from the Project site generally surface flows toward the southwesterly corner of the property to two temporary desilting basins that discharge to the existing 48-inch storm drain at the edge of the Oak Creek Golf Course. As shown on Exhibit 11, the main storm drain that has already been extended through the Project site to serve the adjacent project would convey 25-year storm flows. New pipes and would be installed within the Project site to divert low flow to biofiltration BMPs. The diverted runoff would be treated by proprietary biofiltration units with treated flow discharging back to the on-site main line. A portion of the runoff would be conveyed to underground detention structures to address Hydrologic Conditions of Concern (HCOC). The on-site main lines connect to an existing 42-inch / 48-inch storm drain along the southern property line, which discharges to an existing storm drain in the Oak Creek Golf Club property, and ultimately to Jeffrey Road. Runoff from the building site would not drain to the extended detention basin, which is currently under construction. Based on current information, infiltration of stormwater is considered infeasible due the presence of the El Toro MCAS groundwater contamination plume in proximity to the Project site.

- **Dry Utilities.** Existing and proposed dry utility infrastructure is shown on Exhibit 12. As illustrated, SCE has existing overhead 66 kV and 12 kV electric lines extending in a north-south direction through the center of the Project site, and an overhead 66 kV line along the southern boundary of the Project site. The overhead lines on-site would be replaced with new underground systems as part of the proposed Project and the existing lines would be removed. There are also SCE electric lines in Sand Canyon Avenue. The existing overhead 12kV circuit would be looped out to Sand Canyon Avenue (consistent with the dry utility plan for the office development to the east). SCE plans to serve the proposed Project from the Irvine substation located at the corner of Trabuco Road and Ridge Valley. However, SCE also has a circuit located in Jeffrey Road that would provide SCE operational flexibility that may result in all or a part of PA 12 being served from the Las Lomas substation. Construction activities in proximity to these systems would be completed in accordance with the California Public Utilities Commission (CPUC) General Orders 95 and 128, and applicable local codes. Electric service would be provided in accordance with SCE's rules and regulations on file with and approved by the CPUC and the State of California.



PROJECT SITE INFORMATION:

A = TRIBUTARY AREA IN ACRES
% IMPERVIOUS = 90.0%
C=(0.75 x 0.90) + 0.15 = 0.825
i= 0.25 IN/HR (FOR PURPOSE OF PRELIMINARY STUDY, USE Tc=6 MINUTES)

AD = 1.79 ACRES
WQDF=(0.825)(0.25)(1.79)=0.369 CFS

A1 = 4.69 ACRES
WQDF=(0.825)(0.25)(4.69)=0.967 CFS

A2 = 5.18 ACRES
WQDF=(0.825)(0.25)(5.18)=1.068 CFS

A3 = 1.01 ACRES
WQDF=(0.825)(0.25)(1.01)=0.208 CFS

A4 = 1.69 ACRES
WQDF=(0.825)(0.25)(1.69)=0.349 CFS

A5 = 0.99 ACRES
WQDF=(0.825)(0.25)(0.99)=0.204 CFS

A6 = 1.17 ACRES
WQDF=(0.825)(0.25)(1.17)=0.241 CFS

A7 = 3.28 ACRES
WQDF=(0.825)(0.25)(3.28)=0.677 CFS

A8 = 0.75 ACRES
WQDF=(0.825)(0.25)(0.75)=0.155 CFS

A9 = 1.02 ACRES
WQDF=(0.825)(0.25)(1.02)=0.210 CFS

A10 = 0.60 ACRES
WQDF=(0.825)(0.25)(0.60)=0.124 CFS

A11 = 0.90 ACRES
WQDF=(0.825)(0.25)(0.90)=0.186 CFS

A12 = 1.08 ACRES
WQDF=(0.825)(0.25)(1.08)=0.223 CFS

A13 = 0.55 ACRES
WQDF=(0.825)(0.25)(0.55)=0.113 CFS

A14 = 3.85 ACRES
WQDF=(0.825)(0.25)(3.85)=0.794 CFS

A15 = 0.40 ACRES
WQDF=(0.825)(0.25)(0.40)=0.083 CFS

A16 = 0.72 ACRES
WQDF=(0.825)(0.25)(0.72)=0.149 CFS

A17 = 1.22 ACRES
WQDF=(0.825)(0.25)(1.22)=0.252 CFS

A18 = 1.14 ACRES
WQDF=(0.825)(0.25)(1.14)=0.235 CFS

A19 = 0.61 ACRES
WQDF=(0.825)(0.25)(0.61)=0.126 CFS

B1 = 1.60 ACRES
WQDF=(0.825)(0.25)(1.60)=0.330 CFS

B2 = 1.53 ACRES
WQDF=(0.825)(0.25)(1.53)=0.316 CFS

B3 = 0.69 ACRES
WQDF=(0.825)(0.25)(0.69)=0.142 CFS

TREATMENT OF THE DESIGN CAPTURE VOLUME AND WATER QUALITY DESIGN FLOWRATE FOR DMAs B1, B2 AND B3 IS INCLUDED IN THE WATER QUALITY MANAGEMENT PLAN FOR PLANNING 12 – PHASE 2 OFFICE DEVELOPMENT (008135586–GPRE)

IV.3 LID BMP SELECTION AND PROJECT CONFORMANCE ANALYSIS

IV.3.2 INFILTRATION BMPs
INFILTRATION BMPs ARE NOT FEASIBLE DUE TO THE PROJECT BEING LOCATED WITHIN THE EL TORO PLUME AREA AS INDICATED IN THE TECHNICAL GUIDANCE DOCUMENT.
IV.3.3 EVAPOTRANSPIRATION, RAINWATER HARVESTING BMPs
RAINWATER HARVESTING AND RE–USE BMPs ARE NOT FEASIBLE DUE TO WORKSHEET J ANALYSIS.
IV.3.4 BIOTREATMENT BMPs
BIOFILTRATION BMPs (MWS UNITS) AND UNDERGROUND DETENTION STRUCTURES WILL BE PROVIDED TO TREAT THE PROJECT'S STORMWATER RUNOFF.
IV.3.7 TREATMENT CONTROL BMPs
TREATMENT CONTROL BMPs DO NOT APPLY.

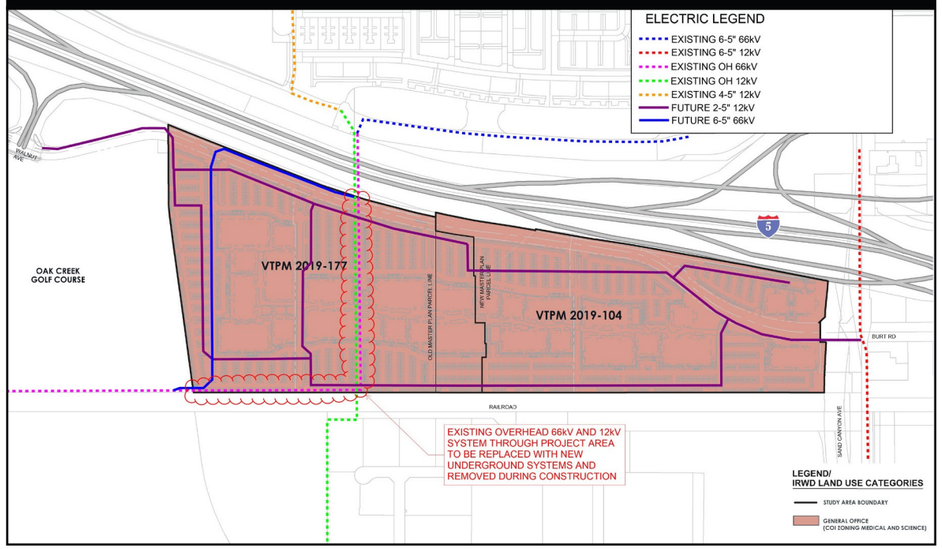
Source(s): Stantec (05-05-2020)

Exhibit 11

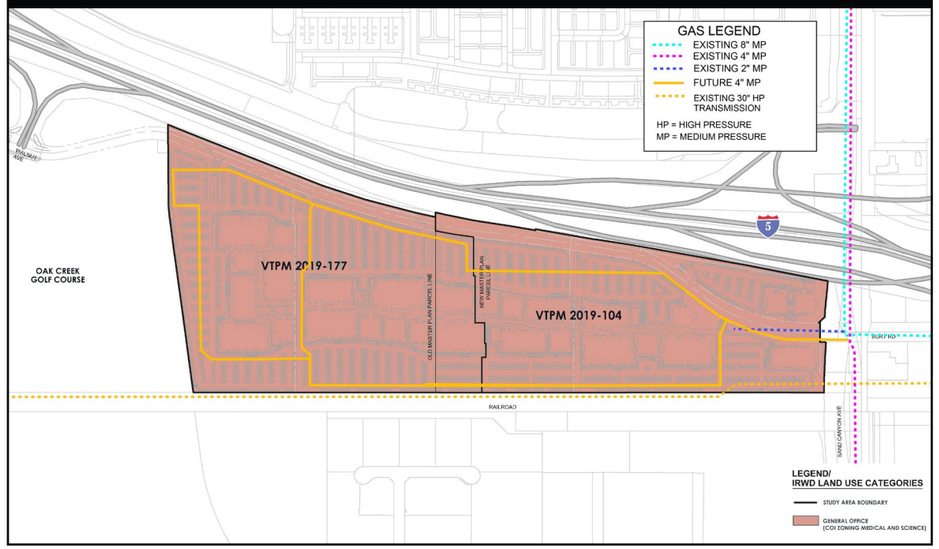
Not to Scale

WQMP BMP Location Map

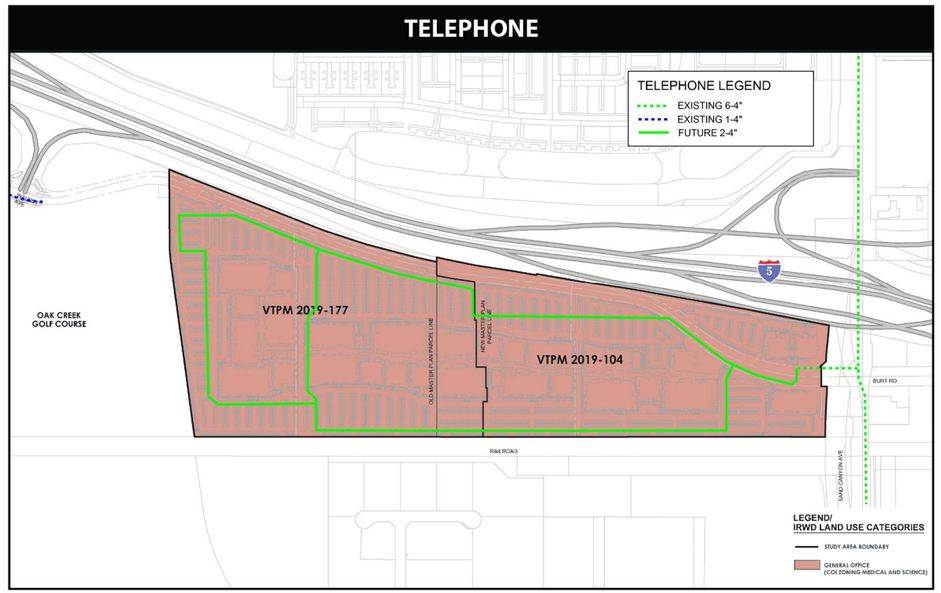
ELECTRIC



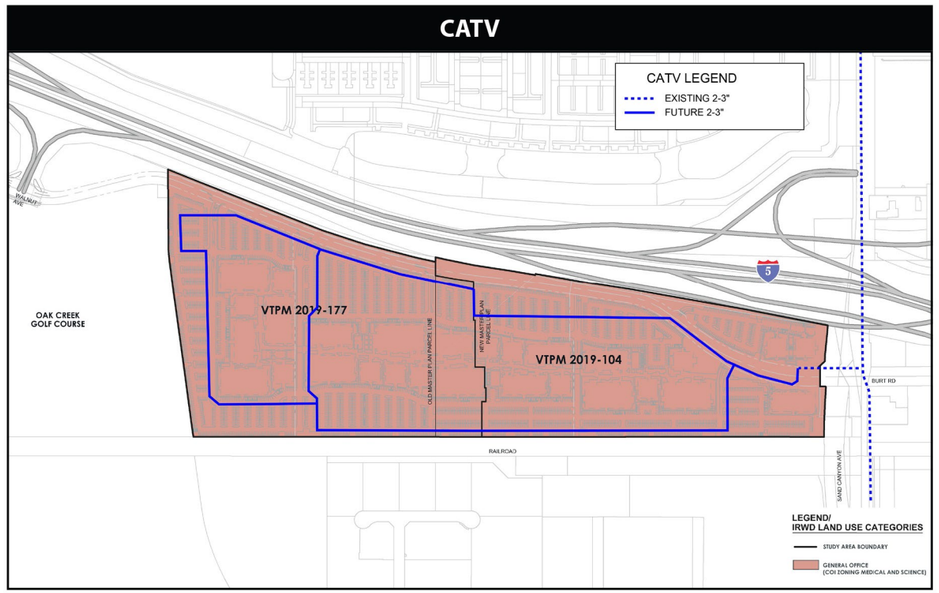
NATURAL GAS



TELEPHONE



CATV



Source(s): Moran Utility Services, Inc. (03-03-2020)

Exhibit 12

Not to Scale

Conceptual Dry Utility Plans

Southern California Gas Company (SCGC) owns and operates the following three facilities within and around the proposed Project site: a 30-inch high pressure gas transmission line that parallels the proposed Project site along the southerly boundary; 4- and 8-inch mains in Sand Canyon Avenue, and a 2-inch gas main in Burt Road. The proposed on-site gas lines would connect to the 4-inch gas main in Sand Canyon Avenue. The gas main in Burt Road is not adequate to render service to the entire office campus; therefore, SCGC required the extension of a 4-inch main across Sand Canyon Avenue and into the new extension of Burt Road. This was addressed in the 2019 Addendum for the office development to the east. Construction activities in proximity of these systems would be completed in accordance with CPUC General Order 112-F and applicable local codes. Gas service would be provided in accordance with SCGC's policies and line extension rules on file with the CPUC when contractual arrangements are made.

AT&T and Cox Communications (Cox) have franchise rights to operate communication systems in the area. Both companies would install communications facilities within the proposed Project site and would compete with one another to provide communication systems to new end users. Cox and AT&T have existing underground facilities in Sand Canyon Avenue. AT&T has four existing 3-inch conduits and Cox has two existing 3-inch conduits in Sand Canyon Avenue. The existing systems' capacities are adequate to serve the proposed Project; therefore, no new or expanded off-site improvements are required. The installation of new communication systems would be the best available technology at the time of the development (currently fiber optic service) and would connect to existing facilities in Sand Canyon Avenue.

3.3 Vesting Tentative Parcel Map 2019-177 (00816106-PTP)

Previously approved VTPM 2019-104 has four primary development parcels (Parcels 1 – 4). Parcels 1 through 3 of VTPM 2019-104 would not change with the proposed Project; however, Parcel 4 of VTPM 2019-104 is being combined with PM 97-184 and the combined area is proposed as VTPM 2019-177 (refer to Exhibit 13). It should be noted that streets shown on PM 97-184 that were proposed to be public streets would be replaced by the private roadway "Progress" and the proposed parking areas. Proposed VTPM 2019-177 has 19 numbered parcels where the office development would occur. However, there are four additional lettered lots for Progress and the water quality basin, which are currently under construction, and small parcel near the IRWD site.

3.4 Modification to Approved Master Plan 00775712-PMPC (Case No. 00816048-PMPC)

Modifications are proposed for the adjacent area covered by the approved Master Plan for Innovation Office Park (00775712-PMPC), including the following, which are depicted on Exhibit 3:

- Refinement of building square footages and related parking
- Refinement of parking lot configuration and planter areas

VESTING TENTATIVE PARCEL MAP NO. 2019-177

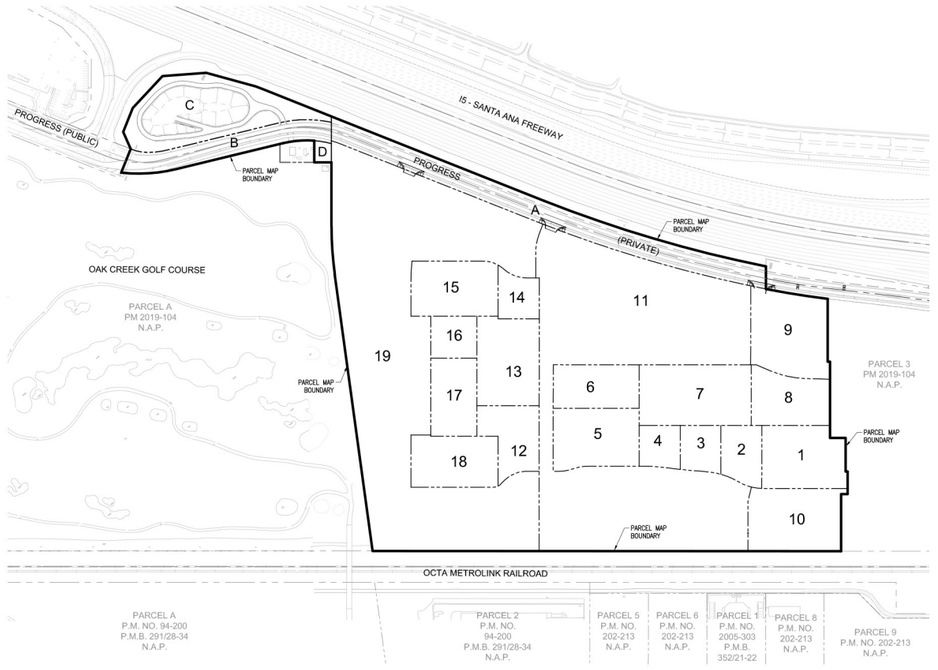
GENERAL NOTES

PLANNING AREA 12 (OAK CREEK)

1. EXISTING LAND USE: VACANT / AGRICULTURE
2. PROPOSED LAND USE: OFFICE
3. ADJACENT LAND USE : NORTH – EXISTING/PROPOSED: SANTA ANA (I-5) FREEWAY
   WEST – EXISTING/PROPOSED: OAK CREEK GOLF COURSE
   SOUTH – EXISTING/PROPOSED: OCTA METROLINK RR
   EAST – EXISTING/PROPOSED: 5.5H MEDICAL & SCIENCE
4. GENERAL PLAN USE: RESEARCH & INDUSTRIAL
5. EXISTING / PROPOSED ZONING: 5.4B GENERAL INDUSTRIAL / 5.5H MEDICAL AND SCIENCE
6. GAS SERVICE WILL BE PROVIDED BY THE SOUTHERN CALIFORNIA GAS COMPANY.
7. ELECTRICAL SERVICE WILL BE PROVIDED BY THE SOUTHERN CALIFORNIA EDISON COMPANY. ALL ELECTRICAL DISTRIBUTION LINES WILL BE PLACED UNDERGROUND.
8. TELEPHONE SERVICE WILL BE PROVIDED BY AT&T.
9. CABLE T.V. SERVICES WILL BE PROVIDED BY COX COMMUNICATIONS.
10. DOMESTIC WATER, RECLAIMED WATER AND SEWER SERVICE WILL BE PROVIDED BY THE IRVINE RANCH WATER DISTRICT.
11. THE DEVELOPER WILL COMPLY WITH ENERGY CONSERVATION MEASURES SET FORTH IN TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE.
12. FLOOD ZONE AND BASE FLOOD ELEVATIONS ARE PER FEDERAL EMERGENCY MANAGEMENT AGENCY: ZONE X PER FIRM MAP NO. 06059C0292J EFFECTIVE DATE: DECEMBER 03, 2009.
13. PROPOSED SEWER FACILITIES: STANDARD LATERAL CONNECTIONS TO EXISTING SEWER SYSTEM SHALL BE IN ACCORDANCE WITH THE IRVINE RANCH WATER DISTRICT'S STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF WATER, SEWER AND RECLAIMED WATER FACILITIES.
14. PROPOSED WATER FACILITIES: STANDARD DOMESTIC CONNECTIONS TO EXISTING WATER SYSTEM SHALL BE IN ACCORDANCE WITH THE IRVINE RANCH WATER DISTRICT'S STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF WATER, SEWER AND RECLAIMED WATER FACILITIES.
15. THE DEVELOPER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS FOR THIS VESTING TENTATIVE PARCEL MAP.
16. MAINTENANCE OF ALL LETTERED PARCELS SHALL BE THE RESPONSIBILITY OF A PUBLIC AGENCY OR PRIVATE ENTITY. SEE THE STATISTICAL SUMMARY AND OWNERSHIP/MAINTENANCE SUMMARY FOR DETAILED BREAKDOWN.
17. DRAINAGE ON THIS SITE WILL BE CONVEYED BY MEANS OF A STORM DRAIN SYSTEM CONSISTING OF VARYING SIZES OF STORM DRAIN PIPES, RCB, AREA DRAINS, BROW DITCHES AND UNDERGROUND STORMWATER DETENTION SYSTEMS.
18. EXISTING IRRIGATION LINES WILL BE REMOVED, RELOCATED OR PROTECTED IN PLACE.
19. ALL EXISTING EASEMENTS ARE TO REMAIN IN THEIR CURRENT DESIGNATED LOCATIONS UNLESS OTHERWISE NOTED.
20. ALL LETTERED PARCELS SHOWN HEREON, UPON APPROVAL BY THE CITY ENGINEER, MAY BE DIVIDED ON THE FINAL MAP INTO MULTIPLE PARCELS FOR PHASING, FINANCING, CONSTRUCTION AND DEDICATION PURPOSES. ADDITIONAL LETTERED PARCELS MAY BE REQUIRED BY OCFA FOR FUEL MODIFICATION PURPOSES.
21. PRIOR TO THE RECORDATION OF A SUBDIVISION MAP, THE APPLICANT SHALL SUBMIT A "BACKBONE" FIRE MASTER PLAN TO THE FIRE CHIEF FOR REVIEW AND APPROVAL. THIS PLAN SHALL INCLUDE THE STREETS AS SHOWN ON THE VESTING TENTATIVE PARCEL MAP (VTPM). THIS PLAN SHALL INCLUDE ALL STREETS (WITH SECTIONS), FIRE HYDRANT LOCATIONS, BLUE PAVEMENT MARKERS, WATER AVAILABILITY FOR FIRE FLOW REPORT, AND ANY GATES PROPOSED ACROSS FIRE DEPARTMENT ACCESS.
22. ALL SIDEWALKS SHOWN OUTSIDE PUBLIC STREET RIGHT OF WAY WILL BE LOCATED IN AN EASEMENT FOR PEDESTRIAN PURPOSES. ALL SIDEWALKS, CURB RETURNS, PEDESTRIAN CROSSINGS AND RAMPS WILL MEET TITLE 24 AND AMERICANS WITH DISABILITIES ACT REQUIREMENTS.
23. ALL PROPOSED PUBLIC STREETS ARE TO BE MAINTAINED BY THE CITY OF IRVINE. EASEMENTS FOR EMERGENCY AND PUBLIC SERVICE VEHICULAR INGRESS-EGRESS WILL BE PROVIDED WITHIN ALL PRIVATE STREETS AS REQUIRED. ALL PRIVATE STREETS WILL BE MAINTAINED BY THE DEVELOPER.
24. THE ASSESSOR'S PARCEL NUMBERS FOR THE PROJECT AREA ARE 466-341-01, 466-341-02, 466-341-03, 466-341-04, 466-341-05, 466-341-06, 466-341-07, 466-341-08, 466-341-09, 466-341-10, 466-342-01, 466-342-02 AND 104-410-65.
25. WHERE STREETS, INFRASTRUCTURE, TRAFFIC SIGNALS AND LANDSCAPING HAVE NOT BEEN ACCEPTED BY THE CITY, THE DEVELOPER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATING COSTS OF THE STREETS, INFRASTRUCTURE, TRAFFIC SIGNALS AND LANDSCAPING UNTIL SUCH TIME AS THE CITY OF IRVINE ACCEPTS THE IMPROVEMENTS.
26. A SIGHT DISTANCE ANALYSIS AND THE "LIMITED USE AREA" WITHIN EACH INTERSECTION IS SUBJECT TO REVIEW PER CITY STANDARD PLAN NO. 403. THE LOCATION OF MONUMENT AND/OR OTHER SIGNS, STRUCTURES AND LANDSCAPING WITHIN THE LIMITED USE AREA IS TENTATIVE AND SUBJECT TO CHANGE UPON PROVISION OF THIS ANALYSIS.
27. CURB RETURNS AND SIDEWALK ACCESS RAMPS SHALL CONFORM TO CITY OF IRVINE STANDARD DRAWING No. 202.
28. ALL SIDEWALKS SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN No. 201.
29. ALL DRIVEWAYS BE TYPE II-A AND SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN No. 205
30. THE PROPOSED DEVELOPMENT IS LOCATED WITHIN THE IRVINE UNIFIED SCHOOL DISTRICT.
31. THE MINIMUM REQUIRED LOT SIZE FOR THIS TRACT IS 0.67 ACRE PER 5.4B GENERAL INDUSTRIAL ZONING.
32. THIS PROJECT SHALL COMPLY WITH REQUIREMENTS OF THE FUEL MODIFICATION ZONE, AS DETERMINED BY OCFA.
33. THE NEAREST BUS STOP TO THE DEVELOPMENT IS LOCATED AT THE INTERSECTION OF SAND CANYON AVE AND IRVINE CENTER DRIVE (APPROXIMATELY 0.6 MILE SOUTHWEST OF THE PROJECT BOUNDARY).
34. STREET LIGHTING LAYOUT SHALL CONFORM TO SECTION 103 OF THE CITY OF IRVINE DESIGN MANUAL.
35. PROJECT NET/GROSS ACREAGE = 42.19

LEGAL DESCRIPTION

PARCEL 4 OF P.M. NO. 2019-104, P.M.B. 403 /38-43 AND PARCEL 1 THROUGH 9, INCLUSIVE, B, D, E, AND A PORTION OF PARCEL C TOGETHER WITH ALL OF WALNUT AVENUE, WISDOM AND KNOWLEDGE OF P.M. 97-184 P.M.B. 330 / 35-38, RECORDS OF ORANGE COUNTY, CALIFORNIA



LEGEND

EXISTING	PROPOSED	DESCRIPTION
	1 / A	LOT NUMBER/LETTER
		PROJECT BOUNDARY
		PROPERTY LINE
		RIGHT-OF-WAY

LIST OF EASEMENTS

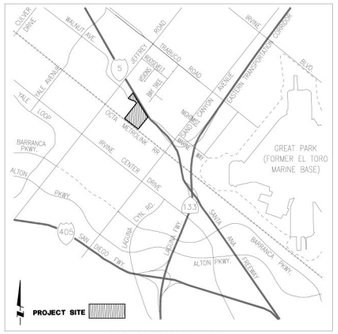
EXISTING EASEMENTS

1. AN EASEMENT TO SOUTHERN CALIFORNIA EDISONCOMPANY FOR AN ELECTRIC LINE RECORDED AUGUST 14, 1962 IN BOOK 6211, PAGE 919 AND MODIFIED SEPTEMBER 23, 1983 IN BOOK 6728, PAGE 638, BOTH OF OFFICIAL RECORDS. – TO BE QUITCLAIMED
2. AN EASEMENT TO SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA FOR GAS PIPES RECORDED AUGUST 20, 1965 IN BOOK 7638, PAGE 765, OFFICIAL RECORDS. – PROTECT IN PLACE.
3. AN EASEMENT TO IRVINE RANCH WATER DISTRICT FOR WATER PIPELINES RECORDED JANUARY 18, 2005 AS INSTRUMENT NO. 2005000040046, OFFICIAL RECORDS. – PROTECT IN PLACE
4. AN EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS RECORDED AUGUST 23, 2006 AS INSTRUMENT NO. 20060005563066, OFFICIAL RECORDS. – TO BE QUITCLAIMED
5. AN EASEMENT TO SOUTHERN CALIFORNIA EDISON COMPANY FOR ELECTRIC TRANSMISSION LINES RECORDED OCTOBER 3, 1969 IN BOOK 9097, PAGE 862, OFFICIAL RECORDS. – TO BE QUITCLAIMED WITHIN MASTER PLAN BOUNDARY.
6. AN EASEMENT TO THE CITY OF IRVINE FOR STORM DRAIN PURPOSES AS DEDICATED ON P.M. NO. 97-184, P.M.B. 330 / 35-38. – PROTECT IN PLACE
7. AN EASEMENT TO IRVINE RANCH WATER DISTRICT FOR WATER AND SEWER LINES AND APPURTENANCES RECORDED AUGUST 11, 1971 IN BOOK 9757, PAGE 418, OFFICIAL RECORDS. – PROTECT IN PLACE.
8. EASEMENT FOR SEWER AND ACCESS PURPOSES DEDICATED TO IRVINE RANCH WATER DISTRICT. – PROTECT IN PLACE
9. EASEMENT FOR WATER PURPOSES DEDICATED TO IRVINE RANCH WATER DISTRICT. – PROTECT IN PLACE

PROPOSED EASEMENTS

A. CITY OF IRVINE & PUBLIC AGENCY INGRESS & EGRESS EASEMENT
B. IRWD EASEMENT FOR SEWER AND/OR WATER PURPOSES
C. IRWD EASEMENT FOR RECYCLED WATER PURPOSES (10' WIDE ON ℄ OF PROPOSED PIPE)
D. SCE EASEMENT FOR 66kV PURPOSES
E. SCE EASEMENT FOR 12kV PURPOSES

NOTE:
– PROPOSED RECIPROCAL ACCESS AND DRAINAGE EASEMENTS OVER ALL PARCELS.
– PROPOSED EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS OVER FUTURE VEHICULAR ACCESS WAYS IN ALL PARCELS.



LOCATION MAP

NOT TO SCALE

SHEET LEGEND

SHEET 1 TITLE/INDEX
SHEET 2 TENTATIVE PARCEL MAP
SHEET 3 TYPICAL SECTIONS

STATISTICAL SUMMARY

NUMBERED LOTS

LOT #	PARCEL SIZE (ACRE)	ZONING	PROPOSED USE
1	1.21	5.5H MEDICAL & SCIENCE	OFFICE
2	0.55	5.5H MEDICAL & SCIENCE	OFFICE
3	0.44	5.5H MEDICAL & SCIENCE	OFFICE
4	0.41	5.5H MEDICAL & SCIENCE	OFFICE
5	1.20	5.5H MEDICAL & SCIENCE	OFFICE
6	0.88	5.5H MEDICAL & SCIENCE	OFFICE
7	1.61	5.5H MEDICAL & SCIENCE	OFFICE
8	0.94	5.5H MEDICAL & SCIENCE	OFFICE
9	1.48	5.5H MEDICAL & SCIENCE	OFFICE
10	1.38	5.5H MEDICAL & SCIENCE	OFFICE
11	9.73	5.5H MEDICAL & SCIENCE	OFFICE
12	0.82	5.5H MEDICAL & SCIENCE	OFFICE
13	1.29	5.5H MEDICAL & SCIENCE	OFFICE
14	0.43	5.5H MEDICAL & SCIENCE	OFFICE
15	1.13	5.5H MEDICAL & SCIENCE	OFFICE
16	0.46	5.5H MEDICAL & SCIENCE	OFFICE
17	0.85	5.5H MEDICAL & SCIENCE	OFFICE
18	1.05	5.5H MEDICAL & SCIENCE	OFFICE
19	10.60	5.5H MEDICAL & SCIENCE	OFFICE
SUBTOTAL	36.46		

LETTERED LOTS

LOT #	PARCEL SIZE (ACRE)	ZONING	PROPOSED USE
A	2.40	5.5H MEDICAL & SCIENCE	PRIVATE STREET[1]
B	1.03	1.4 PRESERVATION	PRIVATE STREET[1]
C	2.22	1.4 PRESERVATION	OPEN SPACE/WATER QUALITY BASIN[1]
D	0.08	1.4 PRESERVATION	OPEN SPACE[1]
TOTAL	5.73		

STREET SUMMARY

DESCRIPTION	LENGTH (LF)	AREA (AC)	TYPE
PROGRESS	2,148	3.43	PRIVATE
TOTAL	2,148	3.43	

LAND USE/ACREAGE SUMMARY

DESCRIPTION	ACREAGE
OFFICE (PARCEL 1–19)	36.46
PROGRESS PRIVATE STREET (PARCEL A&B)	3.43
OPEN SPACE / WATER QUALITY BASIN (PARCEL C)	2.22
OPEN SPACE (PARCEL D)	0.08
TOTAL NET/GROSS ACREAGE:	42.19

OWNERSHIP/MAINTENANCE SUMMARY

[1] OWNED AND MAINTAINED BY IRVINE COMPANY

Source(s): Stantec (07-22-2020)

Exhibit 13

Not to Scale

Proposed Vesting Tentative Parcel Map No. 2019-177

Lead Agency: City of Irvine

- Changes to some of the tree types and locations
- Reduction in some of the building heights from 3-story to 2-story
- Addition of a shade structure
- Inclusion of the approximately 4.2-acre westerly portion of approved Master Plan 00775712-PMPC (Parcel 4 of VTPM 2019-104) in the new proposed Master Plan (Case No. 00808253-PMP).

The approved Master Plan for 00775712-PMPC allowed for the development of 556,000 sf of office east of the proposed Project site; however, 126,000 sf of office uses approved under Master Plan 00775712-PMPC would be incorporated into the proposed Master Plan 00808253-PMP. Consideration of environmental impacts associated with the 126,000 sf of office uses proposed for annexation was previously analyzed during the environmental review associated with Master Plan 00775712-PMPC.

3.5 Construction Activities

Consistent with prior approvals, the Project site was recently rough graded in conjunction with the rough grading for the approved office development to the east. It is estimated that construction of the proposed Project would be initiated 2021 and would have a phased delivery; the timing would reflect the market demand. As part of the proposed Project, the following construction activities would occur at the Project site: precise grading of the entire site, utility installation, building construction, architectural coatings, and paving. Backbone utility installation activities would occur initially over the entire site, while building construction and other construction activities would be phased. The Project components, as analyzed in this Addendum, were previously shown on Exhibit 3 and include: construction of the proposed office buildings, accessory uses, and utility infrastructure on the Project site; installation of an off-site recycled water line extension south of the Project site; and landscape enhancements on and near the Caltrans park-and-ride lot, and surrounding the I-5 / Walnut Avenue intersection that were not addressed in the 2019 Addendum.

It is important to note that Progress (private roadway providing access to the Project site) and the water quality basin south of the I-5 / Walnut Avenue intersection are included on the proposed Master Plan (00808253-PMP) because they serve the proposed office development. However, these facilities also serve the office development under construction to the east, were addressed in the 2019 Addendum, and are currently under construction (with the exception of the access points for the currently proposed development). Accordingly, no further analysis of these facilities is provided in this Addendum. Similarly, the 2019 Addendum addressed physical impacts associated with intersection improvements at the Walnut Avenue / Jeffrey Road intersection, and various improvements proposed along Walnut Avenue including landscape enhancements. Final design plans for Walnut Avenue currently being reviewed by the City and Caltrans include the addition of a right-turn lane and replacing the existing sidewalk on the north side of Walnut Avenue between Jeffrey Road and the westerly Caltrans park-and-ride lot access, a new left turn lane into the project from the I-5 off ramp, new curb and gutter (replacing the asphalt concrete dike) on the southerly side of Walnut Avenue, and the new 10-foot combination pedestrian path / bicycle path on the southerly

side of Walnut Avenue (now Progress). These improvements are within the physical impact area addressed in the 2019 Addendum.

As the Project site was previously rough graded, and the earthwork required for the Project would be associated with finish grading for building pads and parking areas. The proposed grading would generally include fills up to approximately 10-feet above existing ground, and cuts would be approximately 2-3 feet within the building site into recently placed compacted fill. Required fill materials would consist of spoils from grading at the adjacent site or from continued transport of soils from the Applicant's construction projects in the area. Prior to the recent rough grading, the Project site was a receiving site for excess soils generated at the Applicant's construction projects in the area. Construction of the proposed Project would not require rock crushing or pile driving. Construction access to the proposed Project site would be from Walnut Avenue or Burt Road-Progress, consistent with existing conditions.

Installation of the recycled water line south of the Project site would include a jack and bore operation approximately 15-feet deep under the railroad and several utilities. A "jack and bore" method of construction was used for the existing IRWD Desalter water line in this area and the proposed recycled water line would follow the same alignment, including in the undeveloped area south of the railroad. In other words, the installation of the recycled water line would occur in previously disturbed areas, or within existing roadway right-of-way.

Construction staging would occur within the Project site. Construction of the proposed Project would require common equipment, including but not limited to graders, scrapers, dozers, waterpulls, truck loaders, compressors, excavators, backhoes, scissor lifts, forklifts, cranes, rollers, paving equipment, and concrete surfacing equipment.

3.6 Anticipated Discretionary Approvals

The City of Irvine, as the Lead Agency, is expected to use the information contained in the PA 12 EIR and this Addendum for consideration of the following approvals related to and involved in the implementation of the proposed Project.

- Approval of this Addendum and Updated MMRP
- Zone Change (Case No. 00800352-PZC)
- Approval of a Master Plan for Innovation Office Park (Case No. 00808253-PMP)
- Approval of Vesting Tentative Parcel Map (VTPM 2019-177) (Case No. 00816106-PTP)
- Modification to approved Master Plan 00775712-PMPC (Case No. 00816048-PMPC)

Future ministerial permits or approvals (e.g., grading permits, various infrastructure permits, building permits, and easements) would be issued by the City and other agencies (i.e. utility companies) in order to allow site preparation, street work, and proposed development, including connections to off-site utility infrastructure.

Other agencies that may use the information contained in the PA 12 EIR and this Addendum to issue permits or other approvals for implementation of development anticipated by the proposed Project include, but are not limited to, the following:

- **Caltrans**. Temporary encroachments during landscaping installation and roadway improvements. The new signal at the I-5 ramp will be operated by Caltrans.

- **Regional Water Quality Control Board (RWQCB)**. A National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from construction sites.

- **OCTA**. Temporary encroachments during construction, including installation of a utility line under the railroad south of the proposed Project site, and relocation of the SCE facilities over and adjacent to the railroad.

- **IRWD**. Approval of wet utility connections.

- **Other Utility Agencies.** Permits and associated approvals, as necessary for the installation of new utility infrastructure or connections to existing facilities. Agencies that may be required to issue permits and / or approvals include, but are not limited to, SCE, SoCalGas, AT&T, and Cox.

4.0 DETERMINATION

It has been concluded that the proposed Project will not result in any new significant environmental effects requiring major revisions to the PA 12 EIR, nor are there changed circumstances or substantial changes to the proposed development that require major revisions to the PA 12 EIR. Rather, only minor technical changes or additions to the PA 12 EIR are necessary to fully cover and analyze the proposed Project. Mitigation measures from the PA 12 EIR continue to be feasible, would adequately address the proposed Project's potential environmental impacts, and shall be applied to the proposed Project.

Based on the information and analysis contained in the PA 12 EIR and this Addendum, and pursuant to Section 15162 of the CEQA Guidelines, the City has determined that:

1. There are no substantial changes associated with the proposed Project, which will require major revisions of the PA 12 EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
2. Substantial changes have not occurred with respect to the circumstances under which the proposed Project is undertaken which will require major revisions of the PA 12 EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
3. There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the PA 12 EIR was certified as complete, that shows any of the following:
    a) The proposed Project will have one or more significant effects not discussed in the PA 12 EIR;
    b) Significant effects previously examined would be substantially more severe than shown in the PA 12 EIR;
    c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the proposed Project, but the Project proponents decline to adopt the mitigation measure or alternative; and
    d) Mitigation measures or alternatives which are considerably different from those analyzed in the PA 12 EIR would substantially reduce one or more significant effects on the environment, but the proposed Project proponents decline to adopt the mitigation measure or alternative.

Accordingly, none of the triggers for a subsequent or supplemental EIR have been met (CEQA Guidelines, §§ 15162, 15163), and preparation of an addendum is appropriate under CEQA. (CEQA Guidelines, § 15164.)

Stephanie Frady, AICP, Senior Planner
Name, Title

August 12, 2020
Date

City of Irvine

5.0 ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Addendum to the Planning Area 12 Project Final Environmental Impact Report (SCH No. 1993071051)

2. **Lead Agency Name and Address:**
   City of Irvine
   One Civic Center Plaza
   PO Box 19575
   Irvine, CA 92623-9575

3. **Lead Agency Contact Person:**
   Stephanie Frady, AICP, Senior Planner
   City of Irvine, Community Development Department
   (949) 724-6375
   sfrady@cityofirvine.org

4. **Project Applicant:**
   Jeffrey S. Davis, Vice President, Entitlement
   Irvine Company
   550 Newport Center Drive
   Newport Beach, CA 92660
   (949) 720-2409

5. **Project Location(s):** The Project site is bounded by I-5 to the north, the approved Master Plan 00775712-PMPC area to the east, Orange County Transportation Authority (OCTA) / Metrolink railroad to the south, and Oak Creek Golf Club to the west.

6. **General Plan Designation:** Research and Industrial

7. **Zoning Classification:** 5.4B General Industrial

8. **Description of Project:** Refer to Section 3.0, Project Description, of this Addendum. The proposed Project involves the construction and operation of an office park office. Development would include 15 two-story buildings, 2 amenity buildings, and surrounding parking lots. Total development would include 620,200 sf of office and related uses and would be constructed in phases. The size of the buildings would range from approximately 18,600 sf to 61,700 sf.

9. **Surrounding Land Uses and Setting:** Refer to Section 2.0, Project Location and Existing Setting, of this Addendum. In summary, the Project site is bounded by I-5 to the north, approved Master Plan 00775712-PMPC to the east, the OCTA/ Metrolink railroad to the south, and the Oak Creek Golf Club to the west. Exhibit 2 depicts the local and regional vicinity of the Project site.

10. **Other public agencies whose approval is required include, but may not be limited to:** Caltrans, RWQCB, OCTA, IRWD, and other utility agencies. Refer to additional information regarding the approvals from other agencies provided in Section 3.6, Anticipated Discretionary Approvals, of this Addendum.

6.0 ENVIRONMENTAL ASSESSMENT

6.1 Aesthetics

6.1.1 Summary of Previous Environmental Analysis

The analysis of aesthetic impacts for the Approved PA 12 Project is provided in Section 5.2.2 of the PA 12 EIR. At the time the PA 12 EIR was prepared, PA 12 had a visual character dominated by agricultural uses and open space. Physical development within PA 12 primarily included Irvine Valley College, Traveland USA recreational vehicle (RV) sales and service facility, and the Orangetree Community. The PA 12 EIR concluded that implementation of the PA 12 Project would replace agriculture uses with industrial, commercial, golf course, and residential structures, resulting in a significant change to the visual character of the area. The alterations were determined to be apparent from surrounding roadways and land uses existing at the time. Although there would be a substantial change in the visual character, the proposed urban uses were anticipated by the General Plan, and would be developed in compliance with applicable design guidelines, including landscaping. Further, the proposed golf course would preserve open space in the northern portion of PA 12.

The PA 12 EIR also concluded views of the San Joaquin Hills to the southwest and the Santiago Hills to the northeast from the surrounding roadways including the I-405, I-5, Sand Canyon Avenue, and Jeffrey Road would not be significantly impacted by implementation of the Approved PA 12 Project.

The PA 12 EIR identified that implementation of the Approved PA 12 Project would introduce new sources of light and glare within PA 12. New light sources were anticipated to include lights on buildings, signage lighting, and increases in ambient light from inside buildings. It was concluded that general increases in light could significantly increase the ambient evening light level in and around PA 12; however, this increase would not be significant with adherence to the City's lighting code and standards, including the use of direct lighting and / or shielding and the City's Security Code. Additionally, it was identified that the light sources associated with Approved PA 12 would be similar to existing development.

The PA 12 EIR also concluded that glare impacts resulting from the Approved PA 12 Project could occur from the introduction of reflective surfaces of buildings or machinery, and that the industrial uses proposed in the northern portion of PA 12 may result in glare effecting I-5. Glare impacts were determined to be less than significant with adherence to zoning requirements related to screening of equipment and use of non-reflective materials.

Cumulatively-considerable impacts to aesthetics were also determined to be less than significant following implementation of standard conditions of approval and mitigation.

PA 12 EIR Policies, Standard Conditions (SCs) of Approval, and Mitigation Measures (MMs)

The following SCs, as modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019), and MM from the PA 12 EIR are applicable to the proposed Project. It should be noted that the PA 12 EIR did not include a numbering system for SCs or MMs; the number system presented below and for other topical issues addressed in this Addendum is to facilitate tracking and implementation of the SCs and MMs in the MMRP for the proposed Project.

Changes in the text are signified by strikeouts (~~strikeouts)~~ where text has been removed and by bold and underline (**bold and underline)** where text has been added.

MM AES-1 has been revised for the proposed Project because the proposed Project does not include parks or outdoor recreational uses near residential uses.

Policies and Standard Conditions of Approval

SC AES-1 Existing zoning requirements provide for the screening of mechanical equipment and outdoor storage, as well as the use of non-reflective paints and construction materials, which will serve to avoid visual impacts from such equipment and storage.

SC AES-2 ~~In conjunction with the submittal of applications for~~ **Prior to the issuance of** building permits, the applicant shall demonstrate ~~through the submittal of an electrical engineer's survey prepared to the satisfaction of the Director of Community Development, that lighting requirements set forth in Sections V.I 515 and V.I 516 of~~ **they have met** the Irvine Uniform Security Code **requirements for lighting by providing the below listed items for a complete review by the Police Department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition** ~~are met~~.

a) Electrical plan showing light fixture locations, type of light fixture, height of light fixture, light ratio, and point-by-point photometric lighting analysis overlaid onto a tree landscape plan with a legend. The photometric plan should only show those fixtures used to meet the Irvine Uniform Security Code requirements.

b) Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels per the Irvine Uniform Security Code.

c) Site plans that are full-scale and legible. (Standard Condition ~~6.3~~ **3.6**)

Mitigation Measures

MM AES-1 In conjunction with the review of the lighting plans for building permits (see Standard Condition ~~6.3~~ **3.6** above), attention shall be given to the need to avoid or minimize lighting glare and "spill-over" effects. Particular emphasis shall be given to the review of plans for non-residential uses, such as general commercial development occurring in proximity to residential areas. ~~Additionally, any plans for night lighting of parks and other outdoor recreation areas shall address the need to avoid lighting impacts on any nearby residential areas.~~

6.1.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Project site is located south of I-5, east of the Oak Creek Golf Club, and west of the approved Master Plan for Innovation Office Park (west of Sand Canyon Avenue). As shown in Exhibits 14a through 14c, under existing conditions, the Project site has been recently graded and portions of the site are being used for construction staging associated with the construction activities for the adjacent previously approved Innovation Office Park office development. Views of the Project site from Jeffrey Road are obstructed by mature trees within the Oak Creek Golf Club and the park and ride lot.

As identified in the PA 12 EIR, there are views of the San Joaquin Hills and Santiago Hills from I-5, Sand Canyon Avenue and Jeffrey Road. As with the Approved PA 12 Project, and identified in the PA 12 EIR, the proposed Project would involve development of the Project site with non-residential uses allowed by the existing Research and Industrial General Plan land use designation, and the proposed zoning (5.5H Medical and Science). The Project site is not adjacent to Sand Canyon Avenue or Jeffrey Road, which extend in a north-south direction, and would not affect views of the San Joaquin Hills or Santiago Hills from these roadways. There are also distant views of these mountains from I-5; however, in the vicinity of the Project site, I-5 generally extends in an east-west direction and the mountains are the not the focal point of the view. The public trail south of the Project site extends in an east-west direction and views of the San Joaquin Hills and Santa Mountains to the south and north, respectively, are not the focal point for trail users.

The Approved PA 12 Project and proposed Project would not have a substantial adverse effect on a scenic vista, consistent with the conclusion of the PA 12 EIR. Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

View 1

Key Map

View 2

Exhibit 14a

Not to Scale

Site Photos

Lead Agency: City of Irvine

View 3

Key Map

View 4

Exhibit 14b

Not to Scale

Site Photos

Lead Agency: City of Irvine

Key Map

View 5

View 6

Exhibit 14c

Not to Scale

Site Photos

Lead Agency: City of Irvine

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Potential impacts to State scenic highways were not addressed in the PA 12 EIR. However, the nearest officially designated State scenic highway to the Project site is a portion of SR-91 located approximately 12 miles to the northwest (Caltrans, 2019). The Project site has been recently graded and does not contain any unique trees, rock outcroppings, or historic buildings. Therefore, the Approved PA 12 Project and the proposed Project would not damage scenic resources within a state scenic highway.

The PA 12 EIR addressed potential impacts to scenic highways identified in the Scenic Highways Element of the City's General Plan at the time the PA 12 EIR was prepared (Jeffrey Road, Sand Canyon Avenue, I-405, and I-5). According to Figure A-4, *Scenic Highways*, of the City's current General Plan Land Use Element, Sand Canyon Avenue and Jeffrey Road, east and west of the Project site, respectively, are identified as Scenic Highways (City of Irvine, 2015a). Sand Canyon Avenue offers views of San Joaquin Hills looking south and views of Lomas de Santiago Hills looking north. Jeffrey Road offers views of Lomas de Santiago Hills looking north and the San Joaquin Hills looking south. As discussed above, Sand Canyon Avenue and Jeffrey Road are generally north-south oriented roadways; therefore, the Project site is not in the primary viewshed for travelers on these roadways. The proposed Project would result in a similar less than significant impact to Scenic Highways as the PA 12 EIR finding for the Approved PA 12 Project. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. In December 2018, Aesthetics Threshold c of the State CEQA Guidelines was modified to specifically focus on public views and distinguish between urbanized and non-urbanized areas. For projects in urbanized areas, this threshold addresses the project's consistency with regulations governing scenic quality. Due to the urban nature of the Project area and relatively flat topography, views of the Project site are primarily available from site-adjacent vantage points; public views are limited to vantage points along I-5 and the trail south of the Project site. As previously shown by the site photographs provided in Exhibit 14a through Exhibit 14c, the Project site has been recently graded and is largely devoid of vegetation, except for a few disturbed / ruderal plant species. There are mature trees along the western property boundary within the golf course property. The proposed landscape enhancement areas consist of surface parking, existing roadway, and ornamental landscaping. The recycled water line area consists of existing roadway and ornamental species. As shown on Exhibit 14a, trees along the northern perimeter of the Oak Creek Golf Club obstruct views into the Project site from vantage points to the west, including from Jeffrey Road.

The visual character of PA 12 has changed since adoption of the PA 12 EIR and is urban in nature. The Project site is proposed for a zoning classification of 5.5H, Medical and Science, which allows for the development of office uses (City of Irvine, 2020a). According to Section 9-12-7 of the Zoning Ordinance, the architectural style for uses within PA 12 should be unified, clean, and contemporary; there is no established height limit. The Approved PA 12 Project and proposed Project would involve development of non-residential buildings including multiple 2-story, low-rise office buildings. Representative building and accessory structure elevations for the proposed Project are provided on Exhibits 5a through 5d and three-dimensional building perspectives are provided on Exhibit 6. A full set of building elevations is provided in the proposed Master Plan. As described in Section 3.2.1, Proposed Buildings / Structures, of this Addendum, the proposed Project would involve the development of two-story low-rise buildings that would have a maximum height of 33.5-feet at the top of the parapet with an additional 6.5 feet for a mechanical screen (see SC AES-1). The architectural style of the buildings would be unified and would involve a modern industrial design, consistent with the design standards identified in the Zoning Ordinance, and consistent with the approved office buildings currently under construction to the east. The primary form of the proposed buildings would be painted plaster walls with building articulation creating variation in vertical planes. The buildings would have a consistent material palette including use of aluminum window frames, metal panels and painted steel stairs. Low-reflective windows / glazing would be used. Additionally, as required by Section 9-12-7 of the Zoning Ordinance, and shown in the conceptual landscape plans provided in Exhibit 7a and Exhibit 7b, the proposed Project includes landscaping that would provide visual screening of the Project site and would soften the appearance of the proposed structures. Therefore, the proposed Project would not conflict with other regulations governing scenic quality.

Therefore, with respect to visual character, the Approved PA 12 Project and the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality, resulting in a less than significant impact.

Although the Project site's visual character has changed, the potential impacts associated with development of the site with office uses under the Approved PA 12 Project and the proposed Project would be the same and consistent with the analysis provided in the PA 12 EIR. The Approved PA 12 Project and the proposed Project would alter the visual character of the Project site; however, the change would be consistent with existing planned development in the area and would not substantially degrade the visual character or quality of the site or the surrounding area. Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As addressed in the PA 12 EIR and consistent with the Approved PA 12 Project, construction of the proposed Project would increase nighttime illumination at the Project site and the potential for glare. The proposed Project's new light sources would be comparable to those under the Approved PA 12 Project, would occur in an urbanized area with existing sources of light and glare, and would be implemented in accordance with the City's lighting and glare requirements (refer to SC AES-1 and SC AES-2). Additionally, the PA 12 EIR included mitigation to reduce impacts associated with glare and light spill over (refer to MM AES-1). Further, as described in Section 3.2.1, *Proposed Buildings*

/ Structures, of this Addendum, the proposed Project would not involve use of building materials that would generate substantial glare. Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.2 Agriculture and Forestry Resources

6.2.1 Summary of Previous Environmental Analysis

Impacts to agricultural resources are discussed in Section 5.1, Land Use and Planning, of the PA 12 EIR. Forestry Resources was not a resource topic area under CEQA at the time the PA 12 EIR was prepared.

At the time the PA 12 EIR was prepared, the Project site and areas to the south and west were designated Prime Farmland, and the area to the east was designated Urban and Built-up Land. No areas in PA 12 were subject to a Williamson Act contract, and there was no forest land identified. The PA 12 EIR identified that implementation of the Approved PA 12 Project would result in the gradual conversion of the identified agricultural land to residential, commercial, and industrial, institutional, recreational, public, and open space / preserve land uses. The PA 12 EIR concluded that the removal of Prime Farmland would represent a significant and unavoidable impact notwithstanding that the loss of Prime Farmland was contemplated in the City of Irvine General Plan and General Plan Amendment (GPA) 4 EIR (1977), and the City of Irvine adopted a Statement of Overriding Consideration and made findings regarding the benefits of the General Plan Amendment which overrode the significant adverse effects. Further, the EIR for GPA 16 (1989) identified that even less land would be designated for agriculture. In order to mitigate this loss, policies and conditions were identified and made a part of the GPA 16 EIR which required the resolution of any phased dedication and compensating development opportunities involving agricultural land.

Cumulatively-considerable agricultural resources impacts were also determined to be significant and unavoidable.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no policies or standards conditions identified in the PA 12 EIR related to agricultural resources. Further, the only mitigation in the PA 12 EIR related to agricultural resources (MM LU-1) is not applicable to the proposed Project as it addresses extending agricultural production during phased development of PA 12. The phased development of PA 12 and continued agricultural production has been ongoing, consistent with this mitigation, including at the Project site.

6.2.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The Project site has been recently graded and is being used for construction staging; the conversion of Prime Farmland to non-agricultural uses anticipated in the PA 12 EIR has already occurred. According to the California Department of Conservation's (CDC) California Important Farmland Finder, the Project site and adjacent areas are currently classified as "Urban and Built-Up Land" (CDC, 2016). While the PA 12 EIR concluded that the Approved PA 12 Project would result in the removal of Prime Farmland resulting in a significant and unavoidable impact, due to the lack of Farmland at the Project site, the proposed Project would have no impact to Prime Farmland. This impact is considered a reduced impact compared to the PA 12 EIR finding. The proposed Project, which has no impact in this regard, would not result in any new or substantially more severe effects than the effect that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. With approval of the PA 12 Zone Change addressed in the PA 12 EIR, the zoning for the Project site was changed from Development Reserve to 5.4 General Industrial. Consistent with this zone change, the Project site is currently zoned 5.4B General Industrial[3]. Additionally, consistent with the conclusion of the PA 12 EIR, there are no Williamson Act contracts or agricultural preserves located within the Project site or surrounding areas. Consistent with the analysis presented in the PA 12 EIR, the Approved PA 12 Project and the proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The proposed Project, which has no impact in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

[3] The zoning changed from 5.4 General Industrial to 5.4B General Industrial with approval of zone change 28292-ZC adopted by the City Council on September 23, 1997; the zone changed allowed for general office as a permitted use 5.4B General Industrial zoning district.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The PA 12 EIR did not identify any land within PA 12 zoned for forest land, timberland, or Timberland Production. As with the Approved PA 12 Project, implementation of the proposed Project would not conflict with existing zoning for forest land, timberland, or Timberland Production. The proposed Project, which has no impact in this regard, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
d) Result in the loss of forest land or conversion of non-forest land?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The Project site has been graded, is largely void of vegetation, and does not contain forest land. As with the Approved PA 12 Project, implementation of the proposed Project would not result in the loss or conversion of forest land to non-forest uses. The proposed Project, which has no impact in this regard, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. As noted above the Project site does not contain Farmland or forest land. Previous agricultural operations at the Project site and in surrounding areas have ceased, as contemplated in the General Plan and the PA 12 EIR. Therefore, the Approved PA 12 Project and the proposed Project would not result in an impact associated with conversion of Farmland or forest land to non-agricultural or non-forest uses. The proposed Project, which has no impact in this regard, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.3 Air Quality

6.3.1 Summary of Previous Environmental Analysis

Air quality impacts are addressed in Section 5.5 of the PA 12 EIR. The PA 12 EIR, pursuant to the South Coast Air Quality Management District (SCAQMD) Handbook, identifies that if the daily construction emissions exceed 75 pounds per day (lbs / day) for reactive organic compounds (ROC), 100 lbs / day for Nitrogen Oxides (NO_x), 550 lbs / day for Carbon Monoxide (CO), 150 lbs / day for sulfur dioxide (SO_2), or 150 lbs / day for particulate matter 10 micrometers and smaller (PM_{10}), impacts should be considered significant. Additionally, per the SCAQMD Handbook, a significant air quality impact would occur if operation emissions exceed 55 lbs / day of ROC or NO_x, 550 lbs / day of CO, 150 lbs / day of PM_{10}, or 150 lbs / day of sulfur dioxide (SO_2). For purposes of the PA 12 EIR analysis, it was assumed

that the largest amount of land area that would be disturbed at one time would be approximately 176 acres for the proposed golf course. At the completion of grading, it was assumed that all 176 graded acres would be exposed, which poses a potential for PM_{10} impact (e.g., wind erosion). The average amount of land in the remainder of the PA 12 area, which would be disturbed at any given time is estimated at approximately 30 acres. The PA 12 EIR concludes that emissions of CO, NO_x, PM_{10}, and ROC would be significant during construction of the golf course, after mitigation. Emissions of NOx and PM_{10} were determined to be significant after mitigation during construction of the remainder of the PA 12 area.

The PA 12 EIR concluded that operational impacts could result from direct and indirect emissions from utility usage associated with the land uses, and local and regional vehicular emissions from employee, visitor, and service vehicles travelling to and from the PA 12 area. The PA 12 EIR also concluded that operation of the Approved PA 12 Project would result in an exceedance of SCAQMD thresholds established for CO, NO_X, and ROC, even with implementation of identified SCs and MMs and a significant and unavoidable impact would result. These impacts during construction and operation were determined to be significant at a project and cumulative level.

The PA 12 EIR addressed the consistency of the Approved PA 12 Project with the 1991 Air Quality Management Plan. The PA 12 EIR concluded the Approved PA 12 Project, which was intended to bring the zoning of the PA 12 area into consistency with the General Plan land use designations for the area, would implement policies set forth in the AQMP related to location and type of land uses, and would implement measures to increase vehicle occupancy rate, to reduce vehicle trips (VT), and to reduce vehicle miles travelled (VMT). Additionally, the Approved PA 12 Project would incorporate bicycle lanes and bicycle amenities and implement a Transportation Demand Management (TDM) program for onsite employees. Therefore, the PA 12 EIR determined that the Approved PA 12 Project would conform with the adopted regional AQMP.

The PA 12 EIR also concluded that, based on localized modeling for potential CO "hotspots", the Approved PA 12 Project would not negatively affect any local sensitive receptors or exceed applicable state or federal air quality standards, and would result in a less than significant impact with regard to CO concentrations at local intersections.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The following SCs and MMs from the PA 12 EIR are applicable to the proposed Project. Revisions to these SCs and MMs have been made to remove outdated information and / or make corrections to facilitate implementation of the MMRP for the proposed Project. Changes in the text are signified by strikeouts (~~strikeouts)~~ where text has been removed and by bold and underline (**bold and underline)** where text has been added.

MM AQ-1 has been modified as the proposed Project is implementing uses allowed by the Approved PA 12 Project, and the measures have been determined feasible, as modified. A previous condition

to post a cash deposit for guarantee the sweeping and cleanup of street affected by construction has been deleted as this is no longer a standard condition imposed by the City.

Policies and Standard Conditions of Approval

SC AQ-1 The City of Irvine Grading Code requires compliance with SCAQMD Rules 402 and 403, regarding dust control, which will serve to reduce construction-related air emissions.

Mitigation Measures

MM AQ-1 The following SCAQMD mitigation measures are recommended to be incorporated into future levels of project implementation~~, as feasible and appropriate. These measures can reduce emissions associated with new development. The majority of these measures are oriented toward project construction or more detailed levels of planning than is associated with the currently proposed zone change. The feasibility and appropriateness of each measure can best be determined at more detailed levels of planning for PA 12. As such, the following measures are recommended for future levels of project implementation, but only as determined to be feasible and appropriate at that time~~.

Mitigation measures which serve to reduce particulate emissions from paved and unpaved roads, and construction activities, include:

- Use low-emission alternative fuel (i.e., methanol, butane, or propane) as practicable in mobile construction equipment (e.g., tractor, scraper, dozer).
- Clean equipment morning and evening, at least twice daily.
- Incorporate a watering program onsite, and on unpaved roads and parking areas. Spread soil binders, if necessary.
- Employ construction activity management techniques, such as extending the construction period, reducing or changing the hours of construction, and scheduling activity during off-peak hours.
- Sweep streets if silt is carried over to adjacent public thoroughfares.
- Suspend grading operations during first and second stage smog alerts.
- Suspend all grading operations when wind speeds (as instantaneous gusts) result in blowing dust.
- Wash off trucks leaving the site and cover all loads of loose material.
- Maintain construction equipment engines by keeping them adequately tuned.
- Use low-sulfur fuel for stationary construction equipment.
- Use primarily existing power sources (e.g., power poles) or clean-fuel generators rather than temporary power generators.
- Use low-emission onsite equipment (e.g., methanol-, propane-, or butane-powered internal combustion engines) instead of diesel or gasoline.

Automobile emissions reductions can be increased by reducing the number of vehicles driven to a work site on a daily basis. Measures which **serve to** ~~can~~ reduce vehicle trips include:

- Employers ~~in the General Industrial, General Commercial, and Multi-Use portions of PA 12 could~~ **at the Project site will** participate in the Spectrum**otion** Transportation Management Association **(the Project site was annexed into Spectrumotion in November 2019)**.
- For each specific development, incorporate measures into development plans to reduce mobile source emissions, such as scheduling goods movements for off-peak traffic hours, providing dedicated turn lanes, as appropriate, and using clean fuel for vehicles' other uses as appropriate.
- Provide preferential parking to high-occupancy vehicles and shuttle services.

To reduce vehicular emissions through traffic flow improvements, measures include:

- Configure parking to minimize traffic interference.
- Minimize obstruction of through-traffic lanes.
- Provide a flagperson to guide traffic and ensure safety at construction sites.
- Schedule operations affecting traffic for off-peak hours.
- Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advanced public notice of routing, use of public transportation, and satellite parking areas with a shuttle service.
- Schedule goods movements for off-peak traffic hours.
- Provide dedicated turn lanes as appropriate.

To reduce stationary emissions of operation-related activities, measures include:

- Require development practices that maximize energy conservation as a prerequisite to permit approval.
- Improve the thermal integrity of commercial / industrial buildings, and reduce the thermal load with automated time clocks or occupant sensors and with broad-crowned trees planted to shade the west sides of buildings.
- Introduce window glazing, wall insulation, and efficient ventilation methods.
- Introduce energy-efficient heating and cooling appliances, such as water heaters, cooking equipment, refrigerators, air conditioners, furnaces, and boiler units.
- Incorporate appropriate passive solar design and solar heaters.
- Use devices that minimize the combustion of fossil fuels.
- Capture waste heat and re-employ it in nonresidential buildings.
- Landscape building and median landscape areas with native drought-resistant species, as appropriate, to reduce water consumption and to provide passive solar benefits.

To protect sensitive land uses from major sources of toxic air pollution, measures include:

- Require design features, operating procedures, preventive maintenance, operator training, and emergency response planning to prevent the release of toxic pollutants, as appropriate.

6.3.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Since certification of the PA 12 EIR, the SCAQMD has updated the AQMP. The current AQMP for CEQA analysis purposes is the 2016 AQMP, which is a regional and multi-agency effort (SCAQMD, California Air Resources Board [CARB], Southern California Association of Governments [SCAG], and United States Environmental Protection Agency [USEPA]). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (RTP / SCS); updated emission inventory methodologies for various source categories; and SCAG's latest growth forecasts (SCAQMD, 2017). As discussed in Section 3.0, Project Description, of this Addendum, the proposed Project would reduce the amount of development anticipated and analyzed in the PA 12 EIR for PA 12, and currently allowed by the City's General Plan and Zoning Code. City and county general plans were used to develop the growth and pollutant emissions forecasts in the 2016-2040 RTP / SCS and 2016 AQMP. As described in Section 6.14, Population and Housing, of this Addendum, the proposed Project would not exceed the employment projection for PA 12 due to the reduced development intensity. Therefore, consistent with the conclusions of the PA 12 EIR, the Approved PA 12 Project and the proposed Project would be consistent with the AQMP's growth assumptions.

The PA 12 EIR concluded that the Approved PA 12 Project would conform with the 1991 AQMP due to implementation of SCs and MMs that serve to promote the goals and objectives of the 1991 AQMP, but that the emissions from the Approved PA 12 Project would exceed the SCAQMD thresholds of significance for criteria pollutant emissions. The proposed Project would implement the type of land uses anticipated in the PA 12 EIR for the Project site, and would also implement the PA 12 EIR SCs and MMs identified previously. Compliance with the 2016 AQMP is also determined by whether a project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP. As discussed under Threshold b, below, the proposed Project, would not increase or otherwise substantially change the construction activities, the amount of development, or type of operations anticipated with the Approved PA 12 Project. Rather, there would be an overall reduction in development intensity in PA 12. Further, because (1) substantial grading that was anticipated in the PA 12 EIR, including grading for the golf course, has been completed and will not be part of the proposed Project; and (2) construction equipment and on-road vehicles are currently much cleaner (i.e. emit less pollutants

than the equipment and vehicles analyzed in the PA 12 EIR), emissions would be less than what was analyzed in the PA 12 EIR. Therefore, the local and regional air pollutant emissions from the proposed Project would be reduced compared to the Approved PA 12 Project, and less than those estimated in the PA 12 EIR.

The proposed Project would be consistent with local and regional growth projections and would generate less air quality emissions than those analyzed in the PA 12 EIR, and would have a similar less than significant impact related to conflict with the AQMP as the Approved PA 12 Project due to an increase in the frequency or severity of violations. The proposed Project would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Orange County, including the Project site, is within the South Coast Air Basin (SCAB), and is currently a federal or State nonattainment area for the State and federal 1-hour and 8-hour Ozone and the $PM_{2.5}$ standards and the State PM_{10} standard. The PA 12 EIR concluded that even with incorporation of SCs and MMs, long-term operation of the Approved PA 12 Project would result in emissions of ROC, CO, and NOx exceeding the SCAQMD's regional emissions significance thresholds. It should be noted that the SCAB is no longer designated as non-attainment for CO. ROC and NOx are ozone precursors. Direct and cumulative impacts were determined to be significant and unavoidable. The proposed Project would not change the type of use or increase the total amount of office development anticipated by the existing zoning within PA 12, as evaluated in the PA 12 EIR. Notably, the proposed Project would reduce the amount of allowable development. Because the same types of uses would be developed with the Approved PA 12 Project and the proposed Project, the type of operations and associated pollutant emissions would also be the same.

With respect to mobile source emissions, which are the primary factor of operational emissions, as further discussed in Section 6.17, Transportation, of this Addendum, the proposed Project would generate fewer total vehicle trips compared to what was evaluated in the PA 12 EIR for the Approved PA 12 Project. Also related to mobile source emissions, due to federal and State requirements for cleaner and more fuel-efficient cars and light trucks, emissions of vehicle pollutants (mobile emissions) have been reduced in general. Therefore, mobile source emissions from the proposed Project would be reduced compared to the Approved PA 12 Project, and the emissions for either the Approved PA 12 and the proposed Project would be less than that forecasted in the PA 12 EIR.

In 1997, subsequent to certification of the PA 12 EIR, the USEPA added $PM_{2.5}$, which is fine particulate matter with a size less than or equal to 2.5 micrometers, to the list of criteria pollutants. $PM_{2.5}$ is a component of PM_{10}, which was addressed in the PA 12 EIR. Subsequently, the SCAQMD added $PM_{2.5}$ to the air quality significance thresholds. The construction and operational $PM_{2.5}$ thresholds are both 55 lbs/day. The proposed Project would generate less construction-related and operational $PM_{2.5}$ emissions than the Approved PA 12 Project. With respect to construction, USEPA and State requirements for construction equipment have focused on reduction of $PM_{2.5}$ emissions, as well as NOx emissions, resulting in substantial reductions in $PM_{2.5}$ emissions with currently used equipment. For long-term operations, the

overall reduction in vehicle trips, as discussed above, would reduce $PM_{2.5}$ emissions from those that would have been estimated in the 1994 EIR. Further, to demonstrate the magnitude of PM2.5 emissions that might be anticipated, a calculation was made using the California Emissions Estimator Model (CalEEMod), the currently SCAQMD-approved model for pollutant emissions calculations (refer to Appendix B of this Addendum). It was conservatively assumed that the proposed Project would be constructed in one phase. Watering during construction grading was assumed, consistent with MM AQ-1 and SCAQMD rules. However, the use of newer construction equipment was conservatively not assumed. Operationally, trip generation reduction measures, as required by MM AQ-1, were also not assumed for purposes of estimated PM2.5 emissions. Based on these assumptions, the maximum daily construction PM2.5 emissions would be less than 7 lbs/day and the maximum operational PM2.5 emissions would be less than 34 lbs/day. Both the construction and operational PM2.5 emissions would be well below the 55 lbs/day significance threshold. The CalEEMod data are included in Appendix B. Therefore, there would not be a new or substantially more severe impact related to $PM_{2.5}$ emissions.

Although the amount of operational emissions from the Approved PA 12 Project and the proposed Project would be less than the emissions forecasted in the PA 12 EIR for the Approved PA 12 Project for criteria pollutants, the ROC and NOx emissions would remain cumulatively considerable; pollutants for which the Project region is non-attainment. Even with implementation of MM-AQ-1, which includes measures to reduce vehicular emissions, project and cumulative impacts are considered to be significant and unavoidable. Consistent with the conclusion of the PA 12 EIR, there are no feasible / practical mitigation measures to reduce operational emissions to a less than significant level and the cumulatively considerable net increase of criteria pollutants for which the Project region is non-attainment.

The PA 12 EIR concluded that the Approved PA 12 Project would have a significant air quality impacts during construction. The PA 12 EIR concluded that air pollutant emissions would exceed SCAQMD thresholds for CO, NO_x, PM_{10}, and ROC during construction of the golf course, and would exceed SCAQMD thresholds for NO_x and PM_{10} during construction of other uses, resulting in significant and unavoidable impact. The majority of approved land uses in PA 12, as evaluated in the PA 12 EIR, have been constructed. Additionally, the rough grading for the Project site, which uses larger equipment (and generates higher air quality emissions) has been completed; finish grading activities would be conducted as part of the proposed Project. Therefore, the construction activities associated with the proposed Project would be less than what was anticipated for a peak construction day as analyzed in the PA 12 EIR. It should also be noted that federal and State requirements for cleaner diesel engines would further reduce construction emissions compared to estimates in the PA 12 EIR. Therefore, construction emissions of the proposed Project would be less than those forecasted in the PA 12 EIR for the Approved PA 12 Project. However, given the size of the proposed Project (physical development area and amount of development) it is anticipated that even with incorporation of SC AQ-1, which requires adherence to SCAQMD Rule 402 (to prevent occurrences of public nuisances), SCAQMD Rule 403 (which requires dust control), and MM AQ-1 (which includes additional measures to reduce construction-related air quality emissions, construction-related emissions could remain significant and unavoidable.

Therefore, the impact would remain significant and unavoidable and cumulatively considerable. The proposed Project, which would have lower emissions compared to the emissions estimated in the PA 12 EIR, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project. A Statement of Overriding Considerations was adopted by the Irvine City Council to address significant and unavoidable air quality impacts during construction and operation.

c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from development projects. These people include children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. The SCAQMD defines structures that house these persons or places where they gather (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields) as "sensitive receptors."

The nearest sensitive receptors to the Project site are residences approximately 160 feet southwest of the intersection of Valley Oak and Irvine Center Drive, where the proposed recycled water pipeline would be installed. All other sensitive receptors are located approximately 0.1-mile north of the Project site, beyond I-5. The proposed recycled water line is also within PA 12 and the study area for the PA 12 EIR. The proposed Project does not involve any development in areas not anticipated in the PA 12 EIR, and would not be any closer to sensitive receptors than the Approved PA 12 Project. Notwithstanding, impacts from construction of the recycled water line to the nearest residences have been analyzed using the SCAQMD localized significance threshold (LST) method. Installation of the recycled water line would primarily involve trenching and would not require the use of heavy equipment. The analysis is included in Appendix B. Impacts would be substantially less than the conservative screening criteria and would be less than significant.

As identified previously implementation of the Approved PA 12 Project and the proposed Project, which both implement non-residential development at the Project site, would have reduced local construction emissions than forecasted in the PA 12 EIR due to cleaner construction equipment and the reduction in construction activities, and the same types of operations and associated operational emissions. Therefore, the exposure of sensitive receptors to pollutant concentrations would be the same or less for these issues with the proposed Project compared to pollutant concentration impacts forecasted in the PA 12 EIR for the Approved PA 12 Project.

The PA 12 EIR concluded that the Approved PA 12 Project would not result in the exposure of sensitive receptors to unhealthful concentrations of CO at local intersections; there were no projected exceedances of either the state or national 1-hour or 8-hour CO standards at any of the five intersections modeled. The PA 12 EIR further acknowledged that the future projected background CO levels would be substantially reduced from 1994 levels due to emissions control strategies and reduced vehicular emissions due to new technologies. With the reduction in development intensity in PA 12 resulting from the proposed Project, and ongoing federal and State requirements for cleaner and more fuel-efficient cars and light trucks, the CO emissions resulting from the Approved PA 12 and the proposed Project would be less than emission forecasted in the PA 12 EIR for the Approved PA 12 Project. As with the Approved PA 12 Project, the proposed Project would result in a less than significant impact related to local CO concentrations.

The proposed Project, which would have less impacts compared to the Approved PA 12 Project as evaluated in the PA 12 EIR, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The PA 12 EIR did not specifically address the potential for other emission, such as odors. However, consistent with the land use assumptions presented in the PA 12 EIR for the Project site, the proposed Project would involve development of office uses and associated landscaping, roadways, parking lots, and other improvements, and would not involve development of uses that that handle large amounts of solid waste, chemicals associated with heavy industry, or other uses that may generate objectionable odors. Therefore, the types of odors generated by the proposed Project and Approved PA 12 Project would be the same. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects previously than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.4 Biological Resources

6.4.1 Summary of Previous Environmental Analysis

The analysis of impacts to biological resources resulting from the Approved PA 12 Project is provided in Section 5.8 of the PA 12 EIR. At the time the PA 12 EIR was prepared, the Project site contained agricultural uses. The PA 12 EIR determined that the PA 12 is not connected to any large expanse of natural open space. The nearest natural open space was determined to be the Quail Hill area (PA 17), located southwest of PA 12, south of I-405; however, I-405 was determined to as a barrier to wildlife between PA 12 and Quail Hill. Additionally, the PA 12 EIR determined that I-5 and surrounding development are barriers to wildlife. San Diego Creek is a potential wildlife movement corridor linking the site with other open space areas. In the PA 12 EIR, biological resources are separated into two areas: the area outside the San Diego Creek / Barranca Parkway Corridor, and the area inside the San Diego Creek / Barranca Parkway Corridor.

The Project site is located outside of the San Diego Creek / Barranca Parkway Corridor and was identified as "Orchard" on the Biological Resources Map presented in the PA 12 EIR (Exhibit 5.8-1). The PA 12 EIR concluded that the development of Orchard area would not be a significant botanical impact since sensitive species are not expected to occur in this habitat, and the loss of habitat for wildlife would not be considered a significant impact since Orchard areas provide only marginal habitat for wildlife. Additionally, eucalyptus windrows were identified along Walnut Avenue (west of the Project site) and south of the Project site along the railroad track. The PA 12 EIR determined that loss of eucalyptus windrows would result in potentially significant impacts to nesting raptors in violation of California Fish & Game Code (Section 3503.5); however, this impact would be mitigated to a level considered less than significant.

No federally or state-listed endangered or threatened species were observed, or are expected to occur, at the Project site. A loggerhead shrike was observed within the outside the San Diego Creek / Barranca Parkway Corridor, and the PA 12 EIR determined that there was potential for burrowing owl to occasionally use ruderal fields for foraging. However, the PA 12 EIR concluded these species would

not be significantly affected by development because of area's proximity to important natural open space areas (e.g., species more likely to forage / occupy nearby natural areas than the PA 12 area), the high amount of human disturbance, and the general lack of native plant communities.

The PA 12 EIR did not identify wetlands or areas subject to California Department of Fish and Wildlife (CDFW) or U.S. Army Corps of Engineers (Corps) jurisdiction within the Project site, and concluded that the area outside the San Diego Creek / Barranca Parkway Corridor does not contain any sensitive plant species. Therefore, the PA 12 EIR concluded that implementation of the Approved PA 12 Project would not result in an impact associated with these biological resources.

Cumulatively-considerable impacts to biological resources were determined to be less than significant following implementation of SCs and MMs.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The following MMs from the PA 12 EIR are applicable to the proposed Project. MM BIO-1 and MM BIO-2 have been modified to include provisions for protection of nesting birds in addition to raptors. Changes in the text are signified by strikeouts (~~strikeouts)~~ where text has been removed and by bold and underline (**bold and underline)** where text has been added.

The PA 12 EIR includes a SCs related to impacts to earthen flood control channels and removal of eucalyptus trees; these requirements do not apply to the proposed Project as there are no earthen channels within the Project site, and no eucalyptus trees would be removed.

Mitigation Measures

MM BIO-1 If ~~grading is~~ **project mobilization, staging, grading, or other ground disturbances, etc. are** proposed during the ~~raptor~~ nesting **bird** season (~~March-July~~ **February – August**), a ~~focused~~ **nesting bird** survey ~~for raptor nests~~ shall be conducted prior to ~~grading~~ **these** activities by a qualified raptor biologist to identify active nests**, especially raptors,** in areas potentially affected by project implementation. The ~~focused~~ survey shall be submitted in conjunction with the submittal of applications for grading permits.

MM BIO-2 If active nests are located, **a qualified biologist shall establish an appropriate buffer for avoiding the nest, based on the nature of the work that is occurring in the vicinity of the nest and the known tolerance of the species to disturbances, until the biologist is able to determine the nest is no longer active. The buffer distance may be adjusted by the qualified biologist depending on the nature of the work that is occurring in the vicinity of the nest, the known tolerance of the species to noises and vibrations, and/or the nest's location. If an active raptor nest is located,** no grading activity shall take place within 500 feet ~~of an active raptor~~ **the** nest during the breeding season until the young have fledged (as determined by a qualified raptor

biologist) **or the qualified biologist determines that a reduced buffer is appropriate based on the factors above**. Trees containing **raptor** nests to be removed as a result of project implementation shall be removed during the non-breeding season only.

6.4.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
BIOLOGICAL RESOURCES: Would the project				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. In August 2020, Glenn Lukos Associates, Inc. (GLA) prepared a *Supplemental Study Area Site Assessment* (Biological Resources Assessment) for the Project site to support this Addendum (GLA, 2020). The Biological Resources Assessment is included as Appendix C to this Addendum. The purpose of the evaluation was to assess potential biological resources in areas that are in addition to the previous PA 12 Project Study Area evaluated for the approved Master Plan 00775712-PMPC, which also included portions of the current Project site. A field survey for the proposed development area and related features, as described below, was conducted on January 21, 2020.

- **Area 1.** An area of ornamental landscaping on the west side of the Caltrans park and ride parking lot located at Walnut Avenue and Jeffrey Road.
- **Area 2.** The landscaped shoulder on the west side of I-5 and adjacent to the Walnut Avenue / Jeffrey Road I-5 South on-ramp.
- **Area 3.** The proposed development site located southeast of the Oak Creek Golf Club.
- **Area 4.** The utility line installation area, which includes portions of Valley Oak and Oak Canyon and extends from the Oak Canyon terminus to the OCTA / Metrolink railroad tracks.

In addition to site reconnaissance, the Biological Resources Assessment included a review of the California Natural Diversity Database (CNDDB) for the Tustin and El Toro quadrangles, the California Native Plant Society (CNPS) on-line inventory, which was conducted in 2019 for the analysis of biological resources conducted for the 2019 Addendum addressing the adjacent existing Master Plan 00775712-PMPC.

Based on the field survey, the park and ride lot and adjacent I-5 shoulder areas are developed and highly disturbed sites that are either under construction, or landscaped entirely with ornamental vegetation including ground cover, shrubs, and trees. No native habitat occurs within these areas; however, they do have the potential to support nesting birds during the breeding season. Common plant and wildlife species were identified during the survey in these areas include hottentot-fig (*Carpobrotus edulis*), blue Jacaranda (*Jacaranda mimosifolia*), desert catclaw (*Acacia redolens*), acacia (*Acacia sp*.), sweetgum (*Liquidambar styraciflua*), gum tree (*Eucalyptus sp.*), and numerous other ornamental species. Faunal species detected

included Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), and common raven (*Corvus corax*).

The proposed development site is a highly disturbed, active construction site. The majority of the site is devoid of vegetation, with the exception of a few disturbed / ruderal plant species including include Lamb's quarters (*Chenopodium album*), castor bean (*Ricinus communis*), tree tobacco (*Nicotiana glauca*), and short-pod mustard (*Hirschfeldia incana*). The western boundary of the Project site supports a handful of Eucalyptus trees that could support nesting birds during the breeding season; these trees are located off-site on adjacent properties. Additionally, no wildlife species were detected in this area during the survey.

The utility line area includes a paved road alignment between Valley Oak east of Irvine Center Drive and Oak Canyon. The utility line area continues within the paved road alignment continues northwest along Oak Canyon until it reaches the cul-de-sac where the utility alignment continues in a northerly direction, through an undeveloped area until it terminated at the train tracks. The vegetated areas from the terminus to Oak Canyon to the train tracks were observed to be planted with ornamental species including several pine species (*Pinus spp.*), gum tree, acacia, desert catclaw, Peruvian peppertree (*Schinus molle*), Brazilian peppertree (*Schinus terebinthifolius*), tree tobacco, and numerous other ornamental and non-native species. This area was also determined to have the potential to supporting nesting birds during the breeding season. Wildlife species detected during the survey include Cassin's kingbird (*Tyrannus vociferans*), Cooper's hawk (*Accipiter cooperii*), Anna's hummingbird, yellow-rumped warbler (*Setophaga coronata*), American crow (*Corvus brachyrhynchos*), and white-crowned sparrow (*Zonotrichia leucophrys*). It should be noted that the Cooper's hawk is considered and California species of concern while nesting. As previously indicated, the proposed Project would incorporate mitigation measures MM BIO-1 and MM BIO-2, which would reduce impacts to nesting birds, including raptors, to a less than significant level.

Consistent with the findings of the PA 12 EIR, the Biological Resources Assessment did not identify any sensitive plant or animal species within the Project site or other areas associated with Project. Notably, the Project site does not provide potential habitat for the burrowing owl (*Athene cunicularia*). Therefore, consistent with the conclusion of the PA 12 EIR, the Approved PA 12 Project and proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Based on the survey conducted January 2020, and consistent with the conclusions of the PA 12 EIR, the Project site and associated Project areas do not support any of the special-status communities associated with this region (i.e., southern coast live oak riparian forest, southern coastal salt marsh, southern cottonwood willow riparian forest, southern riparian scrub, and southern sycamore alder riparian woodland) or any other special-status habitats. Additionally, the Project site does not contain any features potentially jurisdictional to the Corps, Regional Water Quality Control Board (RWQCB), and / or CDFW. Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project relative to the Project site, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and previously disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Project site is not located within any area previously identified as a potential wildlife movement corridor associated with the Orange County Central / Coastal Natural Community Conservation Plan / Habitat Conservation Plan (NCCP / HCP). According to Figure L-4, *Biotic Resources*, of the City's General Plan Conservation and Open Space Element, the Project site is not located within a NCCP / HCP Special Linkage area (City of Irvine, 2015b). Specifically, and as identified in the PA 12 EIR, intense urban development around PA 12, including the Project site, precludes east-west and / or north-south movement by small and large mammals and reptiles. The lack of native scrub habitats within these highly developed areas also precludes east-west and / or north-south movement by resident avifauna such as the coastal California gnatcatcher and coastal cactus wren. I-5, which is immediately north of the Project site, is a major barrier to north-south movement for all non-avian species or groups, as identified in the PA 12 EIR. Therefore, implementation of the Approved Project and proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species and the impact would be less than significant, consistent with the conclusion of the PA 12 EIR.

As identified above, the Study Area contains vegetation (trees, shrubs, and non-sensitive vegetation) with the potential to support nesting avian species, including raptors. Impacts to nesting birds, including raptors, are prohibited under the California Fish and Game Code. The Migratory Bird Treaty Act (MBTA) further protects the taking of migratory birds and their nests and eggs. The presence of vegetation with the potential to support nesting birds may represent a seasonal constraint to development if not removed at an appropriate time of the year. MM BIO-1 and MM BIO-2 from the PA 12 EIR, which identify actions to take to protect nesting birds and raptors, are incorporated into the proposed Project and would reduce impacts to nesting birds (including raptors) to a less than significant level, consistent with the conclusion of the PA 12 EIR.

Therefore, the impact would remain less than significant with mitigation. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and previously disclosed in the PA 12 EIR for the Approved PA 12 Project.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Portions of the City are subject to a phased Dedication and Compensation Development Opportunities Program (Dedication / Development Program) that was established as a result of the adoption of Initiative Resolution 88-1, entitled "An Initiative Resolution of the City of Irvine Directing the Amendment of the Conservation and Open Space Element and the Land Use Element of the Irvine General Plan" (Open Space Initiative). This program provides for permanent protection of conservation and open space areas through public ownership. The areas of the City that are directly affected by the Dedication / Development Program were divided into lettered "Implementation Districts" containing both designated open space dedication areas and corresponding development areas. Figure L-3, *Implementation Districts*, of the Conservation and Open Space Element of the General Plan, identifies that the Project site and off-site improvement areas are not located in designated Preservation Areas but are within development areas (City of Irvine, 2015b).

Section 5-7-4, Urban Forestry Ordinance, of the Irvine Municipal Code requires a permit be obtained prior to removal of significant trees and other trees that meet the established criteria, including eucalyptus windrows (City of Irvine, 2019c). The Project site has been graded and there are no trees located within the Project site. There are eucalyptus trees within the golf course, along the western boundary of the Project site; however, these trees would not be removed as part of the proposed Project. Therefore, the provisions of the Urban Forestry Ordinance are not applicable the development of the proposed Project or the Approved PA 12 Project on the Project site. No impact would occur.

The proposed Project, which has no impact impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and previously disclosed in the PA 12 EIR.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Project site is identified as a development site under the NCCP / HCP and is not part of the NCCP / HCP Reserve System (City of Irvine, 2015b). Development of the Approved PA 12 Project and the proposed Project at the Project site would not conflict with an adopted NCCP / HCP. The proposed Project, which has no impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and previously disclosed in the PA 12 EIR.

6.5 Cultural Resources

6.5.1 Summary of Previous Environmental Analysis

The analysis of impacts to cultural resources resulting from the Approved PA 12 Project is provided in Section 5.9 of the PA 12 EIR. The PA 12 EIR identified two known archaeological sites (CA-Ora-543 and CA-Ora-1304) within the southern portion of PA 12; no archaeological sites were identified at the Project site. In addition to the two known sites, the PA 12 EIR concluded that there may be additional unknown resources located below ground. Per the PA 12 EIR, implementation of the Approved PA 12 Project could significantly affect archaeological resources; however, implementation of the identified SC (requiring that an archaeologist be retained) and MM CR-1 (requiring archaeological surveys of areas not previously surveyed) were determined to reduce the impact to a less than significant level.

Additionally, the PA 12 EIR identified that there are were no properties within PA 12 listed on the National Register of Historic Places, but the City's General Plan recognizes several potentially historical structures and sites. Historic resources associated with PA 12 were either relocated, or were within other properties not within the current Project site. The PA 12 EIR identified that impacts to historic resources were anticipated to be less than significant; however, a more detailed assessment of the historic value of the structures on Irvine Center Drive would be required prior to determining potential significance. The PA 12 EIR concluded that impacts to historic resources would be less than significant with implementation of identified mitigation (MM CR-2 of the PA 12 EIR).

Additionally, cumulatively-considerable impacts to cultural resources were determined to be less than significant following implementation of SCs and MMs.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

Although the Project site and associated features have been recently graded or otherwise previously disturbed, the following SC remains applicable to the proposed Project. The SC has been modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019). Changes in the text are signified by strikeouts (~~strikeouts)~~ where text has been removed and by bold and underline (**bold and underline)** where text has been added.

MM CR-1 requiring that archaeological surveys be conducted has been completed, as discussed in the analysis provided in Section 6.5.2. MM CR-2 addresses historical resources along Irvine Center Drive and is not applicable to the proposed Project.

Standard Conditions of Approval

SC CR-1 **Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and / or paleontological sites, and for any subsequent permit involving excavation to increased depth, the applicant shall provide letters from an archaeologist and / or**

a paleontologist. The letters shall state that the applicant has retained these individuals, and that the consultant(s) will be on call during all grading and other significant ground disturbing activities. Determination of the need for these consultants shall be based on the environmental analysis for the project. These consultants shall be selected from the roll of qualified archaeologists and paleontologists maintained by the County of Orange (OC Public Works / OC Planning). The archaeologist and / or paleontologist shall meet with Community Development staff, and shall submit written recommendations specifying procedures for cultural / scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the project site. Should any cultural / scientific resources be discovered during grading, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect these resources. This condition and the approved recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: "Conditions of Approval." (Irvine Standard Condition 2.5)

~~In conjunction with the submittal of applications for preliminary or precise grading permits, the applicant shall provide written evidence to the Director of Community Development that an archaeologist and paleontologist, listed on the Orange County list of qualified archaeologists and paleontologists, have been retained and will be available during all grading and other significant ground disturbing activities. The archaeologist and paleontologist shall meet with Community Development staff to review procedures to be used during such activities.~~

~~The archaeologist, paleontologist, and Development Services representative shall attend the pregrade meeting to ensure that the conditions of approval on the project are thoroughly explained. At the pregrade meeting, the archaeologist and paleontologist shall recommend, and the City shall review and approve, procedures for cultural / scientific resources surveillance. If cultural / scientific resources are discovered, the archaeologist and paleontologist shall report such findings to the developer and the Director of Community Development. No further grading shall occur until the Director of Community Development is satisfied that adequate provisions are in place to protect the cultural / scientific resources.~~

~~If the cultural / scientific resources are found to be significant, the archaeologist and paleontologist shall recommend the appropriate procedures which ensure that the resources will not be destroyed before exploration and / or salvage. The procedures shall be reviewed and approved by the Director of Community Development prior to implementation. At the conclusion of grading activities, the archaeologist and paleontologist shall prepare and submit a report to the Director of Community Development per City guidelines (Irvine Standard Condition 3 .1~~.

6.5.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. Consistent with the conclusions of the PA 12 EIR, Figure E-1, *Historical / Archaeological Landmarks*, of the Irvine General Plan Cultural Resources Element does not identify historic resource sites on the Project site. As previously discussed, the Project site was recently graded and is undeveloped. Consistent with the conclusion of the PA 12 EIR, implementation of the Approved PA 12 Project and the proposed Project would not impact historic resources at the Project site. Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. As part of the evaluation for a previously proposed project at the Project site, Psomas conducted a cultural resources records search for the Project site at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton in January 2017. The SCCIC is the designated branch of the California Historical Resources Information System (CHRIS) for the Project area and houses records concerning archaeological and historic resources in Los Angeles, Ventura, and Orange Counties. The review consisted of an examination of the U.S. Geological Survey (USGS) El Toro and Tustin, California 7.5-minute quadrangles to determine if any cultural resources studies had been conducted on or within a half-mile radius of the parcel. The records search provided data on recorded archaeological and built environment resources on or within half-mile of the Project site. Sources consulted at the SCCIC included archaeological records, Archaeological Determinations of Eligibility, historic maps, and the Historic Property Data File (HPDF) maintained by the California Office of Historic Preservation. The HPDF contains listings for the California Register of Historical Resources (CRHR) and / or the National Register of Historic Places (NRHP), California Historical Landmarks, and California Points of Historical Interest. According to records on file at the SCCIC, there have been at least 49 cultural resources studies conducted since 1973 within a half-mile radius of the Project site. Four of these studies included at least a portion of the Project site. None of these studies resulted in the identification of any cultural resources, including archaeological resources, on the Project site. Consistent with the requirements outlined in MM CR-1 of the PA 12 EIR, in February 2017, Psomas' Senior Archaeologist conducted a field survey of the Project site and no archaeological resources were identified during the survey. Further, in compliance with SC CR-1 of the PA 12 EIR, recent grading of the Project site was monitored by a professional archaeologist. The results of the archaeological monitoring are included in the *Results of Archaeological Resource Monitoring for the Innovation Office Park Mass Grading Project*, (December 2019) (LSA, 2019a). The monitoring results indicate that no significant archaeological resources were impacted by grading of the Project site. The report concludes that due to the completion of grading and the lack of				

archaeological resources, no further archaeological resource work is necessary to determine the presence of archaeological resources within the Project site, unless previously ungraded sites are identified for future grading (LSA, 2019a). It should also be noted that the installation of the recycled water line south of the Project site would include a jack and bore operation approximately 15-feet deep under the railroad and several utilities. A "jack and bore" method of construction was used for the existing IRWD Desalter water line in this area and the proposed recycled water line would follow the same alignment, including in the undeveloped area south of the railroad. Therefore, the installation of the recycled water line would occur in previously disturbed areas, or within existing roadway right-of-way.

Because mass grading of the Project site has been conducted, and the Project features would occur in previously disturbed areas, the potential to encounter unknown archaeological resources is low. However, SC CR-1 (which includes the City's Standard Condition for protection of archaeological resources), would be applied to the proposed Project and ensures that impacts would remain less than significant by identifying actions to be taken if resources are discovered during construction, consistent with the conclusion of the PA 12 EIR.

Therefore, implementation of the Approved PA 12 Project and the proposed Project at the Project site would not cause substantial adverse change to the significance of an archaeological resource and the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. This impact was not directly addressed in the PA 12 EIR; however, no human remains were uncovered during the recent grading of the Project site or adjacent site. Although it is not expected that human remains would be encountered, required adherence to State Health and Safety Code Section 7050.5 and Public Resources Code 5097.98 would ensure that development of the Project site with the Approved PA 12 Project and proposed Project are less than significant.

Per State Health and Safety Code Section 7050.5 and PRC 5097.98, if human remains are encountered, the County Coroner would be contacted and the discovery left undisturbed until the Coroner makes a determination of origin and disposition. If the remains are determined to be Native American, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his / her authorized representative, the MLD may complete an inspection of the discovery within 48 hours of notification by the NAHC. The MLD may have also recommended scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Therefore, the proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and previously disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.6 Energy

6.6.1 Summary of Previous Environmental Analysis

Although Energy was added in December 2018 as a topic in the Environmental Checklist included in Appendix G of the State CEQA Guidelines, analysis of the use of energy and non-renewable resources is not a new requirement. Energy consumption is addressed in Section 5.10, Public Services, Utilities, and Energy Consumption, of the PA 12 EIR, and the use of nonrenewable resources is addressed in Section 9.2, Irreversible and Irretrievable Commitment of Resources that would be Involved in the Proposed Action if Implemented.

The PA 12 EIR concluded that the Approved PA 12 Project would result in energy demands, both electrical and natural gas, consistent with the energy demands previously considered in the City of Irvine General Plan. Implementation of the Approved PA 12 Project was determined to be served with adequate energy supplies by Southern California Edison (electricity) and Southern California Gas Company (natural gas). Additionally, the PA 12 EIR identified that future development associated with the Approved PA 12 Project would be was required to comply with energy conservation requirements as specified in the California Administrative Code Title 24 / 25.

Additionally, cumulatively-considerable impacts to energy were determined to be less than significant.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The following PA 12 EIR SC is applicable to the proposed Project.

SC E-1 Habitable structures constructed within PA 12 will comply with California energy conservation requirements as specified in California Administrative Code Title 24 / 25.

6.6.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
ENERGY: Would the Project				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The proposed Project would involve the development of non-residential uses at the Project site, consistent with the land uses anticipated within the Approved PA 12 Project based on the current General Plan land use designation and zoning. However, the proposed Project would result in a net decrease in non-residential building intensity (square footage) in PA 12. Specifically, the proposed Project would result in an overall reduction of non-residential development				

intensity in the Spectrum 7 area of PA 12. The construction and operational characteristics of the Approved PA 12 Project and the proposed Project would be the same; however, the associated energy demand would be reduced with the proposed Project due to the reduction in development intensity.

Construction-related energy demand includes energy and fuel used by construction equipment, construction worker vehicles, and construction vendor / hauling vehicles, coupled with construction energy efficiency / conservation measures. The construction equipment, use of electricity, and fuel for the Approved PA 12 Project and proposed Project would be typical for the type of construction proposed because there are no aspects of the proposed construction process that are unusual or energy-intensive, and construction equipment would conform to applicable CARB emissions standards, which promote equipment fuel efficiencies. Construction worker trips for construction of the Approved PA 12 Project and proposed Project would result in comparable fuel consumption. Gasoline and diesel fuel would be supplied by local and regional commercial vendors. It should be noted that fuel efficiencies are improving for on- and off-road vehicle engines due to more stringent government requirements. Construction energy consumption would represent a "single-event" demand and would not require ongoing or permanent commitment of energy resources. The Approved PA 12 Project and proposed Project would also not necessitate the use of construction equipment or processes that are less energy efficient than at comparable construction sites. Thus, construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

SC E-1 from the PA 12 EIR, which requires compliance with California Administrative Code 24 (Title 24) energy standards, is incorporated into the proposed Project. It should be noted that the Title 24 energy standards have become more stringent since 1994. These regulations are regularly updated and were last updated in 2019 and became effective on January 1, 2020. Office buildings developed under the Approved PA 12 Project and the proposed Project would be constructed to achieve the building energy standards set forth in the Title 24 requirements in effect at the time of building permit issuance. Therefore, there would be additional reductions in energy consumption pursuant to the new and updated codes compared to those anticipated in the PA 12 EIR. The design, construction, and operation of the proposed Project would also incorporate a series of green building strategies, which are described in Section 3.2.1, Proposed Buildings / Structures, of this Addendum.

Energy consumption in support of or related to the Approved PA 12 Project and proposed Project operations would also include transportation energy demands, which includes energy consumed by employee and patron vehicles accessing the proposed office development. The transportation demands would be reduced with the proposed Project compared to the Approved PA 12 Project. As further discussed under Section 6.17, *Transportation*, of this Addendum, the proposed Project would generate fewer vehicle trips compared to what was anticipated in the PA 12 EIR for the Spectrum 7 area of PA 12. Additionally, the trips generated by the Approved PA 12 Project and proposed Project would be consistent with other office developments of similar scale and configuration. The proposed Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and vehicle miles traveled, nor associated excess and wasteful vehicle energy consumption. The Approved PA 12 Project and proposed Project would also not result in a substantial increase in fuel demand or transmission service, which may result in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

The Approved PA 12 Project and proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Therefore, the impact would remain

less than significant. The proposed Project would consume less energy overall compared to that anticipated in the PA 12 EIR. Therefore, the proposed Project would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The potential for the Approved PA 12 Project to conflict with or obstruct a state or local plan for renewable energy or energy efficiency was not specifically addressed in the PA 12 EIR. However, federal and state agencies regulated energy use and consumption through various means and programs when the PA 12 EIR was prepared and continue to do so. At the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy (USDOE), and the USEPA are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the California Energy Commission (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

- **Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).** ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. Transportation and access to the Project site is provided primarily by the local and regional roadway systems. The Approved PA 12 Project and proposed Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because SCAG[4] is not planning for intermodal facilities on or through the Project site.

- **The Transportation Equity Act for the 21st Century (TEA-21).** TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety. The Project site is located adjacent to existing transportation facilities, most notably I-5. As with Approved PA 12 Project, the proposed Project facilitates access, takes advantage of existing infrastructure systems, and promotes land use compatibilities through co-location of similar uses. Although the Approved PA 12 Project was approved prior to the signing of TEA-21 into law, it and proposed Project support the strong planning processes

[4] SCAG is the Metropolitan Planning Organization (MPO) for six counties: San Bernardino, Orange, Riverside, Los Angeles, Ventura, and Imperial. As the designated MPO, the federal government mandates that SCAG researches and prepares plans for transportation, growth management, hazardous waste management, and air quality.

emphasized under TEA-21. The Approved PA 12 Project and proposed Project are therefore consistent with, and would not otherwise interfere with nor obstruct implementation of, TEA-21.

- **Integrated Energy Policy Report (IEPR).** Senate Bill (SB) 1389 requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety. The 2019 IEPR was adopted January 31, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California (CEC, 2020). The 2019 IEPR is a State Policy report and is not applied to individual development projects such as the proposed Project. However, the proposed Project would not involve any uses or activities that would conflict with or otherwise hinder or obstruct implementation of the goals presented in the 2019 IEPR.

- **State of California Energy Plan**. The CEC is responsible for preparing the State of California Energy Plan (State Energy Plan), which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the State Energy Plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access. As noted above, the Project site is adjacent to I-5. The proposed Project takes advantage of existing infrastructure systems, and promotes land use compatibilities through the development of non-residential uses on a site designated for such uses in the Irvine General Plan. Further, the proposed Project includes non-vehicular circulation systems to accommodate pedestrian and bicycle access. The Approved PA 12 Project and the proposed Project would support urban design and planning processes identified under the State Energy Plan, and would not otherwise interfere with or obstruct implementation of the State Energy Plan.

- **State of California Renewables Portfolio Standard (SB 1078, SB 107, and SBX1-2).** Established in 2002 under SB 1078, and accelerated in 2006 under SB 107 and again in 2011 under SBX1-2, California's Renewables Portfolio Standard (RPS) Program requires retail sellers of electric services to increase procurement from eligible renewable energy resources. The RPS applies to all electricity retailers in the State including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt the RPS goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. As with the Approved PA 12 Project, the proposed Project would receive electricity from SCE. SCE is required by law to comply with RPS Goals. The proposed Project would not interfere with nor obstruct implementation of the RPS.

At a local level, the City of Irvine Energy Plan was adopted in July 2008 (City of Irvine, 2008) (Irvine Energy Plan), subsequent to the preparation of the PA 12 EIR, to implement policies of the Energy Element of the General Plan in effect at that time (1999 General Plan). The objectives for creating the Irvine Energy Plan were to eliminate energy waste, improve the efficiency with which energy is used, encourage the use of renewable energy, and increase awareness of energy issues in Irvine. Defined energy goals at a local level provide City decision makers and the community with a clear direction for Irvine's energy management

efforts. The Irvine Energy Plan pre-dates current statewide energy conservation requirements and the current Energy Element of the City's General Plan (amended through 2015) (City of Irvine, 2015d). The current Energy Element of the General Plan has an overall goal to "Promote energy conservation and the use of renewable energy sources throughout the City in a cost-effective way." As discussed under Threshold a, above, office buildings developed under the Approved PA 12 Project and the proposed Project would be constructed to achieve the building energy standards set forth in the Title 24 requirements in effect at the time of building permit issuance. Therefore, there would be additional reductions in energy consumption pursuant to the new and updated codes, compared to what was anticipated in the PA 12 EIR, the Irvine Energy Plan, and the 1999 General Plan Energy Element. The design, construction, and operation of the proposed Project would also incorporate a series of green building strategies, which are described in Section 3.2.1, Proposed Buildings / Structures, of this Addendum. The proposed Project would not conflict with the City's goals and policies relative to energy conservation.

The City is currently developing a Strategic Energy Plan to create a sustainable, economically feasible, and actionable road map for City operations and to identify effective measures the Irvine community can implement to become energy efficient (City of Irvine, 2020b). The objectives of the Strategic Energy Plan are to analyze the City's baseline energy use to project future energy needs, evaluate priorities to meet those needs, and identify funding opportunities to implement the Plan. This effort was initiated in November 2018 and is expected to be complete in Summer 2020.

The Approved PA 12 Project and the proposed Project, which would comply with applicable energy conservation requirements; and would consume less energy overall within the Project site than was anticipated in the PA 12 EIR, would not obstruct a plan for renewable energy or energy efficiency, and thus a less than significant impact would occur. The proposed Project would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR.

6.7 Geology & Soils

6.7.1 Summary of Previous Environmental Analysis

Geology and soils are addressed in Section 5.6, Earth Resources, of the PA 12 EIR and impacts related to paleontological resources are addressed in Section 5.9, Cultural Resources, of the PA 12 EIR. The PA 12 EIR concluded that the Approved PA 12 Project would not expose people or structures to adverse effects related to the rupture of a known earthquake fault as there are no known active or potentially active faults that cross PA 12 and PA 12 is not located within a designated Alquist-Priolo Earthquake Fault Zone. However, PA 12 is located in a seismically active region of southern California. Per the PA 12 EIR, development associated with the Approved PA 12 Project would be required to comply with the Uniform Building Code (UBC), which would reduce the impact associated with seismically induced ground shaking to a less than significant level. The possibility of secondary impacts associated with ground shaking was also determined to be less than significant. Liquefaction and / or seismic settlement occurring beneath the site is considered very remote, and there are no slope stability problems within the PA 12 site. Further, the risk of damage from seismic sea waves or seiches is not a concern due to the distance from the ocean or other water bodies.

Additionally, the PA 12 EIR concluded that there are no major geologic constraints that would preclude the proposed development. The PA 12 EIR that minor cuts and fills in the range of 5 to 10 feet would occur during grading, and cuts performed in the area to the south of Irvine Center Drive, which does not include the currently proposed Project site, may expose expansive soils and be subject to shallow slumping. Cuts in the area to the north would expose the more granular earth materials and may be subject to surface erosion. In general, all removed soils were determined to be suitable for reuse in recompacted fills. Fill slopes constructed in accordance with current industry standards would be considered grossly stable.

As noted above, implementation of the Approved PA 12 Project was determined to result in potential erosion and sedimentation impacts. Water erosion impacts were determined be greatest during grading and construction. Sediment transport impacts could occur relative to the majority of surface drainage flowing into the San Diego Creek Channel. It was noted, however, that the proposed improvement of the channel included provisions for sediment control (i.e., to reduce the potential for sediments entering the channel to be carried downstream to Upper Newport Bay), and erosion control measures implemented during grading and construction can reduce potential sources of erosion and sedimentation. The completion of construction activities and installation of project landscaping would serve to reduce the potential for erosion, compared to the existing characteristics of the site resulting in a less than significant impact.

Relevant to the Project site, the PA 12 EIR concluded that excavation activities associated with development in younger Holocene-aged alluvium would not require paleontological resource monitoring because it is considered to be of low paleontological sensitivity and it is unlikely that notable resources would be encountered. However, should grading extend into the more sensitive Pleistocene aged alluvium and Vaqueros Formation there would be a potential to encounter notable fossils. This impact was determined to be less than significant with implementation of the City's SC requiring a paleontologist be retained and that required actions be taken to protect paleontological resources (refer to SC CR-1 in Section 6.5, Cultural Resources, of this Addendum.

Additionally, cumulatively-considerable impacts related to geology and soils were determined to be less than significant following implementation of standard conditions of approval and mitigation.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

SC CR-1 from the PA 12 EIR, as presented in Section 6.5, Cultural Resources, of this Addendum, and modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019), is applicable to the proposed Project's potential impacts to paleontological resources.

The following PA 12 EIR SCs related to geotechnical issues, as modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019), are also applicable to the proposed Project. Changes in the text are signified by strikeouts (~~strikeouts)~~ where text has been removed and by bold and underline (**bold and underline)** where text has been added.

PA 12 EIR MM ER-1 requires further geotechnical investigation when additional information is available for implementing projects; this requirement has been completed for the Project as discussed below. MM ER-2 is not applicable to the proposed Project as it addresses areas which are located outside of the Project site (i.e., Barranca Parkway Connection and San Diego Creek).

Standard Conditions of Approval

SC GEO-1 Buildings onsite shall be constructed in accordance with seismic design requirements specified in the current edition of the Uniform Building Code (UBC), and will be verified as part of the City's building plan check and construction inspection processes.

SC GEO-2 Prior to issuance of building permits, the applicant shall submit ~~a statement prepared~~ to the ~~satisfaction of the~~ Director of Community Development **for review and approval a completed occupancy disclosure form for the project. The approved disclosure form, along with its attachments, shall be included as part of the rental / lease agreements and / or as part of the sales literature for the project. The disclosure statement shall include information, current as of the date of submittal, with respect to each item below:** ~~to be signed prior to occupancy by each prospective buyer or lessee and / or occupant listed on the lease agreement, acknowledging receipt of the current version of the City's Earthquake Preparedness Manual and the Emergency Information Placard (Irvine Standard Condition 7 .5)~~.

- **Reference to Emergency Preparedness information available on the City of Irvine website at www.cityofirvine.org / office-emergency-management. (Irvine Standard Condition 3.3)**

6.7.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As previously noted, the Project site is currently vacant and has been recently mass graded. A Project-specific *Preliminary Geotechnical Review of Proposed Innovation Park II Office Complex, Planning Area 12, City of Irvine, California,* (Geotechnical Review) has been prepared for the proposed Project by NMG Geotechnical, Inc. (NMG) (July 2020), and is included as Appendix D of this Addendum (NMG, 2020). The purpose of the Geotechnical Review is to evaluate to evaluate the existing geologic site conditions in light of the proposed rough grading plan in order to provide recommendations for design and grading, and to address potential geotechnical impacts pursuant to CEQA. The discussion below is based on the results of the Geotechnical Review.

Consistent with conclusions of the PA 12 EIR, the Project site is not within an Alquist Priolo Fault Rupture Hazard Zone and no active faults are known to transect the Project site. The closest major active faults to the site are the San Joaquin Hills Blind Thrust Fault located approximately 1.8 miles south, the Newport-Inglewood Fault located approximately 10.4 miles southwest, and the Elsinore-Glen Ivy Fault located approximately 14.3 miles northeast. Figure 3 of the Geotechnical Review shows the Project site in relation to the regionally active faults map. The blind thrust faults are not shown since they do not extend to the ground surface. Based on the foregoing analysis, the potential for primary ground rupture at the Project site is considered very low.

Properties in southern California are subject to seismic hazards of varying degrees, depending upon the proximity, degree of activity, and capability of nearby faults. These hazards can be primary (i.e. surface rupture and ground shaking) or secondary (i.e., liquefaction). The primary seismic hazard for the Project site is ground shaking due to a future earthquake on one of the major regional active faults, such.

The site is not located in a seismic hazard zone for liquefaction or earthquake-induced landsliding, as mapped by the State. The Project site has relatively deep groundwater over 40 to 60 feet below ground

surface and cohesive and / or sufficiently dense soils, and based on NMG's review of the site groundwater conditions and the underlying soil conditions, the liquefaction potential at the site is considered very low. Further, there are no landslides mapped within or adjacent to the Project site. Due to the geologic and topographic conditions at the site, the potential for landslides within or adjacent to the site is considered very low to nil.

The Approved PA 12 Project and the proposed Project would be designed in accordance with the most recent version of the local and state grading and / or building code, and in accordance with recommendations outlined in the site-specific geotechnical investigations. Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Geotechnical Review for the proposed Project identifies that the onsite compacted fill materials consist of 3 to 14 feet if sandy silt, sandy silty clay, clayey sand, and silty sand. These materials have sufficient cohesion and the site is nearly level. Thus, the potential for erosion is low. However, consistent with the conclusions of the PA 12 EIR, there would be an increased potential for soil erosion during construction due to ground disturbance and an increase in exposed soil materials. Proper control of surface drainage by adhering to codes and policies that address erosion potential during construction, as specified in Section 6.10, Hydrology and Water Quality, of this Addendum, would minimize erosion impacts. Under the developed condition, the Approved PA 12 Project and the proposed Project would result in an increase in impervious surface area and landscape coverage. However, the amount of erosion would decrease compared to existing conditions, where exposed soil covers the Project site. The Approved PA 12 Project and the proposed Project would be developed in accordance with applicable local and state codes, which address erosion. Notably, as the Project site is larger than one acre, a Stormwater Pollution Prevention Plan (SWPPP) would be required, which would identify structural and nonstructural best management practices (BMPs), such as sand bag barriers, erosion control blankets, or silt fences, to minimize erosion impacts during construction. Therefore, compliance with applicable regulations and implementation of the BMPs identified in the SWPPP would ensure that potential erosion impacts would remain less than significant.

The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As noted above under Threshold a, the Project site is not located in an area associated with risk of landslide or liquefaction. Due to recent grading, shrinkage and subsidence within the Project site is considered to be very minimal. Additionally, the Project site was determined to have groundwater at depths over 40 feet to 60 feet below ground surface (bgs); no groundwater was encountered during borings that extended to a depth of 51.5 bgs.

The Geotechnical Review concludes that under existing conditions, the Project site has a low potential for collapse, shrinkage, and subsidence. Additionally, the on-site soils have a negligible sulfate exposure to concrete, and are moderately to severely corrosive to ferrous metals. With adherence to applicable local (City of Irvine) and state codes during construction; compliance with SC GEO-1, which requires compliance with the UBC (the California Building Code [CBC] adopts the UBC); and implementation of the recommendations from the site-specific geotechnical recommendations, as required by the City, potential impacts related to on-site soil conditions would be less than significant for the Approved PA 12 Project and the proposed Project, consistent with the conclusion of the PA 12 EIR.

Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Geotechnical Review indicates that the expansion potential of soils at the recently graded Project site generally range from “very low” to “medium”; however, locally, soils with expansion potential in the "high" range may be encountered. Impacts associated with expansive soils would be addressed through compliance with applicable building codes and recommendations outlined in the Geotechnical Review. Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project would not involve the use of septic tanks or alternative wastewater disposal systems and no impacts would result. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. Consistent with the PA 12 EIR, the Geotechnical Review indicates that the Project site has surface deposits composed of younger Quaternary-age alluvium deposits. These deposits are primarily derived as alluvial fan deposits from the hills to the east. These deposits usually do not contain significant vertebrate fossils, at least in the uppermost layers, but they may be underlain by older Quaternary deposits that have higher paleontological sensitivity. As required by the City, recent grading activities at the Project site were monitored by a qualified paleontologist. The results of the paleontological monitoring are outlined in the *Results of Paleontological Resource Monitoring for the Innovation Park Mass Grading Project* (Paleontological Resource Monitoring Report) (November 2019) (LSA, 2019b). No scientifically significant paleontological resources were observed during monitoring and it is not expected that paleontological resources would be encountered during construction of the proposed Project, including the off-site recycled water line to the south of the Project site. However, due to the paleontological sensitivity of the sediments in the vicinity, Paleontological Resource Monitoring Report recommends that if additional excavation extends deeper than the depths reached during the mass grading, the ground-disturbing activities in these new areas shall be monitored by a qualified paleontologist. Compliance with Irvine SC for the protection of paleontological resources, as modified since the PA 12 EIR was prepared (refer to SC CR-1), would ensure that impact to paleontological resources remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.8 Greenhouse Gas Emissions

6.8.1 Summary of Previous Environmental Analysis

The State of California enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, after certification of the PA 12 EIR, and, as a result, increased attention has been paid to the impact of GHG emissions. The California Natural Resources Agency (CNRA) in 2010, adopted amendments to the State CEQA Guidelines in a new Section 15064.4 entitled "Determining the Significance of Impacts from Greenhouse Gas Emissions", which require evaluation of GHG emissions. Therefore, greenhouse gas (GHG) emissions were not specifically identified as such in the PA 12 EIR analyses. However, as described in the following paragraphs, courts have ruled that there is no requirement to address GHG emissions in an Addendum to an EIR that was completed prior to the adopted CEQA amendments. "Information on the effect of greenhouse gas emissions on climate change" does not constitute "new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time . . . the IS / MND was adopted." (See *Citizens for Responsible Equitable Environmental Development v. City of San Diego* [2011] 196 Cal. App. 4th 515, 531–532 [rejecting claim that such information triggered the need for a supplemental EIR, and explaining that such information was known "long before the City approved the 1994 EIR" at issue]).

Limiting GHG emissions to combat climate change has been a governmental goal since the late 1970s. As explained by the United States Supreme Court in *Massachusetts v. EPA* (2007) 549 U.S. 497: "In

the late 1970s, the Federal Government began devoting serious attention to the possibility that carbon dioxide emissions associated with human activity could provoke climate change. In 1978, Congress enacted the National Climate Program Act, 92 Stat. 601, which required the President to establish a program to "assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications". In 1987, Congress enacted the Global Climate Protection Act for the purpose of "establish[ing] a national climate program that will assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications" (15 *United States Code* [USC] 2902). The act required the establishment of various programs to further climate change research (15 USC 2904[d]).

In 1988, the United Nations created the Intergovernmental Panel on Climate Change (IPCC) to provide scientific information regarding climate change to policymakers. In 1992, 154 nations, including the United States, entered into the United Nations Framework Convention on Climate Change (UNFCCC), a nonbinding agreement under which industrialized countries pledged to work to reduce GHG emissions. Five years later, in 1997, the parties to the UNFCCC adopted the Kyoto Protocol, which set binding GHG reduction targets for 37 industrialized countries and the European Community, with the objective of reducing their collective emissions by 5 percent below 1990 levels during the "commitment period" of 2008–2012.

Further, as noted by the court in *Citizens for Responsible Equitable Environmental Development v. City of San Diego* (*supra*, 196 Cal. App. 4th 515), by 1990, the potential impacts of GHG emissions were already the subject of litigation, with the "Natural Resources Defense Council (NRDC) argu[ing that an] "increase in fossil fuel combustion … will … lead to a global increase in temperatures, causing a rise in sea level and a decrease in snow cover that would damage the shoreline, forests, and agriculture of California." (*Id*. at 531, quoting *City of Los Angeles v. National Highway Traffic Safety Administration* [D.C. Cir. 1990] 286 U.S. App.D.C. 78.)

Thus, by the 1990s, California's local governmental agencies were well aware of the importance of monitoring and limiting GHG emissions when approving projects. Since GHG impacts were known at the time that the previous environmental analysis was conducted, information regarding the proposed project's potential to impact climate change does not constitute "new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time . . . the IS / MND was adopted"; accordingly, the inclusion of GHG impacts as a requirement of CEQA analysis does not trigger the need for any further environmental review. (*See Citizens for Responsible Equitable Environmental Development v. City of San Diego* [*supra*, 196 Cal. App. 4th at 531–532]).

Furthermore, as mentioned above, the PA 12 EIR analyzed air quality impacts associated with buildout of the Approved PA 12 Project, inclusive of CO_2 and other GHG emissions. The PA 12 EIR also addressed vehicle emissions (both construction and operational) and operational emissions from energy consumption, which are the most common sources of GHG emissions. Per the PA 12 EIR, and addressed in Section 6.3.1 of this Addendum, implementation of the Approved PA 12 Project would result in long-term operational emissions which exceed SCAQMD thresholds. The long-term emissions associated with implementation of the Approved PA 12 Project would be generated from vehicle emissions and energy consumption, which also generate GHG emissions.

Pursuant to CEQA case law and CEQA Guidelines Section 15162 (a)(3), the issue of Project-related GHG emissions does not provide new information of substantial importance or substantial evidence of a new impact to the environment that was not or could not have been known at the time the PA 12 EIR was certified.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs or MMs identified in the PA 12 EIR that specifically reference GHG emissions; however, MM AQ-1 included in Section 6.3, Air Quality, of this Addendum, includes measures to reduce air quality emission during construction and operation of the Approved PA 12 Project that would also serve to reduce GHG emissions.

6.8.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As identified above, the CNRA adopted amendments to the CEQA Guidelines in 2010, after certification of the PA 12 EIR. The CEQA amendments require evaluation of GHG emissions; however, there is no requirement to address GHG emissions in an addendum to an EIR that was completed prior to the aforementioned CEQA amendments.

Regardless, the proposed Project does not change the type of land uses or associated potential GHG emissions expected with the Approved PA 12 Project, does not change the anticipated construction activities, and does not increase the amount of proposed development. As with air quality emissions, GHG emissions are generated during construction and operation. GHG emissions during construction primarily consist of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). SCAQMD recommends that construction-related GHG emissions be amortized over the life of a project (usually assumed to be 30 years). GHG emissions during operation primarily consist of CO_2, CH_4, and N_2O. Operational sources of emissions include: area sources, energy sources; mobile sources; on-site equipment; water supply, treatment, and distribution; and solid waste. Project-related operational GHG emissions would derive predominantly from mobile sources.

With respect to construction-related GHG emissions, as identified in the Air Quality section of this Addendum, the majority of approved land uses in PA 12, as evaluated in the PA 12 EIR, have been constructed. Additionally, the rough grading for the Project site, which uses larger equipment (and generates higher GHG emissions) has been completed; precise grading activities would be conducted as part of the proposed Project. The proposed Project, similar to the Approved PA 12 Project, would

implement MM AQ-1 from the PA 12 EIR, which includes measures that serve to reduce emissions during construction. Additionally, due to advancements in technology and more stringent regulations since 1994, the GHG emissions associated with construction sources would be less for the proposed Project and Approved PA 12 compared to what would have been calculated in the PA 12 EIR. Therefore, the construction activities associated with the proposed Project would be less than what was anticipated in the PA 12 EIR and resulting annual GHG emissions would also be less.

With respect to operations and building design, the proposed Project would generate less operational GHG emissions than the Approved PA 12 Project. This reduction is due to a number of factors, including primarily a reduction in the allowable development intensity within PA 12, and corresponding reduction in average daily trips (ADT) and VMT. As identified in Section 6.17, Transportation, of this Addendum, the anticipated number of average daily trips (ADT) for the proposed Project under buildout conditions would be reduced by approximately 18.9 percent (36,789 ADT compared to 45,362 ADT). The proposed Project also includes bicycle and pedestrian facilities that provide connections to existing bikeways and trails along Jeffrey Road and Sand Canyon Avenue that would facilitate non-vehicular modes of transportation. The proposed Project, similar to the Approved PA 12 Project, would implement MM AQ-1 from the PA 12 EIR, which also includes measures that reduce emissions from mobile sources during operation. Additionally, as with construction sources, due to advancements in technology and more stringent regulations since 1994, the GHG emissions associated with mobile sources, area sources, and energy sources would be less for the proposed Project and Approved PA 12 compared to what would have been calculated in the PA 12 EIR. Relative to building design, as discussed in Section 6.6, Energy, of this Addendum, the proposed Project would be required to comply with current State of California Title 24 Energy Efficient Standards, which are more stringent than when the PA 12 EIR was prepared. Additionally, the CALGreen Code, which contains requirements for new residential and non-residential buildings, was enacted after the PA 12 EIR was prepared. Further, the design, construction, and operation of the proposed Project would incorporate a series of green building strategies, which would include, but not be limited to: use of a high efficiency window system that would allow for natural daylighting; installation of skylights located near the center of the buildings to bring natural daylight into the interior of the buildings; use of highly efficient exterior envelope construction consisting of a combination of solid and window walls; installation of LED interior and exterior lighting system; provision of natural ventilated office space; construction of PV system-ready roofs; provision of EV charging stations; use of reclaimed water for flushing of toilets and urinals; and installation of drought resistant plant material irrigated by reclaimed water.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the Global Warming Solutions Act of 2005 (Assembly Bill [AB] 32) was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. Senate Bill (SB) 32 requires the state to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. This legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80 percent below 1990 levels by 2050. In November 2017, the California Air Resources Board (CARB) released the final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the 2017 Scoping Plan Update builds upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and much cleaner cars, trucks and freight movement, utilizing cleaner,

renewable energy, and strategies to reduce methane emissions from agricultural and other wastes. Many strategies established by local, state and federal agencies for reducing GHG emissions, including those identified in the 2017 Scoping Plan Update, are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. However, the Approved PA 12 Project and PA 12 Project would be implemented in accordance with applicable local and state requirements, including energy conservation requirements, and would not conflict with implementation of strategies to reduce GHG emissions, including those identified in the 2017 Scoping Plan Update.

There is no requirement to address GHG emissions in an addendum to an EIR that was completed prior to the aforementioned CEQA amendments. Nevertheless, as described above, the proposed Project would generate less construction-related and operational GHG emissions than the Approved PA 12 Project, and would have a less than significant impact related to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The proposed Project would not result in any new or substantially more severe effects than the effects that would have been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project if GHG emissions analysis was required when the PA 12 EIR was prepared.

Pursuant to CEQA case law and CEQA Guidelines Section 15162, the issue of Project-related GHG emissions does not provide new information of substantial importance or substantial evidence of a new impact to the environment that was not or could not have been known at the time the PA 12 EIR was certified. In addition, the proposed Project would generate less construction-related and operational GHG emissions compared to the Approved PA 12 Project due primarily to a reduction in construction activities, and an overall reduction in building intensity and associated vehicular trips and VMT. The proposed Project would not result in any new or substantially more severe effects than the effects that would have been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project if GHG emissions analysis was required when the PA 12 EIR was prepared.

6.9 Hazards & Hazardous Materials

6.9.1 Summary of Previous Environmental Analysis

Potential impacts related to hazards and hazardous materials are addressed in Section 5.6, Earth Resources, and Section 5.11, Public Health and Safety, of the PA 12 EIR. The PA 12 EIR concluded that the Approved PA 12 Project would allow land uses (manufacturing, industrial, etc.) in the northern portion of PA 12, including the Project site, that would contribute to the transport, storage, and use of hazardous materials and / or generation of hazardous waste. As such, the Approved PA 12 Project was determined to result in a greater potential for an unauthorized release of hazardous materials and / or hazardous waste to occur onsite. However, the PA 12 EIR concluded that the proposed uses would be required to comply with existing local, state, and federal regulations / requirements and guidelines that provide for mechanisms to ensure proper transport, storage, and use of hazardous materials, generation of hazardous waste, and treatment of any potential hazardous materials and / or waste incidents. Compliance with these regulations and requirements was determined to reduce any potential impacts associated with transport, storage, and use of hazardous materials and / or generation of hazardous waste to a less than significant level.

The PA 12 EIR concluded that implementation of the Approved PA 12 Project would not expose individuals to hazards from known hazardous waste sites. Further, based on soil sampling and testing conducted during preparation of the PA 12 EIR, it was concluded that the levels of agricultural chemicals would not exposed construction workers or employees to levels of agricultural chemicals in the soil that would pose a risk to humans. Construction activities would be conducted in compliance with regulations established by the California Division of Occupational Health and Safety (Cal OSHA) to protect workers. Therefore, this impact was considered less than significant.

When the PA 12 EIR was prepared airports in the vicinity of the City of Irvine included John Wayne Airport (JWA), Marine Corps Air Station (MCAS) Tustin, and MCAS El Toro. MCAS Tustin and MCAS El Toro have subsequently ceased operations. JWA is located along the City's western border and the PA 12 EIR concluded operations at JWA would not pose a hazard to development in PA 12, because PA 12 is located outside of the identified Aircraft Crash Hazard Zones map for JWA.

The PA 12 EIR concluded that, based on the General Plan Safety Element, an area of High Fire Severity was located along the San Diego Creek. However, planned improvements to the San Diego Creek not related to the Approved PA 12 Project would result in the removal of high fuel vegetation within the creek channel, thereby reducing the potential for High Fire hazards within and adjacent to the eastern portion of PA 12. Therefore, the PA 12 EIR concluded that impacts associated with fire hazards would be less than significant.

Additionally, cumulatively-considerable impacts related to public health and safety were determined to be less than significant. PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs or MMs identified in the PA 12 EIR related to hazard and hazardous materials that are applicable to the proposed Project; however, SC PS-1 in Section 6.15, Public Services, of this Addendum, includes a requirement to provide adequate emergency vehicle access.

6.9.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project involves the development of office uses, which was considered in the PA 12 EIR. The proposed Project would involve the use of chemical agents, solvents, paints, fuel for equipment, and other hazardous materials that are associated with construction activities. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no				

greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials and no significant impacts are anticipated to result from the routine use and disposal of these materials. Operation of the proposed office uses would involve the limited use of hazardous materials; however, the use, disposal, and transfer of these materials would be the same as was considered in the PA 12 EIR, and would occur in compliance with applicable federal, State and local requirements that provide for public safety. Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. In March 2020, Advanced Environmental Concepts, Inc. (AEC) conducted a Phase I Environmental Site Assessment (ESA) for the proposed Project (AEC, 2020). The Phase I ESA is included as Appendix E to this Addendum, and summarized herein. It should be noted that the Phase I ESA conducted for the proposed Project is the most recent Phase I to be conducted at the Project site follows previous Phase I Assessment reports prepared between 2007 and 2019, including for the previous use on the site to the east of the Project site. The historical environmental concerns on adjoining and nearby properties have been previously mitigated to the satisfaction of the supervising regulatory agency.

As part of the current effort, AEC conducted a survey of the Project site and associated areas that would subject to landscape enhancements and installation of a recycled water line. The Phase I ESA identifies that the Project site has been graded into future construction pads. There are surface streets; two unlined temporary water retention basins in the southwest portion of the site; a clearing that is improved with a mock-up of the proposed concrete tilt-up commercial buildings; and an area used for the temporary staging of the construction trailers. Northwest of the construction trailers is a steel container used by a construction trade; inside the steel container AEC observed a 500-gallon diesel aboveground storage tank (AST) placed within a secondary containment pan and equipment and materials used during construction. Also, AEC observed along the south boundary a multi-port groundwater monitoring well associated with the El Toro MCAS long-standing TCE investigation. This monitoring well is protected by a metal box and identified as the Westbay Multiport Well 18BGMP06.

The extreme northwest portion of the Project site is currently open ground that was the former location of ground leases consisting of perimeter-fenced unpaved yards occupied by two commercial-use companies. The northwestern most commercial yard was leased to A.L. Vineyard Construction and the adjoining yard to the east was leased to Robert's Waste & Recycling. There is also large excavation in this area that is being used as a "borrow" area for soil during the grading process. As construction proceeds this excavation will be backfilled with excess soil. The offsite ground between the park and ride lot and graded Project site, AEC identified the former Custom Country self-serve point-of-sale firewood display and storage yard which has now been graded into a large water retention basin. AEC also observed a perimeter-fenced water line connected to a water well operated by the Irvine Ranch Water District (IRWD)

which has a perimeter-fenced cell tower operated by Phoenix Enterprises. SCE pad-mounted electrical transformers were identified near the Project site, and as shown on Exhibit 12 there are also wooden poles for electric transmission lines within the Project site.

The Caltrans park and ride lot is asphalt-paved and improved with striping and landscaping; in addition, there is landscaping within the paved area and also along the parking lot boundaries. There is also a concrete bus access drive within the Caltrans Park and Ride lot between Walnut Avenue and the automobile parking area. Adjoining the southeast portion of the lot is the off ramp and on ramp for southbound I-5. The thin strip of the subject property described as Valley Oak and Oak Canyon consists of asphalt-paved surface streets and at the northern terminus open ground planted with vegetation.

The Phase I ESA evaluated whether the Project site and associated improvement areas contain any recognized environmental conditions (RECs) which present a material risk of harm to public health or the environment and generally be the subject of an enforcement action if brought to the attention of appropriate governmental agencies; controlled recognized environmental conditions (CRECs), which are specified as resulting from a past release that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances allowed to remain in place subject to institutional controls; historical recognized environmental conditions (HREC) (i.e. conditions which may have presented a material risk to public health and / or the environment but have now been mitigated to the satisfaction of a regulatory agency at the subject property); and / or "housekeeping conditions" which are considered de minimis and generally do not present a material risk of harm to public health or the environment and would not be the subject of an enforcement action if brought to the attention of an appropriate governmental agency.

The Phase I ESA for the proposed Project concluded that there are no housekeeping conditions, no onsite RECs, no CRECs, two recent onsite historical RECs, no on-site / off-site historical RECs, and two nearby and / or significant off-site RECs, which are described in detail in the Phase I ESA included in Appendix E and summarized below.

Recent Historical Recognized Environmental Conditions

- **Aerially Deposited Lead (ADL)[5] from I-5.** Due to the proximity of the prior and current location of I-5 there is the potential for ADL to impact the site. AEC collected 37 shallow soil samples from approximately 0.5-feet bgs between the approximate eastern boundary of the Project site extending to the west to the Walnut Avenue extension by the former Custom Country Firewood Yard. The 37 soil samples were analyzed for total lead and no sample exceeded the comparative standard of 80 mg / kg. The soil samples were collected from unbiased locations on approximate 1-acre "centers", and, approximately 11 soil samples were collected along the I-5 boundary. Based on the results of this sampling ADL should not be a concern in the landscape improvement areas of the park-and-ride lot and associated with the I-5 / Walnut Avenue intersections since these areas have undergone significant pre-construction grading during the mid-1990s prior to building the parking lot.

[5] Particles of lead emitted from the vehicle exhaust can accumulate over many years along roadways, medians and beneath existing road surfaces.

- **Historic Agricultural Use.** The Project site and the park and ride lot was planted with citrus orchards from prior to 1938 until 1996. Prior environmental studies prepared for the Project site and immediate vicinity included collection of soil sampling and testing for organochlorine pesticides (OCP) and lead / arsenic in 2017. Consistent with the conclusions of the PA 12 EIR, the analytical results did not identify concentrations of OCP compounds exceeding comparative regulatory standards. The on-site arsenic results ranging between 1.7 mg / kg to 7.4 mg / kg exceeded the comparative regulatory standards; however, the analytical results fall within the statistically derived background range of Southern California soil ranging up to 12 mg / kg, therefore, these soils would not be subject to regulatory action.

Off-site Recognized Environmental Condition

- **MCAS El Toro.** The former MCAS El Toro, located east of the Project site, was commissioned in 1943 and encompasses approximately 4,700 acres. In 1993, MCAS El Toro was identified for closure under the federal Base Realignment and Closure (BRAC) process. MCAS El Toro provided material and support for aviation activities of the United States Marine Corps until MCAS El Toro was closed in July 1999. Environmental studies of MCAS El Toro began in 1985, when trichloroethylene (TCE) was detected by the Orange County Water District (OCWD) in a groundwater sample collected from an irrigation well 3,000-feet west of MCAS El Toro. Further investigation concluded that MCAS El Toro was the source of the TCE and other VOCs in groundwater and that the TCE was in the Shallow Groundwater Unit (first depth to water of approximately 80-feet bgs to 130-feet bgs) and the Principal Aquifer (depth to water greater than 250-feet bgs). Due to the off-site extent of the groundwater plume, MCAS El Toro was listed on the National Priorities List (NPL) on February 15, 1990. MCAS El Toro has subsequently undergone numerous phases of remediation for both contaminated soil and groundwater.

  Known contamination plumes remain under portions of MCAS El Toro, and they have migrated northwest approximately 2 miles from their source area; however, the absence of detected TCE concentrations during the March 2018 sampling from the multi-port groundwater monitoring well along the south boundary of the Project site (Westbay Multiport Well 18BGMP06A through E), and the other off-site monitoring wells, indicate that the contaminants from MCAS El Toro have not migrated beneath the Project site. As of March 2017, the majority of the TCE contamination in the Shallow Groundwater Unit has not migrated west of Sand Canyon Avenue and the TCE contamination identified in the Principal Aquifer is south of the Oak Creek Golf Club along Irvine Center Drive.

  The Technical Guidance Document (TGD), prepared by the County of Orange, identifies the presence of TCE in groundwater below the Project site. The TGD is a proactive, regulatory guidance document designed to aid in addressing post-construction runoff for new development and significant redevelopment projects through implementation of Best Management Practices (BMPs). It serves as a primary reference in the preparation of Water Quality Management Plans (WQMPs) for sites undergoing development in Orange and San Diego Counties. Among other things, the TGD was developed for the purpose of protecting groundwater quality from environmental concerns, such as contaminated groundwater plumes. Specifically, the TGD states, "[i]nfiltration shall not be allowed in the vicinity of mapped or potential groundwater plumes, except where infiltration would

not adversely impact groundwater conditions as determined via a site-specific or watershed study applicable to the site."

The TGD and other environmental documents identify the extent of the MCAS El Toro groundwater plume in relation to the Project site differently In addition to groundwater monitoring data (referenced above) that has not detected the migration of TCE from the MCAS El Toro plume onto the Project site (based on most recent update of the March 2018 sampling), there is no indication from AECs prior December 2016 soil gas study that volatile organic compounds have migrated beneath the Project site. While environmental studies differ, the TGD's general precautionary approach to the protection of groundwater from the downward infiltration of surface water is appropriate. Infiltration may have unintended groundwater plume consequences (e.g., mobilization) even when a plume is not directly beneath the infiltration area. Therefore, the Applicant will continue to avoid the use of infiltration BMP's on the Project site; however, if in the future the City allows infiltration of storm water, this item may be re-visited.

The Project would require excavations of up to approximately 15 feet bgs for the installation of utility infrastructure. As previously identified, the Project site was determined to have groundwater at depths over 40 feet to 60 feet bgs and no groundwater was encountered during borings that extended to a depth of 51.5 bgs. Therefore, groundwater would not be encountered and no dewatering would be required. This is consistent with the recently completed construction activities to the east associated with the existing Master Plan 00775712-PMPC office development.

- **Tosco-76 Service Station.** A site west of the park and ride lot along the west side of Jeffrey Road and north side of Walnut Avenue is the Tosco-76 service station at 5410 Walnut Avenue, Irvine. In September 1997 a soil gas survey was conducted at the site which indicated the presence of petroleum hydrocarbons in soil beneath the site. Based on this information further investigation was requested to confirm detections of petroleum hydrocarbons in soil vapor and cleanup case 98UT052 was opened. The Tosco site was issued closure by the Orange County Health Care Agency (OCHCA) and Santa Ana Regional Water Quality Control Board on June 29, 2012. The Phase I ESA does not recommend further work for this site based on the following considerations:

    - Groundwater contaminant concentrations are at or near non-detectable concentrations with the exception of the minor perchloroethylene (PCE) detection.

    - The nearest groundwater production well is located approximately 1,400 feet to the east of the Project site. Groundwater flow direction at the site is reported to the west / northwest.

    - The remaining, limited, groundwater and soil impacts at the site do not pose a threat to human health or the environment.

    - Based on the risk evaluations of available soil and groundwater analytical data, the residual hydrocarbon mass in the soil does not pose a vapor intrusion risk to current site development or neighboring land use.

As also reported in the Phase I ESA, the onsite transformers are of newer vintage and do not contain PCBs. Although not reported as a REC in the Phase I ESA, it should be noted that the wooden electric poles that traverse the site were installed in 1980 after the ban of PCB use. The remaining poles paralleling the

railroad were installed in 1975 and it is possible but not likely that PCBs are present. All the poles are old enough that there is a possibility that creosote, a wood preserving chemical, could be present although this is also not likely. However, should PCBs or creosote be present, SCE implements standard practices in place for handling and disposal of these materials in a manner that not pose a safety hazard.

Therefore, the Approved PA 12 and the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment and the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Project site is not within one-quarter mile of an existing or proposed school. The nearest school to the Project site is Jeffery Trail Middle School, located approximately 0.3-mile southwest. Therefore, the Approved PA 12 Project and the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Accordingly, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, create a significant hazard to the public or the environment?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Phase I ESA included database searches of readily available Federal, State, Tribal, and Local Government database information systems for the purpose of identifying known RECs. The Project site was not on a list of hazardous materials sites; hazardous materials sites in the vicinity of the Project site are discussed under Threshold d, above.

Consistent with the conclusion of the PA 12 EIR, implementation of Approved PA 12 Project and the proposed Project would not create a significant hazard to the public or the environment. Therefore, the proposed Project, which has no impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Project site is not located within 2 miles of a public airport or public use airport. The closest airport is JWA, which is more than 5 miles to the west of the Project site. The Project site is outside of the JWA Clear Zones depicted on Figure J-4, Clear and Accident

Potential Zones, of the Irvine General Plan's Safety Element (City of Irvine, 2015c). Based on review of the "Airport Environs Land Use Plan for John Wayne Airport," the Project site is not within a designated Airport Impact Zone, Airport Environs Land Use Plan (AELUP) Notification Area for JWA, a JWA Obstruction Imaginary Surface area, or a height-restricted zone (Orange County ALUC, 2008). Therefore, no safety hazard would result. The proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The City's Emergency Management Plan (EMP) does not address specific land use planning (City of Irvine, 2004). Instead, it focuses on potential large-scale disasters that would require unusual emergency responses, such as mass evacuations. Development of office uses with the Approved PA 12 Project and the proposed Project would not interfere with the implementation of the City's EMP. Should an emergency occur within the Project site that necessitates evacuation, the proposed internal street system would provide emergency evacuation routes to Sand Canyon Avenue and Jeffrey Road. As with the Approved PA 12 Project, the adequacy of emergency evacuation routes, as well as emergency vehicle access to the Project site, would be reviewed by the Public Safety Department and Orange County Fire Authority (OCFA). Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. According to Figure J-2, *Fire Hazard* Areas, of the Irvine General Plan Safety Element, the Project site is not located within the vicinity of wildlands or fire hazard area; therefore, the Approved PA 12 Project and the proposed Project would not expose people or structures to wildland fires (City of Irvine, 2015c). Therefore, the proposed Project, which has no impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.10 Hydrology and Water Quality

6.10.1 Summary of Previous Environmental Analysis

Hydrology and water quality impacts are addressed in Section 5.7 of the PA 12 EIR. The PA 12 EIR concluded that buildout of the PA 12 area would not affect the general direction of surface runoff, as irrigation and rainfall would continue to flow towards the San Diego Creek and then west towards Jeffrey Road (and ultimately to Newport Bay). The PA 12 EIR concluded that internal drainage patterns may be significantly altered, as the amount of impervious area within PA 12 would increase

as a result of buildout; however, downstream flood control facilities were determined to have adequate capacity to convey the 100-year storm flows following buildout of PA 12. The PA 12 EIR concluded that implementation of the Approved PA 12 Project would not affect existing or planned flood control facilities.

The PA 12 EIR concluded that construction activities may increase the amount of erosion within PA 12 which could increase the sedimentation in the San Diego Creek; however, the increase in erosion / sedimentation associated with construction would be relatively short-term and limited, as compared to erosion / sedimentation associated with ongoing agricultural activities in much of PA 12 when the PA 12 EIR was prepared. Construction equipment may also increase the chance of toxins, such as oil, gas, and solvents, entering the creek. However, construction-related water quality impacts would be reduced to a less than significant level through compliance with the National Pollution Discharge Elimination System (NPDES) stormwater discharge regulations, which includes preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of best management practice (BMPs) such as sandbag dikes, temporary desilting basins, and spillways (as identified in the PA 12 EIR).

The PA 12 EIR concluded that operational activities, particularly operations associated with commercial and industrial structures and roads, would increase the potential of stormwater runoff transporting surface water quality contaminants into the storm drain system. Typical urban runoff contaminants (i.e. oil and grease, surfactant, heavy metals, solvents, pesticides, nutrients, or fecal coliform bacteria) can be expected within runoff reaching the San Diego Creek. However, it was determined that the pollutant loading/concentration generated by the Approved PA 12 Project would be within typical and acceptable ranges for similar projects and that no significant impacts to surface water quality would result.

The PA 12 EIR also concluded that the Approved PA 12 Project would not include the direct extraction of groundwater for public or private use, and would not affect existing or planned extraction wells. The PA 12 EIR further concluded that the Approved PA 12 Project's proposed development would not be affected by the presence of high TCE concentrations in the groundwater because no extraction is proposed and due to the depths at which the high TCE concentrations are present. Finally, with regard to groundwater quality, the PA 12 EIR determined that groundwater in the northern portion of PA 12, near the Project site, has groundwater too deep to be affected by pesticide and chemical migration from the proposed golf course. The PA 12 EIR concluded that no significant impacts to groundwater quality are anticipated as a result of implementation of the Approved PA 12 Project.

Certain parts of PA 12 were also identified within the Laguna Dam inundation area; the Project site, which is north of Alton Parkway, was not location in this inundation area.

Cumulative impacts related to hydrology and water quality were also determined to be less than significant.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The following SCs and MMs from the PA 12 EIR, as modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019), are applicable to the proposed Project. Changes in the text from the PA 12 EIR are signified by strikeouts (~~strikeouts~~) where text has been removed and by bold and underline (**bold and underline**) where text has been added.

The PA 12 EIR requirement to provide evidence of a Flood Insurance Rate Map revision is not applicable to the proposed Project as the Project site is not within a 100-year floodplain. The PA 12 EIR requirement to post a cash deposit for guarantee the sweeping and cleanup of street affected by construction has been deleted as this is no longer a standard condition imposed by the City, and these measures are addressed through the required SWPPP. Further, MM HWQ-1 is not applicable to the proposed Project as the Project site is not within the identified Laguna Dam inundation area, and the Laguna Dam has been removed.

Standard Conditions of Approval

SC HWQ-1 Prior to ~~recordation~~ **release** of ~~the~~ **a** final map **by the City**, the applicant shall construct or enter into an agreement and post security, **in a form and amount acceptable to the City Engineer**, guaranteeing the construction of the following public and / or private improvements in conformance with applicable City standards and the City's Capital Improvement Policy (Irvine Standard Condition ~~A.2~~ **1.1**).

a) Street improvements including, but not limited to, pavements, curb~~s~~ **and~~,~~** gutter~~s~~, medians, sidewalks, drive approaches~~, bus turnouts~~, street ~~and trail~~ lighting, signing, and striping.
b) traffic signal systems, interconnect, and other traffic control **and management** devices~~, as approved by the City Engineer~~.
c) Storm-drain facilities.
~~d) Subdrain facilities.~~
~~e~~ **d**) Landscaping and computerized irrigation control system (**for all public** streets, parks, and public areas).
~~f~~ **e) Sewer**, **reclaimed** and / **or** domestic water system**s, as required by the appropriate sewer and water districts as well as the Orange County Fire Authority when appropriate**.
~~g~~ **f)** Monumentation.
~~h~~ **g)Riding, hiking and bicycle** ~~All~~ trails **adjacent to or through the project site**~~, as required by the City's Master Plan of Riding and Hiking Trails~~.
~~i~~ **h)** Undergrounding of existing **overhead** and proposed utility distribution lines.
~~Standard Condition A.3)~~.

SC HWQ-2 Prior to the issuance of preliminary of precise grading permits for **a project** ~~any development~~ that **will** result~~s~~ in ~~a~~ **soil** disturbance of ~~five~~ **one (1)** or more acres of

land ~~total area (or a smaller parcel of land that is part of a larger common development consisting of five or more areas)~~, the applicant shall **provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board.** ~~obtain from the~~ **Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the** Regional Water Quality Control Board**, or a letter from either agency stating that the NOI has been filed** ~~a National Pollution Discharge Elimination System (NPDES) Industrial Permit for construction activities. Evidence this permit has been obtained shall be submitted to the Director of Community Development~~ (Irvine Standard Condition ~~4.3~~ **2.12**).

Mitigation Measures

MM HWQ-2 Prior to the issuance of preliminary or precise grading permits, the applicant shall **submit to the Chief Building Official for review and approval, a Water Quality Management Plan (WQMP). The WQMP shall identify the Best Management Practices (BMPs) and the full capture systems that will be used on the site to control predictable pollutant runoff, and to meet Statewide Trash Provisions requirements (Irvine Standard Condition 2.13).** ~~provide written evidence to the Manager of Building and Safety that an NPDES permit for stormwater discharge has been obtained from the Regional Water Quality Control Board~~.

6.10.2 Project Environmental Review

In compliance with the City's requirements, a site-specific Preliminary Water Quality Management Plan (WQMP) and a Preliminary Drainage Report has been prepared for the proposed Project (refer to MM HWQ-2). The *County of Orange / Santa Ana Region Priority Project Preliminary Water Quality Management Plan (WQMP) for Planning Areas 12 Innovation Park Office Complex (00808253-PMP) and Vesting Tentative Parcel Map 2019-177 (00816106-PTP)* was prepared by Stantec (Stantec, 2020a). The *Preliminary Drainage Report for Planning Areas 12 Innovation Park Office Complex (00808253-PMP) and Vesting Tentative Parcel Map 2019-177 (00816106-PTP)* was prepared by Stantec (Stantec, 2020b). The results of these reports are summarized below and the reports are provided as Appendix F and G, respectively, of this Addendum.

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. Construction-related stormwater pollutants from the proposed Project are considered within the PA 12 EIR, which covers buildout of the Approved PA 12				

Project. There is a potential for sediments and other construction-related pollutants (e.g., fuels, oil and grease, solvents, paints and other building construction materials, wash water, and dust control water) to enter storm runoff and be transported to nearby waterways. As with Approved PA 12 Project, and consistent with SC HWQ-2, and the NPDES Construction General Permit, the Project Applicant would file a NOI with the State Water Resources Control Board prior to the issuance of a grading permit. Further, in compliance with the NPDES Construction General Permit, a SWPPP would be prepared and erosion control, sediment control, and other BMPs would be implemented to reduce pollutants in the stormwater during construction activities. Mandatory compliance with regulatory requirements, including preparation and implementation of a SWPPP, would ensure neither the Approved PA 12 Project nor the proposed Project would violate any water quality standards or waste discharge requirements during construction, resulting in a less than significant impact.

In compliance with MM HWQ-2 (which reflects current City's Standard Conditions of Approval 2.13), a preliminary WQMP has been prepared for the proposed Project to address potential water quality impacts during operation. The preliminary WQMP was prepared by Stantec and is included as Appendix F, of this Addendum. The proposed Project would generate similar pollutants of concern as the Approved PA 12 Project: suspended-solids / sediments, nutrients, heavy metals, pathogens (bacteria / virus), pesticides, toxic organic compounds, and trash and debris. It should be noted that the preliminary WQMP reflects the 2010 California 303(d) list of impairments for receiving waters; however, the City of Irvine is using the updated 2014/2016 303(d) list, which delists pesticides from the list of impairments for San Diego Creek Reach 1. This update would be reflected in the Final WQMP for the proposed Project.

Implementation of the proposed Project would result in a Hydrologic Conditions of Concern (HCOC) as the runoff volume from the post-developed site would exceed the existing condition by more than 5 percent. This result is expected as the Project site does not currently and has not historically contained impervious surfaces; the implementation of the Project would result in a decrease in pervious surfaces from an existing pre-Project 83 percent to a proposed post-development 34 percent. New storm drain pipes would be installed within the Project site to divert low flow to biofiltration BMPs. The diverted runoff would be treated by proprietary biofiltration units prior to discharging the treated flows back to the on-site main line. A portion of the runoff would be conveyed to underground detention structures to address HCOCs. It should be noted that the proposed Master Plan reflects an extended detention basin, which is currently under construction as part of the approved Master Plan to the east. Stormwater from the currently proposed building site would not drain to this extended detention basin. Additionally, based on current information, infiltration of stormwater is considered infeasible due the presence of the El Toro MCAS groundwater contamination plume in proximity to the Project site; therefore, no infiltration BMPs are proposed.

Further, site design BMPs that would be implemented on-site include, but are not limited to: the amenity area between the proposed buildings would be maximized as much as possible and would consist of walkways and landscape areas; the parking lots would have parking islands that are planted to the maximum extent possible with trees and various ground cover; and the surface gradients would be as shallow as possible to lower stormwater runoff velocities. The proposed Project would also include the following structural source control BMPs: provide storm drain system stenciling and signage; design and construct trash and waste storage areas to reduce pollution introduction; and use efficient irrigation systems and landscape design, water conservation, smart controller, and source control (Stantec, 2020a). Various non-structural source control BMPs would also be implemented. Mandatory compliance with the

final WQMP would ensure that the proposed Project does not violate any water quality standards or waste discharge requirements during operation.

Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Project site is located within the Irvine Sub-basin of the Orange County Groundwater Basin. Groundwater is estimated to be over 40 to 60 feet bgs at the Project site (NMG, 2020). The Approved PA 12 Project and the proposed Project would not include the extraction of groundwater or the installation of groundwater wells. Water would be provided by the IRWD. Implementation of development anticipated by the proposed Project would not involve direct or indirect withdrawals of groundwater during Project construction and operation. Although urban development on the Project site would reduce the pervious areas available for natural recharge, the area covered by the Project site is relatively small from a regional recharge perspective (approximately 36.5 acres). Additionally, the Project site does not receive stormwater flows from off-site areas, only direct precipitation, providing little overall opportunity for recharge under existing conditions. The OCWD is responsible for managing the groundwater basin and has established recharge basins in the cities of Anaheim and Orange. There are no recharge basins in the City of Irvine. Additionally, as discussed above, infiltration at the Project site is not feasible due the presence of the El Toro MCAS groundwater contamination plume in proximity to the Project site. Therefore, development of the Project site with the Approved PA 12 Project or the proposed Project would not result in the depletion of groundwater supplies or substantial interference with groundwater recharge. Therefore, the proposed Project, which has no impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would: **i) result in substantial erosion or siltation on- or off-site;** **ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;** **iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or** **iv) impede or redirect flood flows?**	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As previously discussed, the Approved PA 12 Project and proposed Project would be required to comply with the NPDES Construction General Permit, which

requires preparation of a SWPPP and implementation of erosion control, sediment control, and other BMPs that would reduce potential on-site erosion and off-site sedimentation during construction activities. Additionally, under developed conditions with the Approved PA 12 Project and the proposed Project, erosion and sedimentation would be reduced compared to existing consist with an undeveloped site with exposed soils. Therefore, impacts associated with erosion and sedimentation would be less than significant, consistent with the conclusions of the PA 12 EIR.

The Project site does not contain a stream or river; therefore, consistent with the conclusion of the PA 12 EIR, the Approved PA 12 Project and the proposed Project would not substantially alter the course of a stream or river. Further, the Project site is located within a FEMA Zone X which is defined as having minimal flood risk (FEMA, 2009); therefore, there would be no impacts associated with impeding or redirecting flood flows.

Under the existing condition, runoff from the Project site generally surface flows toward the southwesterly corner of the property to two temporary desilting basins that discharge to the existing 48-inch reinforced concrete pipe (RCP) at the edge of the Oak Creek Golf Course. As previously discussed, a site-specific preliminary drainage report has been prepared for the proposed Project and is included in Appendix G of this Addendum (Stantec, 2020b). The proposed Project would involve the non-residential uses at the Project site, consistent with the Approved PA 12 Project.

The proposed Master Plan is divided into two major tributaries connecting to two existing conveyance systems. Drainage Area B includes runoff from the proposed private roadway that is conveyed by curb inlets and underground private storm drain where most of it discharges into the extended detention basin, which is under construction and was analyzed previously in the 2019 Addendum for the approved Master Plan to the east.

As shown on Exhibit 11, the main storm drain that has already been extended through the Project site to serve the adjacent project would convey 25-year storm flows for the proposed Project. The storm drain improvements have been designed to provide protection at the level required by the City (corresponding to a 25-year storm event).

The stormwater from the proposed development area, which represents the majority of the Project site (Drainage Area A), would be conveyed to the proposed private storm drain facilities within the Project site and would discharge to the existing 42-inch / 48-inch RCP storm drain line that runs parallel to the south property line and ultimately discharges to an existing public 48-inch RCP in the adjacent golf course property, consistent with existing conditions. The 48-inch RCP has a design flow of 149.8 cubic feet per second (cfs). The hydrology analysis for the proposed Project has concluded that under post-development conditions, the 48-inch reinforced concrete pipe would accept an anticipated 155.65 cfs from the Project site. The overage is within the 10 percent tolerance acceptable within standard engineering practice. Additionally, the hydraulic grade line for the existing 48-inch pipe shown on record drawings indicate that there is capacity within the pipe to accept additional flows.

Therefore, the impact would remain less than significant. The proposed Project, which would maintain the overall existing drainage pattern for the Project site, and has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As previously stated, the Project site is not located within a flood hazard zone (FEMA, 2009). Additionally, there are no enclosed bodies of water located in proximity to the Project site, therefore no potential for seiche. The Pacific Ocean is located approximately 8.8 miles to the southwest, and therefore no risk of tsunami. There are no levees located near the Project site and the nearest dam is located approximately 17 miles northwest of the site. Consistent with the conclusions of the PA 12 EIR, the Project site is not located within a flood hazard, tsunami, or seiche zone that would result in inundation of the Project site. Therefore, the Project would not pose a risk for the release of pollutants due to Project inundation. The proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

e) Conflict with or obstruct implementation of a water quality plan or sustainable groundwater management plan?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. At the time the PA 12 EIR was prepared, the CEQA Guidelines did not require an analysis of a project's consistency with a water quality plan or sustainable groundwater plan and, as such, the Approved PA 12 Project's consistency with such plans were not specifically addressed in the PA 12 EIR. This requirement was added to the update to the CEQA Guidelines adopted in December 2018. However, the PA 12 EIR addresses water quality impacts to the San Diego Creek and impacts relative to extraction of groundwater. California's Porter-Cologne Act requires adoption of water quality control plans that contain the guiding policies of water pollution management in California; regional water quality control plans (known as a Basin Plans) have been adopted by each of the Regional Water Boards.

The Project site is in the Santa Ana Region and the Santa Ana RWQCB has developed a Basin Plan for the Santa Ana Basin, including San Diego Creek and Newport Bay. The Basin Plan establishes water quality standards for the ground and surface waters of the region. The Basin Plan describes actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards. The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's groundwater and surface water. Permits are issued under several programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. The RWQCB ensures compliance with the Basin Plan through its issuance of NPDES Permits, issuance of Waste Discharge Requirements (WDR), and Water Quality Certifications pursuant to Section 401 of the CWA. The Basin Plan has identified San Diego Creek as having the following beneficial uses: water contact recreation; non-contact water recreation; warm fresh water habitat; wildlife habitat; rare, threatened, or endangered species habitat; and estuarine habitat. Additionally the Basin Plan has identified the Newport Bay as having the following beneficial uses: navigation; water contact recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; wildlife habitat; rare, threatened, or endangered species habitat; spawning, reproduction and development; marine habitat; shellfish harvesting; and estuarine habitat. The policies from the Basin Plan that apply to the San Diego Creek and Newport Bay include, but are not limited to, Policy for Water Control, Policy for Enclosed Bays and Estuaries, National Pollutant Discharge Elimination System, and Water Discharge Prohibitions.

As discussed under Threshold a, above, there would be a potential for the Approved PA 12 Project and the proposed Project to generate pollutants and impact water quality during construction and operation.

However, as discussed above a Project-specific WQMP has been prepared for the proposed Project, and the Project Applicant is required to implement the proposed Project in compliance with applicable regulations addressing water quality, including applicable NPDES permits. The Approved PA 12 Project and proposed Project would also be required to comply with requirements set forth by the Construction General Permit and Irvine Municipal Code, including preparation of an SWPPP and implementation of construction BMPs to control stormwater runoff and discharge of pollutants. With required adherence to the Project-specific WQMP and Basin Plan policies, the Approved PA 12 Project and the proposed Project would not degrade water quality, cause the receiving waters to exceed the water quality objectives, or impair the beneficial use of receiving waters. As such, the Approved PA 12 Project and the proposed Project would not diminish water quality as defined in the Basin Plan, and would not result in water quality impacts that would conflict with the Basin Plan.

On September 16, 2014, Governor Jerry Brown signed into law the Sustainable Groundwater Management Act (SGMA). The 2014 SGMA requires local public agencies and Groundwater Sustainability Agencies (GSAs) in "high-" and "medium"-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs (DWR, 2020). GSPs are detailed road maps for how groundwater basins will reach long-term sustainability. The California Department of Water Resources (DWR) currently categorizes the Coastal Plan of the Orange County Groundwater Basin (referred to as Basin 8-1) as "medium" priority. The agencies within Basin 8-1 (OCWD, City of La Habra and IRWD) collaborated together in order to submit an Alternative to a GSP to the DWR. The *Basin 8-1 Alternative* was submitted to the DWR in January 2017 (OCWD, IRWD, La Habra, 2017). The Project site is within the OCWD Management Area of Basin 8-1. The Sustainability Goal for the OCWD Management Area is to continue to sustainably manage the groundwater basin to prevent conditions that would lead to significant and unreasonable (1) lowering of groundwater levels, (2) reduction in storage, (3) water quality degradation, (4) seawater intrusion, (5) inelastic land subsidence, and (6) adverse impacts on hydrologically connected surface water. As discussed previously, the Approved PA 12 Project and proposed Project would not involve direct or indirect withdrawals of groundwater and would not impact groundwater quality, and the Project site is not within a groundwater recharge area. Further, due the presence of the El Toro MCAS groundwater contamination plume in proximity to the Project site, no infiltration is proposed. The Approved PA 12 Project and proposed Project would not cause land subsidence or adverse impacts on hydrologically connected surface water. Therefore, the Approved Project and the proposed Project would not obstruct with or conflict with a sustainable groundwater management plan.

Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.11 Land Use and Planning

6.11.1 Summary of Previous Environmental Analysis

Potential land use and planning impacts are addressed in Section 5.1 of the PA 12 EIR. As noted previously, agricultural resources are addressed in the Land Use and Planning section of the PA 12 EIR, but have been addressed in Section 6.2, Agriculture and Forestry Resources, of this Addendum.

The PA 12 EIR concludes that implementation of the Approved PA 12 Project would occur in compliance with associated development standards and regulations and that applicable mitigation measures identified for other topical issue to reduce land use compatibility issues (e.g., noise and aesthetics) would be implemented. Therefore, the PA 12 EIR concluded that the Approved PA 12 Project and would not result in significant impacts associated with substantial or extreme on-site or off-site land use or intensity incompatibilities or inconsistencies; and would not conflict with the environmental goals, objectives, or guidelines of the City of Irvine General Plan or other adopted environmental plans. Cumulative land use and planning impacts were also determined to be less than significant.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs or MMs identified in the PA 12 EIR related to land use and planning beyond those identified in other EIR sections to address potentially significant land use incompatibilities.

6.11.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The Project site is currently vacant and undeveloped and has been recently mass graded. The Project site is bound by I-5 to the north; the approved Master Plan 00775712-PMPC area to the east, which is under construction; the OCTA / Metrolink railroad tracks to the south; and the Oak Creek Golf Club to the west. There are no residential communities located within or adjacent to the Project site, and the Approved PA 12 Project and the proposed Project would implement non-residential land uses anticipated by the current General Plan land use designation and current and proposed zoning for the Project site. The proposed Zone Change (Case No. 008000352-PZC) and the Project's consistency with the City's Municipal Code is further discussed below under Threshold b. As such, the Approved PA 12 Project and the proposed Project would not physically divide an established community. Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

b) 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?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The Approved PA 12 Project and the proposed Project would involve development of the Project site with office uses, which are allowed by the existing General Plan land use designation for the Project site, Research and Industrial, and existing zoning 5.4B (General Industrial). The proposed Project does not involve a General Plan Amendment; however, a zone change is requested. As described in Section 3.1 of this Addendum, the zone change includes: (1) a reduction in the overall building intensity (square footage) assumed in the Zoning Ordinance for PA 12 (a reduction of 381,277 sf); (2) a change in the zoning district from 5.4B (General Industrial) to 5.5H (Medical and Science) to facilitate the implementation of an office campus complimenting and integrating with the approved office development associated with the approved Master Plan 00775712-PMPC to the east; and, (3) a modification to the current Trip Monitoring Program for PA 12 to simplify the process for tracking the consistency of the land uses in the Spectrum 7 portion of Planning Area 12 with the underlying traffic study for the development area. It should be noted that the proposed office uses for the Project site are consistent with both the existing and proposed zoning for the site. As addressed through the analysis presented in this Addendum, the Approved PA 12 Project and the proposed Project would not cause a significant environmental impact due to a conflict with any applicable land use plan or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Notably, the Approved PA 12 Project and the proposed Project are consistent with the General Plan land use designation for the Project site and applicable goals and policies outlined in the City's General Plan.

SCAG is the MPO for six counties: Orange, San Bernardino, Riverside, Los Angeles, Ventura, and Imperial. As the designated MPO, the federal government mandates that SCAG research and prepare plans for transportation, growth management, hazardous waste management, and air quality. SCAG's 2016-2040 RTP / SCS is a planning document for the regional transportation and land use network and includes goals that are intended to provide guidance for considering proposed projects for municipalities throughout the SCAG jurisdictional area within the context of regional goals and policies (SCAG, 2016). The City's General Plan was used to develop the land use and growth assumptions in SCAG's 2016-2040 RTP / SCS and 2016 AQMP. The proposed Project, which involves an overall reduction in building intensity (square footage) in PA 12, is not regionally significant and would not conflict with regional planning programs, including the RTP / SCS.

Consistent with the conclusion of the PA 12 EIR, the Approved PA 12 Project and the proposed Project would not result in a conflict with any land use plan, policy, or regulation. Therefore, the proposed Project, which has no impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.12 Mineral Resources

6.12.1 Summary of Previous Environmental Analysis

Mineral resources are addressed in Section 5.6, Earth Resources, of the PA 12 EIR. The PA 12 EIR did not identify mineral resource areas within PA 12, and did not identify any project or cumulative impacts to mineral resources as a result of implementation of the Approved PA 12 Project.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs or MMs identified in the PA 12 EIR related to mineral resources.

6.12.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. There are no known mineral resources of value to the region and the residents of the State within the limits of the Project site. Implementation of the Approved PA 12 Project and the proposed Project would not result in the loss of availability of known mineral resources and impacts. Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. There are no locally important mineral resource recovery sites delineated within the Irvine General Plan or in any specific plan, or other land use plan that would affect the Project site. Therefore, implementation of the Approved PA 12 Project and the proposed Project would not result in the loss of a locally important mineral resource recover site. Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.13 Noise

6.13.1 Summary of Previous Environmental Analysis

Noise impacts are addressed in Section 5.4 of the PA 12 EIR. The PA 12 EIR concluded that construction noise impacts to nearby sensitive receptors are unavoidable but would be temporary and construction activities would be limited to the hours allowed by the Irvine Municipal Code. Therefore, construction impacts were determined to be less than significant. However, mitigation measures were recommended to ensure construction-related impacts remain less than significant.

With respect to traffic-related noise impacts, the PA 12 EIR concluded that impacts from the Approved PA 12 Project would be less than significant, and that the Approved PA 12 Project's contribution to cumulative traffic-related noise impacts would not be cumulatively considerable. The PA 12 EIR also identifies SCs that require compliance with the City's interior and exterior noise standards.

The PA 12 EIR concluded that noise generated by commercial and industrial activities would normally be short term, and is generally not considered to be a significant noise impact to other commercial and industrial uses. However, in the event that specific uses of a unique nature with the potential to generate very high noise levels are proposed, a detailed noise impact analysis would be required, and noise mitigation measures would be implemented to reduce stationary noise impacts from the proposed new sources.

The PA 12 EIR addressed potential noise impacts associated with operations at MCAS Tustin and MCAS El Toro; however, the MCAS operations have ceased and this analysis and associated SCs and MMs are no longer applicable.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The following SC from the PA 12 EIR, as modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019), is applicable to the proposed Project. Changes in the text from the PA 12 EIR are signified by strikeouts (~~strikeouts~~) where text has been removed and by bold and underline (**bold and underline**) where text has been added.

SCs and MM N-2, which address MCAS El Toro and MCAS Tustin noise impacts, do not apply to the proposed Project as airport operations have ceased. MM N-1 does not apply because excavation activities associated with proposed Project would not impact sensitive receptors. MM N-3 does not apply as the City has not adopted a Noise Barrier Fee Program. MM N-4 does not apply as the proposed Project does not involve an application for a Master Tentative Tract Map.

Standard Conditions of Approval

SC N-1 Prior to the **issuance of** ~~submittal of applications for~~ building permits for each structure **or tenant improvement**, other than a parking structure, the applicant shall submit a final acoustical report prepared to the satisfaction of the Director of Community Development**.** ~~and showing~~ **The report shall demonstrate** that the development will be sound attenuated against present and projected noise levels including ~~stationary,~~ roadway, aircraft, helicopter, and railroad, ~~noise~~ to meet City interior and exterior noise standards. The final acoustical ~~analysis~~ **report** shall **include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list identifying the sheet(s) of the building plans that include required sound attenuation measures** ~~calculate the noise impact exposure levels and specify mitigation measures necessary to bring the project into conformance with applicable City noise standards and policies. The final acoustical analysis shall be prepared by an expert or authority in the field of acoustics~~ (Irvine Standard Condition ~~5.2~~ **3.5**).

~~In conjunction with the submittal of applications for building permits for each structure, documentation shall be provided to demonstrate that all mitigation measures identified in the approved final acoustical report required by Standard Condition 5.2 have been incorporated into the project (Irvine Standard Condition 6.1).~~

6.13.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
NOISE: Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The proposed Project does not change the type of land uses anticipated with the Approved PA 12 Project, or increase the amount of non-residential development in PA 12. Rather, the proposed Project would reduce the allowable development intensity within PA 12, as further discussed in Section 3.0, Project Description, of this Addendum. The types of land uses surrounding the Project site have been developed in accordance with the land uses approved under the Approved PA 12 Project and analyzed in the PA 12 EIR. Additionally, with the exception of the reduction in aircraft noise due to the closure of the MCAS El Toro and MCAS Tustin, the sources of ambient noise have not changed (primarily noise from adjacent transportation facilities, including the railroad and I-5). With respect to operations, the noise generated by the Approved PA 12 Project and the proposed Project would result from on-site activities and vehicle trips generated by proposed uses. Because the uses to be				

developed at the site are the same with the Approved PA 12 Project and proposed Project, the on-site activities are anticipated to be substantially similar. The Village Church of Irvine and the Orange Coast Seventh Day Adventist Church are located approximately 450 feet and 600 feet, respectively, south of the Project site, in an area zoned 5.4B, General Industrial. The OCTA / Metrolink rail line and a row of buildings are between the Project site and the two churches. Given the distance from the Project site, intervening structures, and compliance with the City Noise Ordinance, there would be no significant noise impacts related to on-site operations from the Approved PA 12 Project and the proposed Project. Further, as identified in Section 6.17, Transportation, of this Addendum, the anticipated ADT for the proposed Project under buildout conditions would be reduced by approximately 18.9 percent (36,789 ADT compared to 45,362 ADT). Therefore, the proposed Project would not increase Project-specific and cumulative traffic-related noise impacts to off-site uses beyond that anticipated in the PA 12 EIR. Therefore, the operational noise impacts associated with the proposed Project, similar to the Approved PA 12 Project, would be less than significant.

As with the Approved PA 12 Project, the proposed office uses would be exposed to noise generated by railroad operations along the southern property; however, as stated in the PA 12 EIR, the industrial uses along the OCTA / Metro Link railroad tracks are not considered a noise sensitive land use. Regardless, SC N-1, which is incorporated into the proposed Project requires preparation of an acoustic report to ensure that the City's interior noise standards are met through building design.

The construction activities and methods for the proposed Project would be the same as for the Approved PA 12 Project. As with the Approved PA 12 Project, project-related construction activities at the Project site would not occur near sensitive receptors. However, as with the Approved PA 12 Project, the proposed Project would require that construction hours comply with the Irvine Municipal Code requirements. Compliance with the Irvine Municipal Code would ensure that construction-related noise impacts are less than significant, consistent with the conclusion of the PA 12 EIR.

Therefore, the impact would remain less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the PA 12 Project.

b) Generation of excessive groundborne vibration or goundborne noise levels?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Construction of the proposed Project would involve heavy construction equipment that can produce vibration to nearby receptors. Vibration from construction equipment is barely perceptible in the range from 0.01-0.04 inches/second peak particle velocity (ppv) (Caltrans, 2013). The closest buildings to the Project site are approximately 150 feet away and at that distance vibration impacts from heavy equipment, such as heavy bulldozers or caisson drilling would be less than 0.01 inches/second (ppv) and would not be perceptible. The impact would be less than significant. The Approved PA 12 Project and the proposed Project would involve the development of office uses and would not involve the development of any use that would generate excessive groundborne vibration or groundborne noise levels. There would be no impact from on-site operations. Additionally, the proposed office buildings are more than 200 -feet from the railroad tracks and would not be subjected to vibration from the adjacent railroad during train pass-bys that would be disruptive to uses anticipated in a Category 3 building (e.g., quiet offices that do not have vibration-sensitive equipment). Therefore, the impact would

be less than significant. The proposed Project and the Approved PA 12 Project would have less than significant vibration impacts, and would not result in any new significant effects.				
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. Consistent with the conclusion of the PA 12 EIR, the Project site is not located within an airport land use plan or within two miles of JWA or a private airstrip. Specifically, the Project site is not within the designated Airport Planning Area for JWA (Orange County ALUC, 2008). Further, based on review of Figure F-1, Aircraft Noise, of the Noise Element of the City's General Plan, the Project site is not within the aircraft noise contours for JWA (City of Irvine, 2015). No impact related to exposure to excessive noise associated with airports or airstrips would occur with the Approved PA 12 Project or the proposed Project. The proposed Project, which has no impacts in this regard, consistent with the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.14 Population & Housing

6.14.1 Summary of Previous Environmental Analysis

Potential impacts related to population and housing are addressed in Section 5.13 of the PA 12 EIR. The PA 12 EIR concludes that the Approved PA 12 Project would result in an increase in employment, housing and associated population within PA 12. However, the number and type of dwelling units associated with the Approved PA 12 Project are consistent with growth projections in the Irvine General Plan and is therefore not considered a significant impact. The PA 12 EIR also concluded that resulting jobs / housing ratio would also be consistent with General Plan projections and that cumulative impacts would be less than significant.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs or MMs identified in the PA 12 EIR related to population and housing.

6.14.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
POPULATION AND HOUSING: Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The proposed Project, as with the Approved PA 12 Project, would not introduce residential land uses within the Project site; therefore, there would be no direct population generation from residential uses. Further, the proposed Project would include the extension of roads and infrastructure, but only as necessary to accommodate the proposed Project. With respect to employment growth, the proposed Project would involve the development of non-residential uses at the Project site, consistent with the Approved PA 12 Project. However, with the proposed Project, the overall amount of buildout intensity within PA 12, as currently anticipated in the General Plan and PA 12 zoning would be reduced. As the proposed Project would reduce the amount of non-residential building intensity (square footage) in PA 12, it would not induce substantial unplanned population growth. Therefore, impacts would be less than significant, consistent with the conclusion of the PA 12 EIR. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. There are no existing residential structures located within the Project site, nor were there at the time the PA 12 EIR was prepared. Therefore, implementation of the Approved PA 12 Project and the proposed Project would not result in the displacement of housing or a substantial number of people. Therefore, the proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.15 Public Services

6.15.1 Summary of Previous Environmental Analysis

Potential impacts related to fire protection, police protection, and other public services are addressed in Section 5.10 of the PA 12 EIR; potential impacts related to parks are addressed in Section 5.12, Recreation, of the PA 12 EIR. The PA 12 EIR concluded that buildout of the Approved PA 12 Project would result in an increase in demand for public services would be less than significant based on the phasing of development over time, and ongoing budget review by the City. The PA 12 EIR addresses impacts related to public parks based on the increase in residential uses and associated population, and concluded that non-residential development would not have a significant impact related to parks or schools.

Cumulative impacts related to public services and facilities were also determined to be less than significant in the PA 12 EIR.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The following SCs, as modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019), and MMs from the PA 12 EIR, are applicable to the proposed Project. Changes in the text from the PA 12 EIR are signified by strikeouts (~~strikeouts~~) where text has been removed and by bold and underline (**bold and underline**) where text has been added.

MM F-1 was required to be implemented with submittal of the first tentative tract map for PA 12 and is not applicable to the proposed Project. MM P-1 is not applicable to the proposed Project because the City has not developed a Citywide impact fee program for police protection. The MMs related to recreation are not applicable as they are related to development of the golf course (MM R-1 and MM R-2), and the development of park plans (MM R-3).

Standard Conditions of Approval

SC F-1 Prior to the recordation of a final tract / parcel map, all fire protection access easements shall be approved by the Fire Chief and the Director of Community Development and dedicated to the City.

SC F-2 In conjunction with the submittal of applications for building permits, a construction phasing plan shall be submitted to demonstrate that emergency vehicle access is adequate. The plan shall be reviewed and approved by the Fire Chief and the Director of Community Development.

SC F-3 Prior to the storage or presence of combustible materials or construction onsite, fire hydrants or equivalent devices capable of flow in amounts approved by the Orange

County Fire Department shall be in place and operational to meet fire flow requirements ~~(Irvine Standard Condition 10.4)~~.

6.15.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
PUBLIC SERVICES: Would the Project				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Police protection?	☐	☐	☐	☒
ii) Fire protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project is located within the service area of the OCFA, IPD, Irvine Unified School District (IUSD), and Irvine Community Services Department, and the Orange County Public Library System. Consistent with the Approved PA 12 Project, the proposed Project would involve the development of non-residential uses at the Project site; no residential uses are proposed.

Although the proposed Project would involve an overall reduction in non-residential building intensity (square footage) in PA 12, the proposed uses under the Approved PA 12 Project and proposed Project would generate similar demand for police and fire protection services. As with the Approved PA 12 Project, the proposed Project would be developed in accordance with City of Irvine and OCFA requirements relative to access, provision of adequate fire flow (water), building design, etc. Further, as part of the Master Plan and Parcel Map review, OCFA reviewed the plans and provided conditions of approval that would be applied to the proposed development.

As with the Approved PA 12 Project, the proposed Project would not include residential uses and would not generate school-aged children requiring school services from the IUSD. However, the Project Applicant would pay school impact fees on commercial development, as required by State law, or enter into a mitigation agreement; this requirement was established after the PA 12 EIR was prepared.

The Approved PA 12 Project and proposed Project would not require the construction of new or expanded fire or police protection facilities, or schools. Impacts related to these public services for the Approved PA

12 Project and the proposed Project would remain less than significant, consistent with the conclusion of the PA 12 EIR. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.16 Recreation

6.16.1 Summary of Previous Environmental Analysis

Potential impacts related to recreation are addressed in Section 5.12 of the PA 12 EIR. The PA 12 EIR concluded that the residential portion of the Approved PA 12 Project would be subject to parkland dedication requirements and that with required dedications the Approved PA 12 Project would not result in any impacts to recreational facilities. The PA 12 EIR did not identify any impacts to recreation facilities as a result of implementation of non-residential uses. The PA 12 EIR identified mitigation to further reduce potential impacts associated with the golf course and with the design and implementation of park space throughout the PA 12 area. This impact was determined to be less than significant. Cumulatively-considerable impacts were determined to be less than significant following implementation of mitigation.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs identified in the PA 12 EIR related to recreation. As discussed above, the PA 12 EIR included MM R-1 and MM R-2; however, they are not applicable to the proposed Project as they are associated with the golf course located west of the Project site, which was previously constructed. Additionally, the PA 12 EIR included MM R-3; however, this measure is not applicable as the proposed Project does not include residential uses that would require park dedication.

6.16.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
RECREATION: Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project would not involve the development of residential uses within the Project site and would not result in direct population growth (see Section 6.14 of this Addendum) that would increase the use of parks and / or recreational facilities. There could be a limited increase in the daytime use of nearby and adjacent trails with the addition of office development as the proposed Project would provide pedestrian and bicycle facilities on-site that would facilitate use of existing trails in the area, such as the trails along Jeffrey Road				

(the Jeffrey Open Space Trail [JOST]) and Sand Canyon Avenue. The Approved PA 12 Project and the proposed Project would not result in the substantial physical deterioration of recreational facilities and impacts would be less than significant. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The Approved PA 12 Project and the proposed Project do not involve the construction of recreational facilities at the Project site; therefore, there would be no adverse physical effects resulting from the construction of such facilities. It should be noted that on-site amenities would be provided for employees, and pedestrian and bicycle facilities would be constructed to encourage non-vehicular travel. These facilities are within the physical impact areas addressed in this Addendum and no additional physical impacts would result. Consistent with the findings in the PA 12 EIR, the proposed Project would result in less than significant impacts associated with the construction of recreational facilities. The proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

6.17 Transportation

6.17.1 Summary of Previous Environmental Analysis

Traffic and circulation impacts resulting from the Approved PA 12 Project are discussed in Section 5.3 of the PA 12 EIR. Public transportation is addressed in Section 5.10, Public Services, Utilities, and Energy Consumption. Additionally, vehicle miles traveled (VMT) is discussed in Section 5.5, Air Quality, of the PA 12 EIR.

In order to determine the Approved PA 12 Project's impacts on future traffic conditions, trip generation was calculated for the land uses proposed in PA 12. At buildout, it was estimated that the Approved PA 12 Project would generate 9,694 AM peak hour trips, 11,881 PM peak hour trips, and 131,086 ADT. The PA 12 EIR also identified various improvements that would be implemented as part of the PA 12 Project along the following roadways: Jeffrey Road, Alton Parkway, Barranca Parkway, Sand Canyon Avenue, Irvine Center Drive, and North / South Parkway ("A" Street) (existing Valley Oak).

The PA 12 EIR evaluated Existing Plus Project and Cumulative Post Year 2010 traffic impacts on study area roadways and intersection. Pertinent to this Addendum, the PA 12 EIR concludes that prior to mitigation, implementation of the PA 12 Project would have significant impacts to nine roadway segments under the Cumulative Post Year 2010 traffic analysis scenario, as implementation of the PA 12 Project would cause these roadway segments to exceed the City's performance criteria (LOS D or better with volume / capacity ratio [V / C] not exceeding 0.90):

- Sand Canyon Avenue between Alton Parkway and I-405
- Alton Parkway between Jeffrey Road and East Yale Loop
- Alton Parkway between West Yale Loop and Lake
- University Drive between Yale Avenue and Culver Drive
- University Drive between Michelson Drive and Ridgeline
- Barranca Parkway between Culver Drive and West Yale Loop
- Culver Drive between Trabuco Road and I-5 northbound on-ramp
- Walnut Avenue west of Jeffery Road between Jeffery Road and Yale Loop
- Michelson between Culver Drive and Harvard Avenue

Further, the PA 12 concluded that the following intersection would be impacted under the Cumulative Post Year 2010 traffic analysis scenario, as implementation of the PA 12 Project would cause these intersections to exceed the City's performance criteria (LOS D or better with intersection capacity utilization [ICU] not exceeding 0.90):

- Culver Drive and Irvine Center Drive (AM peak hour)
- Culver Drive and Alton Parkway (PM peak hour)
- Jeffrey Road and I-5 Southbound Ramps / Walnut Avenue (AM and PM peak hours)
- Jeffrey Road and Alton Parkway (PM peak hour)
- Sand Canyon Avenue and Alton Parkway (PM peak hour)
- Jeffrey Road and Irvine Center Drive (AM and PM peak hours)

The PA 12 EIR included an SC (requiring a Phasing Plan to address the implementation of required on- and off-site improvements), and mitigation measures (MM-TR-1 through MM-TR-3) to reduce the traffic impacts resulting from the PA 12 Project. The PA 12 EIR concluded that with implementation of the identified mitigation measures, the traffic impacts would be mitigated to a less than significant level.

It should also be noted that the PA 12 EIR also required implementation of transportation demand reduction measures as previously discussed in Section 6.3, Air Quality, of this Addendum.

With respect to public transportation, the PA 12 EIR concluded there would be an increased demand for public transportation, which includes bus services provided by the Orange County Transportation Authority (OCTA). The impact to public transportation was determined to be less than significant with the addition of bus pads / turnouts on Jeffrey Road, Alton Parkway and Sand Canyon Avenue, and adequate pedestrian access to developments within PA 12. Although no significant impacts were identified MM PT-1 required coordination with OCTA regarding public transportation requirements.

With respect to VMT, the PA 12 EIR discusses the reduction of vehicular emissions through the application of transportation demand management strategies and associated reduction in vehicular trips and VMT. Notably, the PA 12 EIR identifies that incorporation of PA 12 into the City of Irvine's Spectrumotion program is aimed at increasing vehicle occupancy rate and reducing vehicle trips and VMT.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

The requirement for additional traffic analysis to be completed in conjunction with the first tentative tract map to reevaluate roadway and intersections that did not meet the established performance criteria (MM TR-1 and MM TR-2) and determine the necessary mitigation has been satisfied. Specifically, the *Planning Area 12 Tentative Tract Map and Tentative Parcel Map Traffic Study* was completed by Austin-Foust Associates, Inc. (AFA) in March 1995 (March 1995 PA 12 Traffic Study) (AFA, 1995). The March 1995 PA 12 Traffic Study concluded that the traffic generated by Tentative Tract Map was less than traffic generated by original Approved PA 12 Project and that the identified roadway segment impacts would not occur; therefore, no mitigation was required.

The March 1995 PA 12 Traffic Study further concluded that only three intersections would be impacted with implementation of the Tentative Tract Map: Culver Drive / Barranca Parkway, Culver Drive / Alton Parkway, and Jeffrey Road / Alton Parkway. The mitigation for impacts at the Culver Drive / Barranca Parkway and Culver Drive / Alton Parkway intersection included a fee payment for implementation of an Advanced Traffic Management System (ATMS). At the Jeffrey Road / Alton Parkway intersection implementation of a northbound free right-turn lane was required. The mitigation measures outlined in the March 1995 PA 12 Traffic Study have been completed.

MM TR-3 identified improvements that would be required to ensure intersection impacts as identified in the PA 12 EIR would be reduced to a level considered less than significant. However, MM TR-3 further indicates that the improvements identified were only recommendations at the time, and the exact nature of improvements to be implemented would be determined as part of future detailed analyses. As noted above, more detailed analysis as completed as part of the March 1995 PA 12 Traffic Study. Additionally, as required by the City, the *Spectrum 7 (City of Irvine Planning Area 12) Zone Change Study (Case No. 00800352-PZC)*, has been completed by Stantec for the currently proposed Project (Spectrum 7 Traffic Study) (April 2020) (Stantec, 2020c). The Spectrum 7 Traffic Study ensures compliance with the PA 12 EIR mitigation requirements.

Coordination with OCTA as outlined in MM PT-1 was required to be implemented with submittal of the first tentative tract map for PA 12 and is not applicable to the proposed Project.

Revised 2019 Addendum Project Design Feature

A concept striping plan has been prepared for the segment of Progress between Jeffrey Road and the I-5 southbound ramps based on the Synchro / SimTraffic simulation modeling. The initial concept plan developed in the June 2019 VTPM 2019-104 traffic study was reviewed by the City and Caltrans, and comments from both agencies have been incorporated into the current design. The concept was refined through the testing of multiple iterations of roadway lane configurations to optimize traffic flow through the corridor while maintaining access to the park-and-ride lot. The conceptual design at the intersections of I-5 Southbound Ramp / Progress and Jeffrey Road and Walnut Avenue / Progress have been refined; these refinements require modifications to PDF-TR-1 from the 2019 Addendum, as presented below.

PDF-TR-1 Project Related Roadway Improvements: New on-site roadways and roadway improvements adjacent to the Project site are proposed to facilitate access to and from the development uses proposed in PA 40 and PA 12. Figure 5.14-7 in the 2008 EIR, PA 12 and PA 40 Project-Related Roadway Improvements, illustrates the general nature, location, and timing of those improvements, and Table 5.14-10 in the 2008 EIR, Project-Related Roadway Improvements, provides a brief description of each improvement. As part of the Planning Area 12 Master Plan (00775712-PMPC) and Vesting Tentative Parcel Map 2019-104 Project, Walnut Avenue / Burt Road shall be improved and constructed as a continuous, privately maintained access road between Sand Canyon Avenue and the I-5 southbound ramps at Walnut Avenue. The segment of Walnut Avenue between Jeffrey Road and the I-5 southbound ramps shall be modified to accommodate the extension easterly of the ramps and to improve access to the existing park-and-ride lot located between Jeffrey Road and the I-5 southbound ramps.

Prior to the issuance of the first building permit in TPM 2019-104, the Project Applicant shall submit design plans and pay applicable plan check fees to the City and post surety, in a manner acceptable to the City, for the cost of the southbound Sand Canyon improvements consistent with the Sand Canyon Operational Analysis dated July 2, 2019. Subject to review and approval by the City and Caltrans, the Project Applicant shall implement the identified improvements prior to the issuance of the final use and occupancy permit in TPM 2019-104.

Prior to release of the final map by the City, the Project Applicant shall construct the following or enter into an agreement and post security, in a form and amount acceptable to the City guaranteeing the construction of the following public and / or private improvements:

- **I-5 Southbound Ramp / ~~Walnut Avenue~~ Progress**. Subject to approval by Caltrans, implement the signalization of the intersection, which was previously conditioned for the development of PA 12 Parcel Map No. 97-184, and provide one eastbound through lane and two westbound through lanes on ~~Walnut Avenue~~ **Progress**, double left-turn lanes from eastbound ~~Walnut Avenue~~ **Progress** to the southbound I-5 on-ramp, and a ~~right-turn lane and an optional~~ **single** left-turn **lane and double** right-turn lane**s** from the southbound I-5 off-ramp to ~~Walnut Avenue~~ **Progress**.

- **Sand Canyon Avenue / Burt Road - Progress Intersection**. Provide a second left-turn lane from eastbound ~~Burt Road~~ **Progress** to northbound Sand Canyon Avenue, a right-turn lane from eastbound ~~Burt Road~~ **Progress** to southbound Sand Canyon Avenue, and a second left-turn lane from northbound Sand Canyon Avenue to westbound ~~Burt Road~~ **Progress**.

- **Jeffrey Road / Walnut Avenue - Progress Intersection**. **Provide a second right-turn lane from westbound Progress to northbound Jeffrey Road**~~Modify traffic signal to provide an overlap phase between the westbound right-turn movement and the southbound left-turn movement~~.

6.17.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As discussed under Threshold b, below, pursuant to Senate Bill (SB) 743, the requirement for analyzing congestion impacts for CEQA purposes was eliminated in December 2018. This analysis focuses on the consistency of the Project with programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Roadways and Intersections

The assessment of the Project's consistency with programs, plans, ordinances, or policies addressing the roadway system takes into consideration the estimated trip generation from the Project compared to the Approved PA 12 Project. Table 6.17-1 provides a comparison of the trip generation estimates for the Spectrum 7 area of PA 12, which includes the Project site, with and without the proposed Project. As previously described, the zone change associated with the proposed Project involves an overall reduction in the non-residential building intensity (square footage) in Spectrum 7; a reduction of 538,477 sf (per ITAM 15) is proposed. The trip rates applied in the No Project scenarios are primarily taken from the traffic study prepared for the PA 12 EIR in order to provide a direct comparison to the number of trips that were expected to be generated and then analyzed in the PA 12 EIR. The exceptions are for the adjacent site (approved Master Plan 00775712-PMPC) where, consistent with the June 2019 PA 12 VTPM 2019-104 Traffic Study, office trip rates are applied from the Institute of Transportation Engineers (ITE) 10th Edition Trip Generation Manual, and for mini warehouse land uses where ITE 10th Edition trip rates are applied because there were no mini warehouse trip rates applied in the PA 12 EIR Traffic Study. The trip rates applied in the with-project scenarios are all taken from the ITE 10th Edition Trip Generation Manual. The land use and trip generation estimates for the No Project and With Project traffic analysis scenarios are summarized in Table 6.17-1 for buildout conditions. As shown, under the buildout condition, the proposed Project is forecast to generate 765 (15.7 percent) fewer AM peak hour trips; 1,017 (20.3 percent) fewer PM peak hour trips; and, 8,573 (18.9 percent) fewer daily trips compared to No Project conditions (representing the Approved PA 12 Project).

Table 6.17-1 Land Use and Trip Generation Summary – Buildout Scenarios

ITAM TAZ	ITAM LU Code	Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT
					In	Out	Total	In	Out	Total	
NO PROJECT											
Spectrum 7 Vesting Tentative Parcel Map 2019-177 Site											
156	125	Research & Development	TSF	392.749	365	39	404	82	334	416	3,676
Spectrum 7 Vesting Tentative Parcel Map 2019-104 Site											
156	121	Office	TSF	575	605	98	703	112	586	698	5,904
Remainder of Spectrum 7											
157	218	Office	TSF	280.079	319	76	395	95	297	392	4,173
	221	R&D	TSF	337.147	314	34	348	71	287	358	3,156
	214	Manufacturing	TSF	191.795	90	10	100	6	56	62	767
	161	Mini Warehouse	TSF	168.036	10	7	17	13	15	28	254
159	121	Office	TSF	157.2	179	42	221	53	167	220	2,342
	159	R&D	TSF	606.191	564	61	625	127	515	642	5,674
	214	Manufacturing	TSF	2.5	1	0	1	0	1	1	10
	223	Warehouse	TSF	208.142	92	10	102	8	75	83	1,041
	132	Government Facility	TSF	100.666	245	27	272	109	254	363	3,020
161	221	R&D	TSF	684.442	637	68	705	144	582	726	6,406
163	221	R&D	TSF	955	888	96	984	201	812	1,013	8,939
Sub-Total Trip Generation					3,339	431	3,770	827	3,061	3,888	35,782
Total Trip Generation											
Land Use Based Trip Rates[a]					4,309	568	4,877	1,021	3,981	5,002	45,362
WITH PROJECT											
Spectrum 7 Vesting Tentative Parcel Map 2019-177 Site											
156	121	Office	TSF	470	494	80	574	91	479	570	4,825
Spectrum 7 Vesting Tentative Parcel Map 2019-104 Site											
156	121	Office	TSF	575	605	98	703	112	586	698	5,904
Remainder of Spectrum 7											
157	121	Office	TSF	165.575	174	28	202	32	169	201	1,700
	218	Office	TSF	280	295	48	343	54	285	339	2,875
	221	Research & Development	TSF	156	50	17	67	11	66	77	1,757
	161	Mini Warehouse	TSF	600	36	24	60	48	54	102	906
159	121	Office	TSF	100	105	17	122	19	102	121	1,027
	221	R&D	TSF	150	48	17	65	11	63	74	1,689
	214	Manufacturing	TSF	2.5	1	0	1	1	1	2	10
	223	Warehouse	TSF	210	27	8	35	11	29	40	365
	132	Government Facility	TSF	100.666	253	85	338	43	129	172	2,274
161	121	Office	TSF	610.729	642	104	746	118	622	740	6,270
163	121	Office	TSF	700	736	120	856	136	713	849	7,187
Sub-Total Trip Generation					2,367	468	2,835	484	2,233	2,717	26,060
Total Trip Generation											
Land Use Based Trip Rates[b]					3,466	646	4,112	687	3,298	3,985	36,789
Difference (No Project Compared to With Project					***-843***	***78***	***-765***	***-334***	***-683***	***-1,017***	***-8,573***
% Difference					***-19.6%***	***13.7%***	***-15.7%***	***-32.7%***	***-17.2%***	***-20.3%***	***-18.9%***

R&D – Research and Development; ADT – average daily trips; ITAM – Irvine Transportation Analysis Model; TAZ – traffic analysis zone; TSF – thousand square feet.

a. The trip rates applied in the no-project scenario are taken from the 1994 PA12 12 EIR traffic study except for the VTPM 2019-104 site where ITE 10th Edition office trip rates are applied and for mini warehouse use where ITE 10th Edition mini warehouse trip rates are applied because there were no mini warehouse trip rates applied in the 1994 PA12 EIR traffic study.

b. The trip rates applied in the with-project scenario are taken from the ITE 10th Edition Trip Generation Manual.

Source: (Stantec, 2020c)

City of Irvine

With respect to programs, plans, and ordinances relative to the circulation system the following objective from the Irvine General Plan Circulation Element (CIty of Irvine, 2015e) is applicable to the Approved PA 12 Project and the proposed Project:

- ***Objective B-1: Roadway Development***. Plan, provide and maintain an integrated vehicular circulation system to accommodate projected local and regional needs.

Policy (c) under this objective establishes LOS standards that "shall be the goal applied to arterial highways, … which are in the City of Irvine or its sphere of influence, and which are under the City's jurisdiction." Within PA 12, LOS D or better is considered acceptable. Based on the results of the Spectrum 7 Traffic Study, the following intersections would operate at a deficient LOS under the Short-term Interim Year, Long-Range Interim Year, and Buildout traffic analysis scenarios. However, none of these deficient intersections require improvements by the proposed Project based on the peak hour intersection ICU improvement thresholds. As noted previously, the proposed Project includes a zone change that would reduce the overall building intensity (square footage) in the Spectrum 7 area of PA 12.

Short-Term Interim Year

- 289. Jeffrey Road & Irvine Center Drive – PM LOS=E

Long-Range Interim Year

- 312. Sand Canyon Avenue & I-405 Northbound Ramps – AM LOS=E
- 364. Bake Parkway & Jeronimo Road – AM LOS=E

Buildout

- 312. Sand Canyon Avenue & I-405 Northbound Ramps – AM LOS=E
- 318. Banting & Barranca Parkway – AM LOS=E
- 364. Bake Parkway & Jeronimo Road – AM LOS=E

It should also be noted that to simplify the process for tracking the consistency of the land uses in the Spectrum 7 portion of Planning Area 12 (as reflected on Exhibit F in the City of Irvine Zoning Code Section 9-12-7) with the underlying traffic study for the development area the proposed zone change includes a modification to the current Trip Monitoring Program requirement. The Spectrum 7 Traffic Study includes specific land use types and related intensity for each ITAM Traffic Analysis Zone (TAZ) based on the existing and proposed uses on each parcel in Spectrum 7. The requirement for a Trip Allocation and Monitoring Report would be replaced with a Development Monitoring Report. The proposed development monitoring would provide a program and procedure for the City to review and ensure that any applications for building permits and / or changes to the existing land uses are consistent with the Spectrum 7 traffic study land use assumptions.

Therefore, the Approved PA 12 Project and the proposed Project would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including pedestrian and bicycle facilities.

Orange County Congestion Management Program

The Congestion Management Program (CMP) legislation requires that the CMP Agency monitor the implementation of the Orange County CMP, including CMP land use coordination component requirements. OCTA is the CMP Agency for the Orange County. The goal of the CMP is to ensure that certain key intersections within the CMP Highway System (CMPHS) are operating at acceptable levels. The CMP has been developed to monitor impacts on CMPHS intersections. There are four intersection locations within the study area for the Spectrum 7 Traffic Study that are monitored as part of the CMP: Irvine Center Drive at Entertainment, Irvine Center Drive at I-405 southbound ramps, SR-133 southbound ramps at Irvine Boulevard, and SR-133 northbound ramps at Irvine Boulevard. The results of the Spectrum 7 Traffic Study indicate that all of the CMP intersections in the study area are forecast to operate at LOS E or better, which is within the CMP performance standard for CMP intersections based on an analysis of short-term traffic conditions that is required by the CMP. No required improvements to CMP intersections would occur. Therefore, the proposed Project, would have the same improvements compared to the Approved PA 12 Project, and would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

Bicycle and Pedestrian Facilities

The following objectives from the Irvine General Plan Circulation Element are applicable to the Approved PA 12 Project and the proposed Project:

- ***Objective B-3: Pedestrian Circulation***. Establish a pedestrian circulation system to support and encourage walking as a mode of transportation.

  Policy (b): Require development to provide safe, convenient, and direct pedestrian access to surrounding land uses and transit stops. Issues such as anticipated interaction between pedestrians and vehicles, proposed infrastructure improvements and design standards shall be considered.

  Policy (c): Design and locate land uses to encourage access to them by nonautomotive means.

  Policy (d): Require bicycle trail linkages between residential areas, employment areas, schools, parks, community facilities, commercial centers, and transit facilities.

  Policy (e): Require pedestrian and bicycle circulation plans detailing access to the subject property and adjacent properties in conjunction with new development

- ***Objective B-4: Bicycle Circulation Plan.*** Provide and maintain a comprehensive bicycle trail network that together with the regional trail system, encourages increased use of bicycle trails for commuters and recreational purposes.

Exhibit 9 of this Addendum shows the existing and planned system of sidewalks, on-street bike lanes and off-street trails in the vicinity of the Project site, in the northern part of Spectrum 7. Included is a 10-foot wide off-street bicycle and pedestrian path on the south side of Progress, which was approved a part of the adjacent office development to the east, and is under construction. The off-street path will extend along Progress from Jeffrey Road to Sand Canyon Avenue and will facilitate access to the planned Jeffrey

Open Space Trail in this area, the existing pedestrian / bicycle path along the west side of Sand Canyon Avenue, and the Walnut Trail south of the Metrolink railroad tracks. The planned pedestrian and bicycle facilities on and adjacent to the Project would provide access to nearby recreational facilities, schools, public amenities, and bus stops, and would provide for an alternative mode of transportation for the employees at the Project site. The connections of the off-street path along Progress would also provide direct linkages via the existing trails in the area for commuters in the residential areas north, south and west of the Project site and to the Irvine Spectrum areas southeast of Sand Canyon Avenue, and to the Irvine Transportation Center.

The pedestrian and bicycle facilities and appropriate traffic control measures that are implemented within or near the Project site will be in accordance with City Standards and implemented in the design of the development with the approval of the street improvement plans. Through the implementation of the off-street path along Progress and a system of public and private sidewalks within the area, the goals of the Irvine General Plan Circulation Element (Objectives B-3 and B-4 and associated policies) for providing alternative modes of transportation and recreational amenities would be met. Therefore, the Approved PA 12 Project and the proposed Project would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including pedestrian and bicycle facilities.

Transit

The following objectives from the Irvine General Plan Circulation Element are applicable to the Approved PA 12 Project and the proposed Project:

- ***Objective B-6: Public Transit Program.*** Work with Orange County Transportation Authority to implement a public transit system for trips within the City and adjacent areas.

  Policy (a): Plan residential, commercial, and industrial areas to enable effective use of the public transit.

Consistent with this objective and associated policy, the Irvine Transportation Center is located approximately two miles east of the Project, is served by Metrolink and Amtrak passenger rail services, OCTA bus services and the City of Irvine's iShuttle service. Metrolink is a regional commuter train system that runs from Orange County south to San Diego County, east to Riverside County and San Bernardino County, and north to Los Angeles County and Ventura County. Amtrak's Pacific Surfliner, which stops at the Irvine Transportation Center, travels between San Diego and San Luis Obispo.

The existing OCTA bus routes that serve the area in the vicinity of the Project site include:

- **OCTA Bus Route 86**: This is a local bus route that travels between Costa Mesa and Mission Viejo via Alton Parkway and Barranca Parkway in the project vicinity. This line passes approximately 1.5 miles south of the intersection of Progress at Sand Canyon providing access to the Project site. The route has stops along Alton Parkway and has scheduled departures from the intersection of Sand Canyon Avenue and Alton Parkway and from the Irvine Transportation Center.

- **OCTA Bus Route 90**: This is a local bus route that travels between Tustin and Dana Point via Irvine Center Drive in the Project vicinity. This line passes approximately 0.75 mile south of the

intersection of Progress at Sand Canyon providing access to the Project site. The route has stops along Irvine Center Drive and has scheduled departures from Irvine Valley College near the intersection of Jeffrey Road and Irvine Center Drive.

- **OCTA Bus Route 206**: This is an Orange County express route that travels from Santa Ana to Lake Forest via I-5. This line travels along I-5 immediately north of the Project site and enters / exits I-5 at Barranca Parkway with stops along Barranca Parkway and scheduled departures from the Irvine Transportation Center.

The OCTA's iShuttle provides morning and evening peak hour service along two routes in the Irvine Spectrum area in the vicinity of the Project site. The routes, both of which begin and end at the Irvine Transportation Center include:

- **iShuttle Route 402C**: This iShuttle route serves incoming and outgoing Irvine Transportation Center commuters in both the morning and afternoon. The route travels between the Irvine Transportation Center and the Sand Canyon Avenue / Laguna Canyon Road area via Ada, Alton Parkway and Irvine Center Drive. There are several stops along the route, and scheduled departures occur from the Capitol Group parking lot adjacent to Sand Canyon Avenue between Irvine Center Drive and Oak Canyon-Laguna Canyon Road, which is approximately 0.5 mile south of the intersection of Progress at Sand Canyon providing access to the Project site.

- **iShuttle Route 403D**: This iShuttle route serves Irvine Transportation Center commuters that are incoming to the station in the morning and outgoing from the station in the afternoon. The route travels between the Irvine Transportation Center and the intersection of Sand Canyon Avenue and Waterworks Way via Barranca Parkway, Irvine Center Drive, Gateway Boulevard, Fortune Drive, Pacifica, Meridian, Alton Parkway and Sand Canyon Avenue. Service is provided in the westbound direction (from the Irvine Transportation Center) in the morning and the eastbound direction (to the Irvine Transportation Center) in the afternoon. There are several stops along the route, and scheduled departures occur at the Sand Canyon Avenue / Waterworks Way intersection, which is approximately 1 mile south of the intersection of Progress at Sand Canyon providing access to the Project site.

The transit amenities described above in combination with the network of pedestrian facilities and bikeways adjacent to the Project site, as discussed above, provide alternative means of transportation for the future employees at the Project site. Therefore, the Approved PA 12 Project and the proposed Project would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit.

The proposed Project, which would generate less traffic compared to the Approved PA 12 Project, and which would not conflict with a program, plan, ordinance, or policy addressing the circulation system, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Senate Bill 743 (SB 743), approved in 2013 and codified in Public Resources Code Section 21099, changes the way transportation impacts are determined according to CEQA. The Office of Planning and Research (OPR) recommended the use of VMT as the replacement for automobile delay-based LOS for the purposes of determining a significant transportation impact under CEQA. On December 28, 2018, the State approved updates to the State CEQA Guidelines, which entailed changes to the thresholds of significance for the evaluation of impacts to transportation. Updates to the State CEQA Guidelines included the addition of CEQA Guidelines Section 15064.3, of which Subdivision b establishes criteria for evaluating a project's transportation impacts based on project type and using automobile VMT as the metric. Beginning July 1, 2020, the provisions of CEQA Guidelines Section 15064.3 apply statewide. As identified in Section 15064.3(b)(4) of the CEQA Guidelines, a lead agency has the discretion to choose the most appropriate methodology to evaluate a project's VMT. The City of Irvine approved a comprehensive update to its CEQA Manual on June 23, 2020, which includes its CEQA VMT Impact Analysis Guidelines. Pursuant to SB 743 and PRC Section 21099, the requirement for analyzing congestion impacts for CEQA purposes was eliminated in December 2018.

As further discussed below, the proposed Project would not increase vehicular trips or VMT compared to that evaluated in the PA 12 EIR, and the Project site has been annexed into the Spectrumotion Transportation Management Association (TMA), which was one of several measures identified in the PA 12 EIR to reduce vehicle trips, VMT, and associated vehicular emissions during operation (refer to MM AQ-1 in the Air Quality Section of this Addendum). Therefore, the proposed Project, which would have reduced vehicular trips and associated VMT compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project. As further discussed in Section 6.8, Greenhouse Gas Emissions, of this Addendum, the proposed Project would also generate less operational GHG emissions compared to the Approved PA 12 Project due primarily to the overall reduction in vehicular trips and associated VMT.

Notwithstanding this conclusion, for informational purposes, the proposed Project has been reviewed under the City's CEQA VMT Impact Analysis Guidelines. The City's VMT Impact Analysis Guidelines identify a multi-tiered approach that addresses less than significant projects and projects that could potentially lead to a significant impact. Tier 1 is a VMT Screening to determine whether a project meets any one of a list of criteria. One criterion is a determination of whether the project nets an increase of 250 or less weekday daily trips. If such a project meets this criterion, no further VMT analysis is required and no mitigation is required.

Table 6.17-1 provides a land use and trip generation summary for buildout scenarios for the No Project and With Project Conditions; the trip generation assumptions are also provided above. As shown in this table, the No Project Scenario generates 45,362 ADT and the With Project Scenario generates 36,789 ADT Based on a comparison of these ADTs for the No Project and With Project scenarios, the proposed Project does not exceed the City's proposed 250 or less daily trip increase and thus does not require a VMT analysis pursuant to the City's VMT Impact Analysis Guidelines.

As another means of comparison, the 1994 PA 12 EIR Traffic Impact Analysis Appendix A provides a summary of land use and trip generation for the Project analyzed in this 1994 PA 12 EIR. By accumulating

the Buildout trip generation for the ITAM zones included within only Spectrum 7 (Zones 31, 121, 122, 123, 124, 128 and 130) less the Traveland trips within Zone 31 results in an ADT of 36,972. When then adding the 5,904 ADT trip generation for the Traveland site based on the VTPM 2019-104 Traffic Study results in a total of 42,696 ADT. Thus, by comparing the trip generation (42,696 ADT) that was assessed in the 1994 PA 12 EIR along with the trip generation for VTPM 2019-104 to the currently proposed Project's ADT of 36,789 results in a conclusion that the Project does not exceed the City's proposed 250 or less daily trip increase. Thus, no VMT analysis or mitigation is required based on this comparison as well.

It is noted that there are a number of PA 12 Spectrum 7 features that will contribute to a reduction in projected VMT for the Project. First, Spectrum 7 parcels, including the Project site, are mandatory members of the Spectrumotion TMA; the Project site was annexed into the Spectrumotion TMA in November 2019. The primary goal of the TMA is to offer programs and incentives for the purpose of reducing single occupancy driving. Second, PA 12 and the surrounding areas within the City have a number of well connected on- and off-street bike trails (also discussed under Threshold a, above). Lastly, bicycle lockers and bicycle parking spaces would be provided on-site for future tenants and visitors to facilitate bicycle travel.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project is designed to reduce incompatible uses and improve the street system in the area in accordance with local, regional, and State agency engineering requirements. The proposed circulation system and site access for the Project site is shown on Exhibits 4a and 4b including sight distance lines for access driveways. Therefore, the impact would be less than significant. The proposed Project, which would have similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Result in inadequate emergency access?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The existing and proposed roadway system would provide adequate emergency access to the Project site, and would not affect off-site emergency access. The proposed circulation system and site access for the Project site is shown on Exhibits 4a and 4b. The proposed Project has been reviewed by the OCFA, which did not identify any conflicts with OCFA requirements relative to emergency vehicle access. Therefore, no significant impacts related to emergency access would result. The proposed Project, which has less than significant impacts, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.18 Tribal Cultural Resources

6.18.1 Summary of Previous Environmental Analysis

As with the Approved PA 12 Project, the provisions of AB 52 are not applicable to the proposed Project. AB 52 applies "…only to a project that has a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015." AB 52, which became effective on July 1, 2015, established a consultation process with California Native American tribes, and established Tribal Cultural Resources as a new class of resources to be considered in the determination of project impacts and mitigation under CEQA. AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, if they have requested such notice in writing. The project notification is required prior to the lead agency's release of a Notice of Preparation (NOP) of an EIR or notice of intent to adopt an MND or ND, and is not required for Addendums.

The analysis of impacts to cultural resources, including prehistoric archaeological sites, resulting from the Approved PA 12 Project is provided in Section 5.9 of the PA 12 EIR and is summarized above in Section 6.5 of this Addendum. The PA 12 EIR found that implementation of the Approved PA 12 Project would result in less than significant impact to archaeological resources.

Cumulative impacts to cultural resources were determined to be less than significant.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

Although the Project site and associated features have been recently graded or otherwise previously disturbed, SC CR-1 presented in Section 6.5 of this Addendum remains applicable to the proposed Project. The SC has been modified to reflect the current text of the City's Standard Conditions of Approval (revised through November 2019) to protect archaeological resources. MM CR-1 requiring that archaeological surveys be conducted has been completed, as discussed in the analysis provided in Section 6.5.2.

6.18.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
TRIBAL CULTURAL RESOURCES: Would the Project				
a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Pubic Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

No Substantial Change from Previous Analysis. The proposed Project would be developed within the same limits of disturbance as the Approved PA 12 Project, and would also include landscape enhancement along Walnut Avenue, and installation of utility infrastructure on- and off-site. The areas that would be disturbed to implement the Approved PA 12 Project and the proposed Project have been subject to previous grading or other ground disturbance. As previously identified in Section 6.5, Cultural Resources, of this Addendum, in January 2017, a cultural resource records search was conducted for the Project site at the SCCIC at California State University, Fullerton. According to the records search, there are no recorded cultural or historic resources located on the Project site. Additionally, in February 2017, a field survey was conducted for the Project site and off-site improvement areas that did not identify any cultural resources, tribal cultural resources, or historic resources. Further, recent grading activities were monitoring by a qualified archaeologist, and no cultural or tribal cultural resources were discovered.

Based on the lack of identified resources on the Project site, and consistent with the analysis presented in the PA 12 EIR, with incorporation of SC CR-1, which would serve to protect archaeological and tribal cultural resources, potential impacts to cultural resources resulting from construction of the Approved PA 12 Project and proposed Project, including tribal cultural resources, would be less than significant. Therefore, the proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.19 Utilities & Service Systems

6.19.1 Summary of Previous Environmental Analysis

Potential impacts related to utilities and service systems resulting from implementation of the Approved PA 12 Project are discussed in Section 5.10, Public Services, Utilities and Energy Consumption, of the PA 12 EIR. Additionally, storm drain facilities were addressed in Section 5.7, Hydrology and Water Quality, of the PA 12 EIR. Water and wastewater services are provided to PA 12 by the Irvine Ranch Water District (IRWD). The PA 12 EIR concluded that IRWD would have sufficient water supply capacity to meet the projected future water supply demands of PA 12; however, implementation of water conservation measures would be required with future development. IRWD prepared a Sub-Area Master Plan for PA 12 to determine the domestic water and reclaimed water facility requirements for PA 12. The PA 12 EIR concluded that water and sewer facilities existing at the time the PA 12 EIR was prepared would not be adequate to serve the Approved PA 12 Project and additional facilities would be required. With implementation of the required infrastructure as part of the future development projects, and in coordination with IRWD, it was determined that potential impacts associated with the provision of water and wastewater utility infrastructure would be less than significant.

The PA 12 EIR concluded that IRWD's and County Sanitation Districts of Orange County ongoing monitoring of treatment capacity needs combined with the treatment of wastewater at Michelson Water Recycling Plant (MWRP) would provide adequate treatment capacity to accommodate the Approved PA 12 Project, thereby resulting in a less than significant impact to wastewater treatment capacity.

The PA 12 EIR concluded that the Approved PA 12 Project would increase solid waste generation and the associated service demand on solid waste disposal facilities but would not exceed the available capacity of the landfill system serving the City. The PA 12 EIR determined that the Frank R. Bowerman Landfill has sufficient capacity to accommodate the solid waste generated within the PA 12.

The PA 12 EIR concluded that implementation of the Approved PA 12 Project would require extension of existing dry utility facilities and distribution systems (electric, natural gas and communications) from the existing facilities in the vicinity in order to serve the Approved PA 12 Project. With implementation of the required infrastructure as part of the future development projects, and in coordination with the respective utility providers, it was determined that potential impacts associated with the provision of the utility infrastructure would be less than significant.

Cumulative impacts related to utilities and service systems were also determined to be less than significant.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

SC E-1 presented in Section 6.6, Energy, of this Addendum is applicable to the proposed Project and requires adhere to energy conservation requirements outlined in Title 24 of the California Administrative Code. Additionally, the following MM is applicable to the proposed Project.

MM SW-1 is not applicable to the proposed Project as it addresses solid waste management / recycling for residential uses, and MM SW-2 is not applicable as it addresses golf course operations.

PA 12 EIR Mitigation Measures

MM W-1 In conjunction with the submittal of applications for building permits, the applicant shall incorporate the following water conservation measures into the project:

- Reclaimed water shall be used for all park and streetscape landscape irrigation in the project area.
- Reclaimed water shall be used for other appropriate non-potable uses, such as toilet flushing in commercial and industrial buildings and cooling tower make-up, where feasible.
- Low-flow fixtures and other water conservation features shall be used in all new residences in accordance with current codes and standards.
- Low water use, drought tolerant landscaping shall be used on project landscaping, as feasible, and in accordance with the City's guidelines.
- Water conservation irrigation systems incorporating drip irrigation and rain sensors shall be implemented where appropriate.

6.19.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project would require the installation of new water (domestic and reclaimed), sewer, storm drain, electric, natural gas, and telecommunications facilities to serve the proposed office uses. As previously identified, the proposed Project would reduce the amount of non-residential development intensity anticipated and analyzed in the PA 12 EIR for the Approved PA 12 Project. Therefore, the overall utility demand for the proposed Project would be reduced compared to the Approved PA 12 Project. Further, energy and water conservation requirements are currently more stringent than when the PA 12 EIR was prepared, resulting				

in additional reductions compared to what was anticipated for the Approved PA 12 Project as estimated in the PA 12 EIR.

As described in Section 3.2.4, Utility Infrastructure, of this Addendum, the proposed on-site utility infrastructure would connect to existing utilities adjacent to or in the vicinity of the Project site. With preparation of the currently proposed Master Plan for the proposed Project, the size of required infrastructure and location of utility line connections has been identified based on estimated proposed Project demands. A *Planning Area 12 Sub Area Master Plan Addendum No. 2 for VTPM 2019-104 and VTPM 2019-177* has been prepared for IRWD's review and approval to update the potable water, sanitary sewer collection, and non-potable water systems required to serve the proposed Project (March 2020) (Stantec, 2020d). Additionally, as previously discussed in Section 6.10, Hydrology and Water Quality, of this Addendum, a Preliminary Drainage Report has been prepared to identify required storm drain facilities (Stantec, 2020b).

In summary, as described in Section 3.2.4 of this Addendum, existing utility infrastructure is located within or in the vicinity of the Project site (domestic water, sewer, storm drain, electric, natural gas, and telecommunications). However, the proposed Project includes the installation of a new recycled water line extending south from the Project site; the recycled water line would be installed in an existing vacant area extending from the railroad tracks to the Oak Canyon cul-de-sac, and then in the Oak Canyon and Valley Oak roadway alignments (refer to Exhibit 3). The installation of the recycled water line would include a jack and bore operation approximately 15-feet deep under the railroad and several utilities. A jack and bore method of construction was used for the existing IRWD Desalter water line in this area and the proposed recycled water line would follow the same alignment, including in the undeveloped area south of the railroad. Therefore, the installation of the recycled water line would occur in previously disturbed areas, or within existing roadway right-of-way. Additionally, the overhead electric lines on-site would be replaced with new underground systems as part of the proposed Project and the existing lines would be removed (refer to Exhibit 12). The physical impact area associated with the installation of utility infrastructure has been identified and analyzed in this Addendum. Conclusions of the PA 12 EIR, installation of utility infrastructure would result in construction-related impacts and these impacts are addressed for each topical issue, as appropriate. Additionally, construction-related SCs and MMs from the PA 12 EIR are applicable to the proposed Project, as identified throughout this Addendum. Therefore, the impact would remain less than significant with mitigation. The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. IRWD prepared a WSA for the PA 40 / PA 12 GPA and Zone Change Project in 2007 (2007 WSA). The 2007 WSA concluded that a sufficient water supply would be available to meet the projected annual demand of the PA 40 / PA 12 Project at build-out during normal, single-dry, and multiple-dry years within a 20-year projection. In April 2017, the City requested that IRWD prepare an amended WSA for a then proposed PA 12 and PA 40 GPA and Zone Change Project (File Nos. 00693260-PGA and 00693257-PZC). The previously proposed 2017 Project anticipated development of up to 1,710 Medium-High Density residential units, up to 25,000 sf of neighborhood commercial use, and an

approximately 5-acre park on the PA 12 site (in addition to development of other sites in PA 40). IRWD approved the Amended Irvine Ranch Water District Assessment of Water Supply for the 2017 PA 12 and PA 40 GPA and Zone Change Project in August 2017 (2017 Amended WSA) (IRWD, 2017). As with the 2007 WSA, the 2017 WSA concluded that the total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection would meet the projected water demand for the previously proposed 2017 Project in addition to the demand of existing and other planned future uses, including but not limited to, agricultural and manufacturing uses. Although the Project Applicant subsequently withdrew the application for the proposed 2017 Project, IRWD confirmed that the 2017 Amended WSA replaces the 2007 WSA and that the conclusion that IRWD has sufficient supplies are the same under both development scenarios (residential and currently proposed office uses). Further, since the projected demands in the 2017 Amended WSA are greater than those projected in the 2007 WSA, the supplies remain sufficient to serve the previously approved and currently proposed office development associated with Innovation Office Park (Welch, IRWD Water Resources Manager, 2020).

Further, the Approved Project and proposed Project would generate less water demand than anticipated for the Approved PA 12 Project in the 1994 EIR due to the reduction in amount of non-residential building intensity (square footage) and current water conservation requirements, which are more stringent. Therefore, the impact would remain less than significant. The proposed Project, which has less impacts compared to what was analyzed in the PA 12 EIR for the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

The proposed Project, which has similar impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects previously disclosed in the PA 12 EIR.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As identified in the PA 12 EIR, wastewater from the Project site would be collected and treated at the MWRP. With completion in 2014 of a major plant expansion, the MWRP has capacity to treat 28 million gallons per day (mgd). The recycled water produced at the MWRP is delivered throughout the IRWD service area for landscaping and agricultural irrigation, as well as industrial and commercial needs (such as the proposed Project) (IRWD, 2016). Currently, the MWRP treats approximately 20 to 21 mgd of wastewater (Welch, Water Resources Manager IRWD, 2019); therefore, there is an estimated excess daily treatment capacity of approximately 7 mgd. The proposed Project would generate less wastewater requiring treatment at the MWRP than anticipated in the PA 12 EIR due to the reduction in amount of non-residential building intensity (square footage) and current water conservation requirements. It should also be noted that the MWRP Phase 2 and 3 Capacity Expansion Project was approved by IRWD in 2006, which anticipates an expansion of the MWRP to 33 mgd to meet demands in IRWD's service area (IRWD, 2016). Therefore, the impact would remain less than significant. The proposed Project, which has less impacts compared to what was analyzed in the PA 12 EIR for the Approved PA 12 project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. As with the Approved PA 12 Project, the proposed Project would involve the development of office uses at the Project site. However, the proposed Project would generate less solid waste requiring disposal in the landfill system serving the City due to the reduction in amount of non-residential building intensity (square footage) and more stringent solid waste management and diversion requirements. Solid waste generated by the Approved PA 12 Project and the proposed Project would be hauled to an OC Waste & Recycling Facility. As identified in the PA 12 EIR, the Frank R. Bowerman Landfill is the closest landfill to the Project site. The Frank R. Bowerman Landfill is permitted to accept a maximum of 11,500 tons per day (TPD) with an 8,500 TPD annual average (OC Waste & Recycling, 2020). Based on the calculated solid waste generation factors presented in the PA 12 EIR, with the reduction in non-residential building intensity (square footage) and associated employees, the proposed Project would reduce solid waste generation by approximately 3 tons per day (assuming an average of 8.5 lbs / day of solid waste generated per employee). Additionally, the solid waste generation amount is likely overstated in the PA 12 EIR when taking into consideration more stringent solid waste management and disposal requirements, discussed further below. With respect to solid waste generation during construction, and as further discussed under Threshold g, below, in accordance with the Irvine Municipal Code, a large portion of C&D debris generated by the proposed Project would have to be diverted from landfills through recycling, reuse, and / or salvage.

The type of solid waste generated by the Approved PA 12 Project and the proposed Project would be the same; however, the amount of solid waste would be less than the solid waste generation estimated in the PA 12 EIR. Consistent with the conclusion of the PA 12 EIR, the solid waste generated would not exceed the permitted capacity of the landfill system. Therefore, the impact would remain less than significant. The proposed Project, which has less impacts compared to the Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

g) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

No Substantial Change from Previous Analysis. Regulations related to solid waste have become more stringent since the PA 12 EIR was prepared. Recycling of construction and demolition debris is a standard condition placed on development projects in the City. The provisions of the City's Construction and Demolition Debris and Recycling and Reuse Ordinance are outlined in Title 6, Division 7 of the Irvine Municipal Code. To ensure consistency with the California Green Building Code, Section 6-7-903 of the Irvine Municipal Code includes thresholds for various "covered" projects, including all projects involving new non-residential development. Pursuant to Section 6-7-902 of the Irvine Municipal Code, preparation of a Waste Management Plan is required for the Approved PA 12 Project and proposed Project. The Waste Management Plan must commit to diverting 100 percent of all non-hazardous excavated soil and land-clearing debris, at least 75 percent of all non-hazardous concrete and asphalt construction and demolition debris, and 65 percent of all other construction and demolition debris, unless the City grants an exception.

The California Integrated Waste Management Act of 1989, also known as AB 939, created the California Department of Resources Recycling and Recovery Board, now known as CalRecycle, and is discussed in the

PA 12 EIR. AB 939 required that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The diversion goal has been increased to 75 percent by 2020 by SB 341. Further, the Solid Waste Disposal Measurement Act of 2008 (SB 1016) was established to make the process of goal measurement (as established by AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator—the per capita disposal rate—which uses only two factors: (1) a jurisdiction's population (or in some cases employment); and (2) its disposal, as reported by disposal facilities.

In 2017, California's Statewide disposal was 37.8 million tons with a per employee disposal rate of 11.9 pounds / employee / day (ppd) using SB 1016's measurement system. This is less than the employee disposal rate of 14.7 ppd in 1994 when the PA 12 EIR was prepared (CalRecycle, 2020a).

The target for the City is a disposal rate of 9.3 ppd per employee for businesses. According to CalRecycle, the City's currently approved calculated per capita disposal rate per employee is 6.0 ppd (approved for 2015); the 2018 disposal rate per employee (awaiting review) is 6.7 ppd (CalRecycle, 2020b). Therefore, the City is in compliance with AB 939 goals. Future occupants at the Project site would be required to comply with ongoing waste management programs / requirements implemented by the City and would comply with applicable regulations. The proposed office uses would be served by Waste Management of Orange County for the collection of solid wastes and recyclables. In addition, the City requires solid waste recycling in compliance with Title 6, Division 7, Refuse, of the Irvine Municipal Code. The waste recycler is also required to meet or exceed the diversion requirements set forth in AB 939.

Construction and operation of the Approved PA 12 Project and proposed Project would be required to adhere to applicable solid waste regulations and no impact with respect to compliance with solid waste regulations would result. The proposed Project, which has no impacts in this regard, consistent with Approved PA 12 Project, would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.

6.20 Wildfire

6.20.1 Summary of Previous Environmental Analysis

Wildfire was added as a new topic in the environmental checklist form in Appendix G of the State Guidelines as part of the CEQA Guidelines updates that were approved in December 2018; however, Section 5.1, Land Use and Planning, and Section 5.11, Public Health and Safety, of the PA 12 EIR include a discussion of impacts associated with wildfire.

The PA 12 EIR identifies an area of High Fire Hazard Severity located along the San Diego Creek, within the eastern portion of PA 12. However, as described in the PA 12 EIR, planned improvements to the San Diego Creek would reduce the amount of high-fuel vegetation within the creek channel, thus reducing any impacts to a less than significant level.

PA 12 EIR Policies, Standard Conditions of Approval, and Mitigation Measures

There are no SCs or MMs identified in the PA 12 EIR related to wildfire.

6.20.2 Project Environmental Review

Environmental Issue	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impacts	No Substantial Change from Previous Analysis
WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒
No Substantial Change from Previous Analysis. The PA 12 EIR identified that the Project site is not within a Fire Hazard Area. Consistent with this conclusion, according to the California Department of Forestry and Fire Protection's (Cal Fire) Irvine Very High Fire Hazard Severity Zone (VHFHSZ) Map, the Project site is located in a non-VHFHSZ of the City (Cal Fire, 2011). The Project site is located within the limits of the City and, therefore, is not contained within a State Responsibility Area (SRA). Thus, the Approved PA 12 Project and proposed Project would not result in any impacts associated with being located in a VHFHSZ. The Project site is not located in a Fire Hazard Area; therefore, the proposed Project and Approved PA 12 Project both would have no impact. The proposed Project would not result in any new or substantially more severe effects than the effects that have already been identified, analyzed, and disclosed in the PA 12 EIR for the Approved PA 12 Project.				

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