

# **THE BOWERY MIXED-USE PROJECT FINAL ENVIRONMENTAL IMPACT REPORT**



**CITY OF SANTA ANA, CALIFORNIA**

**REVISED MAY 22, 2020**

**STATE CLEARINGHOUSE NO. 2019080011**

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**FINAL  
ENVIRONMENTAL IMPACT REPORT  
THE BOWERY MIXED-USE PROJECT  
SANTA ANA, CALIFORNIA  
STATE CLEARINGHOUSE NO. 2019080011**

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REVISED MAY 22, 2020

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## ACRONYMS AND ABBREVIATIONS

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°C	degrees celsius
µg/m <sup>3</sup>	micrograms per cubic meter
AB 52	California Assembly Bill 52
ACM	asbestos-containing material
AF	acre-feet
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
AQIA	Air Quality Impact Analyses
AQMP	Air Quality Management Plan
APN	Assessor's Parcel Number
ATCM	airborne toxic control measure
BAAQMD	Bay Area Air Quality Management District
BACM	best available control measure
BACT	best available control technology
Basin	South Coast Air Quality Basin
BAU	business as usual
BFE	base flood elevation
bgs	below ground surface
BMPs	Best Management Practices
CAA	Clean Air Act of 1970
CAAA	CAA Amendments of 1990
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan of 2013
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act of 1988
CDFW	California Department of Fish and Wildlife
CC&Rs	Covenants, Conditions, and Restrictions
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGEU	California Gas and Electric Utilities 2016 California Gas Report
CGS	California Geological Survey
CH <sub>4</sub>	methane
CHAPIS	Community Health Air Pollution Information System (CARB)
CHRIS	California Historical Resources Inventory System
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CTP	Clean Truck Program
CUP	Conditional Use Permit
dB	decibel

dba	A-weighted decibels
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EMS	Emergency Medical Services
ESA	Environmental Site Assessment
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act of 1973
FMMP	Farmland Mapping and Monitoring Program
gal/day	gallons per day
GHG	greenhouse gas
GWP	global warming potential
Handbook	Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005)
HAPs	hazardous air pollutants
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HDT	Heavy Duty Trucks
HFCs	hydroflourocarbons
Hot Spots Act	Air Toxics Hot Spots Information and Assessment Act of 1987
HP	horsepower
HPLV	High Pressure Low Volume
HVAC	heating, ventilating, and air conditioning
ICU	intersection capacity utilization
I	Interstate
I-5	Santa Ana Freeway
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
LEV	Low Emission Vehicle
LID	low impact development
LOS	level of service
LSTs	localized significance thresholds
MACT	maximum available control technology
MBTA	Migratory Bird Treaty Act of 1918
MCC	Material Culture Consulting
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric tons
MT CO <sub>2e</sub>	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission
NALs	numeric action levels
NCCP	Natural Community Conservation Plan
NESHAP	national emissions standards for HAPs
NH <sub>3</sub>	ammonia
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic and Safety Administration
NMC	New Model Colony

NOP	Notice of Preparation
NO <sub>2</sub>	nitrogen oxide
NO <sub>x</sub>	nitrogen oxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	U.A. Department of Agriculture Natural Resources Conservation Service
O <sub>3</sub>	ozone
ODC	Ontario Development Code
ONT	Ontario International Airport
PA	Planning Area
Pb	lead
PDF	project design feature
PFCs	perfluorocarbons
PM <sub>2.5</sub>	particulate matter less than 2.5 micrometers in aerodynamic diameter
PM <sub>10</sub>	particulate matter less than 10 micrometers in aerodynamic diameter
ppb	parts per billion
PPP	Plans, Programs, and Policies
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Plan
PWS	public water supplier
REC	recognized environmental conditions
ROG	reactive organic gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SB 18	California Senate Bill 18, Ch. 905 (2004)
SC	Standard Condition
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SCS	Sustainable Communities Strategy
SF	square feet
SF <sub>6</sub>	sulfur hexafluoride
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
SO <sub>3</sub>	sulfur trioxide
SO <sub>4</sub>	sulfates
SoCalGas	Southern California Gas Company
SO <sub>x</sub>	sulfur oxides
SP	Specific Plan
SR	State Route
SR-60	Pomona Freeway
SR-83	Euclid Avenue
SRA	Source Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	Storm Water Resources Control Board
TACs	toxic air contaminants
TIA	Traffic Impact Analysis
tpy	tons per year
TTCP	traditional tribal cultural places

TUA	traditional use area
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UTRs	utility tractors
UWMP	Urban Water Management Plan
VdB	velocity levels expressed in decibel notation
VMT	vehicle miles travelled
VOC	volatile organic compounds
WDR	Waste Discharge Requirements
WFA	Water Facilities Authority
Williamson Act	California Land Conservation Act of 1965
WQC	Water Quality Certification

# 1. Introduction

This Final Environmental Impact Report (FEIR; Final EIR) has been prepared in conformance with the environmental policy guidelines for the implementation of the California Environmental Quality Act (CEQA) to evaluate the environmental effects that may result from construction and operation of the proposed Bowery Mixed-Use Project (proposed Project).

According to CEQA Guidelines Section 15132, the FEIR shall consist of:

- (a) The Draft Environmental Impact Report (DEIR; Draft EIR) or a revision of the Draft EIR;
- (b) Comments and recommendations received on the Draft EIR, either verbatim or in summary;
- (c) A list of persons, organizations, and public agencies commenting on the Draft EIR;
- (d) The responses of the lead agency to significant environmental points raised in the review and consultation process;
- (e) Any other information added by the lead agency.

This document contains responses to comments received on the Draft EIR during the public review period, which began January 3, 2020 and ended on February 18, 2020. This document has been prepared in accordance with CEQA, the State CEQA Guidelines, and represents the independent judgment of the lead agency, the City of Santa Ana. This document and the circulated Draft EIR comprise the Final EIR in accordance with CEQA Guidelines, Section 15132.

## 1.1 Format of the Final EIR

The following chapters are contained within this document:

**Chapter 1, Introduction.** This chapter describes CEQA requirements and the content of the Final EIR.

**Chapter 2, Response to Comments.** This chapter provides a list of agencies and organizations who commented on the Draft EIR, as well as copies of their comment letters received during and following the public review period, and individual responses to their comments.

**Chapter 3, Revisions to the Draft EIR.** This chapter contains revisions made to the Draft EIR as a result of the comments received by agencies and organizations as described in Chapter 3, and/or errors and omissions discovered subsequent to release of the Draft EIR for public review.

The City of Santa Ana has determined that none of this material constitutes significant new information that requires recirculation of the Draft EIR for further public comment under CEQA Guidelines Section 15088.5. The additional material clarifies existing information prepared in the Draft EIR and does not present any new substantive information. None of this new material indicates that the project would result in a significant new environmental impact not previously disclosed in the Draft EIR. Additionally, none of this material indicates that there would be a substantial increase in the severity of a previously identified environmental impact that would not be mitigated, or that there would be any of the other circumstances requiring recirculation described in Section 15088.5.

**Chapter 4, Mitigation, Monitoring, and Reporting Program.** This chapter includes the Mitigation Monitoring and Reporting Program (MMRP). CEQA requires lead agencies to “adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment” (CEQA Section 21081.6, CEQA

Guidelines Section 15097). The MMRP was prepared based on the mitigation measures included in this Final EIR and has been included as Chapter 4.0.

## 1.2 CEQA Requirements Regarding Comments and Responses

CEQA Guidelines Section 15204(a) outlines parameters for submitting comments and reminds persons and public agencies that the focus of review and comment of Draft EIRs should be *“on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible ... CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.”*

CEQA Guidelines Section 15204(c) further advises, *“Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence.”* Section 15204 (d) also states, *“Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency’s statutory responsibility.”* Section 15204 (e) states, *“This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section.”*

In accordance with CEQA, Public Resources Code (PRC) Section 21092.5, copies of the written responses to public agencies are being forwarded to those agencies at least 10 days prior to certification of the Final EIR, with copies of this Final EIR document, which conforms to the legal standards established for response to comments on the Draft EIR pursuant to CEQA.



## 2. Response to Comments

Section 15088 of the CEQA Guidelines requires the Lead Agency, the City of Santa Ana to evaluate comments on environmental issues received from public agencies, organizations, and interested parties who reviewed the Draft EIR and prepare written responses. This section provides all written responses received on the Draft EIR and the City of Santa Ana's responses to each comment of each comment letter. Comment letters and specific comments are numbered for reference purposes.

The following is a list of public agencies, organizations, and residents and interested parties that submitted comments on the Draft EIR during and after the public review period. The comment letters received on the Draft EIR and responses to those comments are provided on the following pages.

Letter Number	Commenting Agency/Organization/ Individual	Comment Date
<b>Agencies</b>		
A1	California Department of Toxic Substances Control	January 22, 2020
A2	South Coast Air Quality Management District	February 12, 2020
A3	California Department of Transportation (Caltrans)	February 18, 2020
A4	Orange County Airport Land Use Commission (ALUC)	February 18, 2020
A5	Orange County Fire Authority (OCFA)	February 18, 2020
A6	Orange County Transportation Agency (OCTA)	March 4, 2020
A7	City of Irvine	February 18, 2020
A8	City of Tustin	February 5, 2020
<b>Organizations</b>		
O1	Lozeau Drury LLP	January 29, 2020
O2	Sirco/Irvine Business Park I Association	February 3, 2020

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**LETTER A1: California Department of Toxic Substances Control (3 pages)**

Jared Blumenfeld  
Secretary for  
Environmental Protection

**Department of Toxic Substances Control**

Meredith Williams, Ph.D., Director  
5796 Corporate Avenue  
Cypress, California 90630



Gavin Newsom  
Governor

January 22, 2020

Mr. Jerry Guevara  
City of Santa Ana  
20 Civic Center Plaza  
Santa Ana, California 92072  
[jguevara@santa-ana.org](mailto:jguevara@santa-ana.org)

DRAFT ENVIRONMENTAL IMPACT REPORT, THE BOWERY MIXED-USE  
PROJECT, 2300, 2310, and 2320 SOUTH REDHILL AVENUE, SANTA ANA  
(SCH# 2019080011)

Dear Mr. Guevara:

The Department of Toxic Substances Control (DTSC) reviewed the Draft Environmental Impact Report (EIR) for the Bowery Mixed-Use Project (Project) located at 2300, 2310 and 2320 South Redhill Avenue in Santa Ana (Project Site).

The Project proposes redeveloping the Project Site for new commercial and multi-family residential uses. The Project will demolish the three existing buildings and remove all existing pavements and landscaping to construct a four-phase mixed use development with residential units, commercial retail and restaurant spaces.

DTSC's comments are as follows:

1. Section 5.7.6, Impact HAZ-4, Page 5.7-26

EIR states that this Project is not located on or near by a site which is included on a list of hazardous materials sites pursuant to Government Code Section 65962.5.

Please revise this section to state that the Project Site is listed in the Geotracker at ([https://geotracker.waterboards.ca.gov/profile\\_report?global\\_id=T0605900440](https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605900440)) and located near several hazardous material sites. Past investigation and cleanup conducted under the Regional Water Quality Control Board should be discussed in the EIR to assess whether the Project Site was remediated to meet the residential land use cleanup goals.

Mr. Jerry Guevara  
January 22, 2020  
Page 2

In addition, the Project Site may be located within a groundwater basin that is impacted by volatile organic compounds. The groundwater investigation within the basin is being conducted by the Orange County Health Care Agency (OCHCA). The EIR should discuss the OCHCA investigation data and potential risk to future receptors associated with groundwater contamination.

3

2. Section 5.7.6, Impact HAZ-2, Page 5.7-23

Excavation of 900 cubic yards of contaminated soil impacted by total petroleum hydrocarbons would be required. Please note that all environmental investigations, sampling and/or remediation for the project Site should be conducted under a workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. Clarify in this section that a Removal Action Workplan (RAW) or a Remedial Action Plan (RAP) would be prepared and specify the oversight agency to review and approve the RAW or RAP.

4

Please note that a land use covenant may be required for the Project Site if both soil and groundwater cannot be remediated to meet cleanup goals for residential use.

DTSC appreciates the opportunity to review the EIR. Should you have any questions regarding this letter, please contact me at (714) 484-5392 or by email at [ChiaRin.Yen@dtsc.ca.gov](mailto:ChiaRin.Yen@dtsc.ca.gov).

Sincerely,



Chia Rin Yen  
Environmental Scientist  
Brownfields Restoration and School Evaluation Branch  
Site Mitigation and Restoration Program

mv/cy/ylg

cc: See next page

Mr. Jerry Guevara  
January 22, 2020  
Page 3

cc: (via e-mail)

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State Clearinghouse  
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Site Mitigation and Restoration Program  
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## Letter A1: California Department of Toxic Substances Control

**Comment 1:** This comment states that the California Department of Toxic Substances Control (DTSC) has received the Draft EIR and describes the proposed project. In addition, the comment states that the letter provides comments based on the submittal.

**Response 1:** This comment provides the basis for the DTSC letter and is general in nature. The comment does not reference a specific section of the Draft EIR or concern; therefore, no further response is required or provided.

**Comment 2:** This comment states that the Draft EIR describes that the Project is not located on or near a site that is included on a list of hazardous material sites pursuant to Government Code Section 65962.5. The comment requests the EIR be revised to state that the site is included in the Geotracker and located near several hazardous material sites. The comment also states that past investigations should be discussed to assess whether the site was remediated to meet residential land use clean up goals.

**Response 2:** The State Water Resources Control Board GeoTracker site identifies that previous contamination on the site occurred from an underground storage tank (UST) occurred onsite and that cleanup and UST removal activities occurred onsite from 1986 through 2006. The cleanup and remediation activities resulted in a “Completed - Case Closed” status as of August 13, 2010, as shown in the attached GeoTracker Listing for the project site. The GeoTracker information identifies only one other hazardous materials site within 1,000 feet of the project site, which is a military UST site located in the former Tustin Marine Corps Air Station. The GeoTracker information can be accessed at the following link:  
[https://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0605900440](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900440)

The same data provided by the GeoTracker is included in the Phase I Environmental Site Assessment (ESA) provided as Appendix F of the Draft EIR. In addition, detailed information about past uses related to hazardous materials and testing related to potential onsite hazardous substances is provided in the Phase II ESA and the Limited Phase II Subsurface Investigation Report, which are also provided in Appendix F of the Draft EIR.

As detailed in Section 5.7, *Hazards and Hazardous Materials*, on page 5.7-26 of the Draft EIR, the record searches conducted as part of the Phase I ESA determined that although the site and surrounding areas have a history of various uses, and are identified as previously generating hazardous wastes and clean-up activities, the Project site is not located on or near by a site which is included on a list of hazardous materials sites pursuant to Government Code Section 65962.5.

In addition, as described on page 5.7-22 of the Draft EIR, the investigations detailed in the Phase I ESA, Phase II ESA, and Limited Phase II Subsurface Investigation Report included various testing for hazardous materials and determined that the Project site contains approximately 900 cubic yards of contaminated soil that would require excavation and disposal as part of excavation and grading activities. These contaminated soils would be excavated and removed during Project excavation and grading activities pursuant to the regulations of DTSC, California Integrated Waste Management Board, RWQCB, OCFA, and the Orange County Health Care Agency (OCHCA). In addition, the EIR includes Mitigation Measure HAZ-1 that requires approval of a Soil Management Plan (SMP) to ensure that excavation of contaminated soils be completed pursuant to existing DTSC and RWQCB requirements, soils sampling be conducted to ensure all contaminated soils are removed, and that a certified hazardous waste hauler remove and transport all TPH impacted soil and other potentially hazardous materials per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. Excavated soil containing hazardous substances would

be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). The SMP would detail hazardous materials excavation and disposal methods and requirements pursuant to the regulation of Title 8 of the California Code of Regulations (CalOSHA) and DTSC that regulates the removal, transportation, and disposal of hazardous waste to protect human health and the environment. With implementation of Mitigation Measure HAZ-1 contaminated soils would be remediated to meet residential land use requirements.

**Comment 3:** This comment states that the Project site may be located within a groundwater basin that is impacted by volatile organic compounds and that the EIR should discuss the Orange County Health Care Agency investigation data and the potential risk to future receptors associated with groundwater contamination.

**Response 3:** Groundwater quality is described in Section 5.8, *Hydrology and Water Quality*, of the Draft EIR, which details that the Project site is within the Selenium Concentration Area, South Basin Groundwater Protection Project area, and adjacent to the former Tustin Marine Corps Air Station that has contamination in groundwater. The location of the Project site and these areas of groundwater contamination are shown on Figure 5.8-1 on page 5.8-7 of the Draft EIR.

In addition, it is described on page 5.5-5 in Section 5.5, *Geology and Soils*, of the Draft EIR that based on onsite borings the depth of groundwater is in the range of 24 to 33 feet below ground surface (bgs). This depth of groundwater would not impact persons onsite during operation of the proposed mixed-uses. Also, the Draft EIR page 3-19, Section 3.0, *Project Description*, describes that excavation and grading during project construction would be a minimum of 5 feet below the bottom of the building foundations. As the depth of groundwater currently ranges between 24 to 33 feet, project excavation of approximately 5 feet below building foundations would not result in encountering groundwater. Thus, construction workers would also not be in contact with, and therefore impacted by, contaminated groundwater. Therefore, the potential risk to future receptors associated with groundwater contamination would be less than significant.

**Comment 4:** This comment states that excavation of 900 cubic yards of contaminated soil impacted with petroleum hydrocarbon would be required, which should be conducted under a workplan approved and overseen by a regulatory agency with jurisdiction over substance clean up. The comment states that the EIR should be clarified to state that a Removal Action Workplan or a Remedial Action Plan should be prepared for agency review and approval. The comment further states that a land use covenant may be required if soil and groundwater contamination cannot be remediated for residential uses.

**Response 4:** As previously detailed in Response 2, Mitigation Measure HAZ-1 requires approval of a Soil Management Plan (SMP) to ensure that the contaminated soils would be excavated and removed during Project excavation and grading activities pursuant to the regulations of DTSC, California Integrated Waste Management Board, RWQCB, OCFA, and the Orange County Health Care Agency (OCHCA). The SMP required by Mitigation Measure HAZ-1 would meet the same intent and requirements as the Removal Action Workplan or a Remedial Action Plan mentioned in this comment.





**STATE WATER RESOURCES CONTROL BOARD**

# GEOTRACKER

<b>CASE SUMMARY</b>			
<u>REPORT DATE</u> 7/20/1987		<u>HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?</u>	
<u>I. REPORTED BY -</u> UNKNOWN		<u>CREATED BY</u> UNKNOWN	
<b><u>III. SITE LOCATION</u></b>			
<u>FACILITY NAME</u> RICOH ELECTRONICS, INC.		<u>FACILITY ID</u>	
<u>FACILITY ADDRESS</u> 2320 S RED HILL AVE SANTA ANA, CA 92705 ORANGE COUNTY		<u>ORIENTATION OF SITE TO STREET</u>  <u>CROSS STREET</u> WARNER	
<b><u>V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN</u></b>			
DIESEL OTHER SOLVENT OR NON-PETROLEUM HYDROCARBON			
<b><u>VI. DISCOVERY/ABATEMENT</u></b>			
<u>DATE DISCHARGE BEGAN</u>			
<u>DATE DISCOVERED</u>	<u>HOW DISCOVERED</u>	<u>DESCRIPTION</u>	
<u>DATE STOPPED</u>	<u>STOP METHOD</u>	<u>DESCRIPTION</u>	
<b><u>VII. SOURCE/CAUSE</u></b>			
<u>SOURCE OF DISCHARGE</u>		<u>CAUSE OF DISCHARGE</u>	
<u>DISCHARGE DESCRIPTION</u>			
<b><u>VIII. CASE TYPE</u></b>			
<u>CASE TYPE</u> Aquifer used for drinking water supply			
<b><u>IX. REMEDIAL ACTION</u></b>			
<u>REMEDIAL ACTION</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>DESCRIPTION</u>
Pump & Treat (P&T) Groundwater	1/1/1988	7/15/1998	
Free Product Removal	1/1/1988	7/15/1998	
Pump & Treat (P&T) Groundwater	7/1/1998	9/30/2008	Gallons Excavation Water
Excavation	8/1/1998	9/30/1998	
Excavation	8/1/2006	8/30/2006	
<b><u>X. GENERAL COMMENTS</u></b>			
In July 1986, leakage from piping associated with three USTs was detected. The USTs stored ISOPAR G (C10-C11) and H (C11-C12), which was used in the manufacture of toner. Based on the results of a soil gas survey, four soil			

borings were advanced at the site. TPH (C6-C8) were detected at a concentration ranging from 50 to 1000 ppm. Six groundwater monitoring wells and twenty groundwater well points were installed to characterize the groundwater. Groundwater was encountered at approximately 10 feet bgs and was found to flow to the south. Free product was detected up to 6.9 ft. In February 1988, FP recovery was initiated. On July 8, 1988 the Board issued Cleanup and Abatement Order CAO 88-78, requiring Ricoh to implement corrective measures and to establish waste discharge limits. In August 1988, Ricoh implement groundwater extraction and treatment. Up to 14,000 gallons per day were discharged to the local storm drain which discharged into San Diego Creek. In September 1992, Ricoh requested cessation of groundwater remediation because free product was no longer detected in the Isopar/groundwater recovery system. In a letter dated December 15, 1992, Regional Board staff denied the request due to the continued presence of free product in some groundwater monitoring wells and the lack of consistent groundwater monitoring. The recovery system reportedly operated until July 1998, when the three USTs were removed and replaced.

In July through September 1998, the three USTs were removed and replaced by one 40,000-gallon Isopar UST. The UST area was reportedly excavated to a depth of 16 feet, approximately 100,000 gallons of groundwater from the excavation was treated and discharged, and ORC was placed in the backfill.

Due to the continued detection of elevated concentration of TPH in the groundwater, a subsurface investigation was conducted in December 2000. Five soil borings were advanced to 17 to 20 feet and three grab groundwater samples were collected. TPH was detected at a concentration of up to 1.9 mg/kg in the soil samples and up to 8,000,000 ug/l TPH was detected in the groundwater. In January 2003, two confirmatory wells were installed at the site. TPH was detected at a concentration of up to 2.1 mg/l in the groundwater. In February 2003, a 24-hour two phase extraction test was conducted. Vapor influent concentrations peaked at 1,060 ppmv after 18 hours of operation. Approximately 13.5 lbs (2.1 gallons) of petroleum hydrocarbons were recovered.

In April 2005, the TPH concentrations in the groundwater monitoring wells have reduced to 400 ug/l. As a result, Ricoh requested site closure. Final consideration of closure of the site was delayed due to the pending removal of the one remaining UST.

In September 2006, the 40,000-gallon UST was removed. Two soil samples were collected each from under the UST and the dispenser. TPH (C13-C28) and TPHC29-40) were detected at a concentration of up to 360 ppm and 860 ppm, respectively. TPH (C13-C28) and TPHC29-40) were detected in groundwater samples collected from the excavation at a concentration of up to 530 ug/l and not detected, respectively.

#### **XI. CERTIFICATION**

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN  
IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

#### **XII. REGULATORY USE ONLY**

##### LOCAL AGENCY CASE NUMBER

##### REGIONAL BOARD CASE NUMBER

083000552T

##### LOCAL AGENCY

<u>CONTACT NAME</u>	<u>INITIALS</u>	<u>ORGANIZATION NAME</u>	<u>EMAIL ADDRESS</u>
CHRISTOPHER CIRAULO	CC	SANTA ANA, CITY OF	cciraulo@santa-ana.org
<u>ADDRESS</u>		<u>CONTACT DESCRIPTION</u>	
1439 S. BROADWAY		UST Inspector	
SANTA ANA, CA 92707			

##### REGIONAL BOARD

<u>CONTACT NAME</u>	<u>INITIALS</u>	<u>ORGANIZATION NAME</u>	<u>EMAIL ADDRESS</u>
CARL BERNHARDT	CAB	SANTA ANA RWQCB (REGION 8)	carl.bernhardt@waterboards.ca.gov
		<u>CONTACT DESCRIPTION</u>	

**LETTER A2 South Coast Air Quality Management District (2 pages)**

## South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

SENT VIA E-MAIL AND USPS:

[jguevara@santa-ana.org](mailto:jguevara@santa-ana.org)

Jerry Guevara, Assistant Planner  
City of Santa Ana, Planning and Building Agency  
P.O. Box 1988  
Santa Ana, CA 92702

February 12, 2020

**Draft Environmental Impact Report (Draft EIR) for the Proposed  
Bowery Mixed-Use Project (SCH No.: 2019080011)**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR.

**South Coast AQMD Staff's Summary of Project Description**

The Lead Agency proposes to redevelop existing light industrial buildings into 1,150 multi-family residential units, and commercial, retail, and restaurant uses totaling 212,121 square feet on 14.58 acres (Proposed Project). The Proposed Project is located on the southwest corner of Red Hill Avenue and Warner Avenue within the City of Santa Ana. Construction of the Proposed Project will occur over 27 months<sup>1</sup>. It is anticipated that the Proposed Project will become operational by 2022<sup>2</sup>.

**South Coast AQMD Staff's Summary of Air Quality Analysis**

The Lead Agency quantified the Proposed Project's construction emissions and compared those emissions to South Coast AQMD's recommended regional and localized CEQA air quality significance thresholds. Based on the analysis, the Lead Agency found that the Proposed Project's construction air quality impacts would be less than significant. The Lead Agency also quantified the net new operational emissions by subtracting operational emissions from the existing light industrial land uses from operational emissions estimated from the Proposed Project and compared the net new operational emissions to South Coast AQMD's recommended regional CEQA air quality significance thresholds for operation. Based on the analysis, the Lead Agency estimated that the net new volatile organic compounds (VOCs) emissions from the Proposed Project would be 63.62 pounds per day (lbs/day)<sup>3</sup>, which would exceed South Coast AQMD's recommended CEQA air quality significance threshold of 55 lbs/day. After implementation of Best Available Control Measures (BACM)-2, which requires the use of low VOCs paints that comply with South Coast AQMD Rule 1113 requirements<sup>4</sup>, the net new VOCs emissions would remain significant and unavoidable<sup>5</sup>.

**Additional Recommended Mitigation Measures**

CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse air quality impacts. To further reduce the Proposed Project's net new VOCs emissions during operation, South Coast AQMD staff recommends that the Lead Agency incorporate the following mitigation measures in the Final EIR.

<sup>1</sup> Draft EIR, Chapter 3, Project Description, "3.4.1 Construction Duration" Page 31.

<sup>2</sup> *Ibid.*

<sup>3</sup> Draft EIR, Chapter 3, Project Description, "3.5.5 Operational Emissions Summary" Page 35.

<sup>4</sup> South Coast AQMD, Rule 1113 – Architectural Coatings. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf>.

<sup>5</sup> Draft EIR, Chapter 3, Project Description, "3.5.5 Operational Emissions Summary" Page 35.

Jerry Guevara

February 12, 2020

1. Use of water-based or low VOCs cleaning products that go beyond the requirements of South Coast AQMD Rule 1113.
2. Require the use of electric landscaping equipment, such as lawn mowers and leaf blowers. South Coast AQMD's Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program<sup>6</sup> (Program) provides funds to accelerate the replacement of gasoline-powered commercial lawn and garden equipment for commercial landscapers and gardeners operating within the South Coast AQMD region and should be used to support the implementation of this recommended mitigation measures. The Lead Agency should include the information about the Program in the Final EIR and encourage commercial landscapers and gardeners to apply for funds from the Program.

2

Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that the Lead Agency provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR. In addition, issues raised in the comments should be addressed in detail giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and to the public who are interested in the Proposed Project. Further, if the Lead Agency makes the finding that the recommended additional mitigation measures are not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting them in the Final EIR (CEQA Guidelines Section 15091).

3

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Margaret Isied, Assistant Air Quality Specialist, at [misied@aqmd.gov](mailto:misied@aqmd.gov) or (909) 396-2543, should you have any questions.

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development &amp; Area Sources

LS:MI  
 ORC200109-01  
 Control Number

<sup>6</sup> South Coast AQMD. Electric Lawn and Garden Equipment. Accessed at: <http://www.aqmd.gov/home/programs/community/community-detail?title=lawn-equipment>.



## Letter A2: South Coast Air Quality Management District

**Comment 1:** This comment states that the South Coast Air Quality Management District (SCAQMD) has provided comments as guidance for the Lead Agency and provides a summary of the proposed project and the impacts related to volatile organic compounds (VOCs) emissions. The comment provides information from the Draft EIR that the Project would generate 63.62 pounds per day (lbs/day) of VOCs, which would exceed the SCAQMD's threshold of 55 lbs/day after implementation of Rule 1113 requirements.

**Response 1:** This comment provides the basis for the SCAQMD letter and is general in nature. The comment provides information from Section 5.2, *Air Quality*, of the Draft EIR. No further response is required or provided.

**Comment 2:** This comment states that CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse air quality impacts. In addition, the comment states that to further reduce the Project's VOCs emissions during operation, it is recommended that the following two additional mitigation measures be incorporated in the Final EIR:

1. Use of water-based or low VOCs cleaning products that go beyond the requirements of SCAQMD Rule 1113.
2. Require the use of electric landscaping equipment, such as lawn mowers and leaf blowers. South Coast AQMD's Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program (Program) provides funds to accelerate the replacement of gasoline-powered commercial lawn and garden equipment for commercial landscapers and gardeners operating within the South Coast AQMD region and should be used to support the implementation of this recommended mitigation measures. The Lead Agency should include the information about the Program in the Final EIR and encourage commercial landscapers and gardeners to apply for funds from the Program.

**Response 2:** As described in Draft EIR Section 5.2, *Air Quality*, the majority of VOC emissions would be generated from consumer products and mobile activity. Consumer products include cleaning supplies, kitchen aerosols, cosmetics and toiletries, the use of which cannot be controlled by the City. Likewise, vehicular emissions cannot be controlled by either the Project applicant or the City. There are no feasible mitigation measures that would reduce VOC emissions to below the SCAQMD threshold.

The recommended mitigation measure to require future residents and tenants to use water-based or low VOCs cleaning products that go beyond the requirements of SCAQMD Rule 1113 would not be fully enforceable and could not be legally imposed to a degree of certainty. Therefore, it is not considered a feasible mitigation measure as defined by CEQA Guidelines Section 15126.4.

Requiring the use of electric landscaping equipment would also not be fully enforceable and could not be legally imposed to a degree of certainty; and is also not considered a feasible mitigation measure as defined by CEQA Guidelines Section 15126.4. However, pursuant to the comment, the Final EIR includes information about the SCAQMD's Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program. This SCAQMD Program has a goal of improving air quality by exchanging older, polluting gasoline- or diesel-powered commercial lawn and garden equipment for new zero emission, battery electric commercial grade equipment; the link to the Program's website follows: <https://www.aqmd.gov/home/programs/community/lawn-and-garden-equipment>. In addition, the suggested measure to provide information about the Program is incorporated into the Project as PDF AQ-1: As part of lease or service contracts, the Project operator shall provide information to commercial tenants and Project landscape management about the availability of electric landscaping equipment SCAQMD's Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program.

**Comment 3:** This comment states that written responses to all comments are requested, and that issues raised should be addressed in detail giving reasons why specific suggestions are not accepted, and that conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)) as they do not facilitate the purpose and goal of CEQA related to public disclosure. The comment also states that, if it is determined that the recommended additional mitigation measures are not feasible, the specific reasons should be described and supported by substantial evidence for rejecting them.

**Response 3:** Response 2, above, provides detailed reasons why the recommended mitigation measures are not accepted. As described by the factual evidence provided previously, the recommended measures would not be fully enforceable and could not be legally imposed to a degree of certainty; and therefore, are not considered feasible mitigation measures per CEQA Guidelines Section 15126.4. However, the information about SCAQMD's Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program is provided as requested, and the Project has been modified to include PDF AQ-1 to provide information about the Program to commercial tenants and Project landscape management.

**LETTER A3 California Department of Transportation (Caltrans)**

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 12  
 1750 EAST FOURTH STREET, SUITE 100  
 SANTA ANA, CA 92705  
 PHONE (657) 328-6267  
 FAX (657) 328-6510  
 TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



Making Conservation  
 a California Way of Life.

February 18, 2020

Mr. Jerry Guevara  
 City of Santa Ana Planning and Building Agency  
 PO Box 1988  
 Santa Ana, CA 92702

File: IGR/CEQA  
 SCH#: 2019080011  
 12-ORA-2019-01296  
 SR 55 8.539

Dear Mr. Guevara,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Draft Environmental Impact Report for the proposed Bowery Mixed-Use Project. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.

1

The project will redevelop the project site into a mixed-use development featuring 1,150 multi-family residential units and 80,000 square feet of commercial space. The project development is located on the western corner of Red Hill Avenue and Warner Avenue, on the border of the cities of Santa Ana and Tustin, and east of State Route (SR) 55. Caltrans is a commenting agency and has the following comments:

**Transportation Planning:**

1. As stated previously in the comment letter sent for the Notice of Preparation:
  - The City of Santa Ana's Active Transportation Plan (2019) shows the following proposed bicycle facilities nearby: Class IV on Warner Avenue; Class II on Carnegie Avenue; and Class II on Pullman Street. Additionally, the Tustin Legacy Specific Plan (2017) notes the following proposed bicycle facilities nearby: Class II on Red Hill Avenue; Class II on Warner Avenue; Class II on Victory Road; and Class II on Armstrong Avenue. There is also an existing Class II on Barranca Parkway. Coordinate with the City of Tustin to discuss constructing the bicycle facilities on Red Hill Avenue and Warner Avenue. Active Transportation facilities increase mobility and regional connectivity, improve air quality, and reduce congestion and VMT.

2

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

City of Santa Ana  
February 18, 2020  
Page 2

- Ensure that connections are provided to the Tustin Metrolink Station, which is located three miles away from the project site, as rail transit increases regional connectivity. OCTA Bus Route 472 provides a direct connection to Tustin Metrolink. Bicycle facilities also improve first-/last-mile connections to the station. The Tustin Legacy Specific Plan (2017) proposes a Class I trail through the Tustin Legacy Park that runs diagonally from Red Hill Avenue and Barranca Parkway to the Tustin Metrolink Station. 3
  - Consider incorporating designated areas/parking for freight delivery and micro-transit pick up and drop off in the site plan design for this project. 4
  - Promote the use of transit. OCTA operates bus transit routes with stops near the project site. Route 472 runs from Tustin Metrolink Station to Irvine Business Complex. Route 71 runs from the City of Yorba Linda to the City of Newport Beach. Ensure that transit service will not be disrupted during construction. 5
2. The Project is adjacent to the Tustin Legacy development. Ensure high visibility pedestrian improvements to connection to Tustin Legacy. The Legacy will include educational and recreational facilities. Families may cross Red Hill Avenue to get to these facilities. High visibility improvements on intersection like Red Hill Avenue and Warner Avenue will increase safety for pedestrian travelers. 6

**Permits:**

3. Any project work proposed in the vicinity of the State Right-of-Way (ROW) would require an encroachment permit and all environmental concerns must be adequately addressed. If the environmental documentation for the project does not meet Caltrans's requirements for work done within State ROW, additional documentation would be required before approval of the encroachment permit. Please coordinate with Caltrans to meet requirements for any work within or near State ROW. For specific details for Encroachment Permits procedure, please refer to the Caltrans's Encroachment Permits Manual at: 7
- <http://www.dot.ca.gov/hq/traffops/developserv/permits/>

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

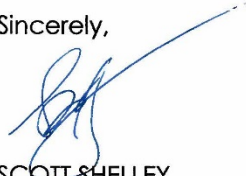


City of Santa Ana  
February 18, 2020  
Page 3

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to contact Jude Miranda at (657) 328-6229 or [Jude.Miranda@dot.ca.gov](mailto:Jude.Miranda@dot.ca.gov).

8

Sincerely,



SCOTT SHELLEY  
Branch Chief, Regional-IGR-Transit Planning  
District 12

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

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## Letter A3: California Department of Transportation

**Comment 1:** This comment states that the California Department of Transportation (Caltrans) is a commenting agency and has provided comments. In addition, the comment provides a summary of the proposed project and its location.

**Response 1:** This comment provides the basis for the Caltrans letter and is general in nature. The comment does not reference a specific section or analysis within the Draft EIR. No further response is required or provided.

**Comment 2:** This comment states that the City's Active Transportation Plan (2019) shows the following proposed bicycle facilities nearby: Class IV on Warner Avenue; Class II on Carnegie Avenue; and Class II on Pullman Street. Additionally, the Tustin Legacy Specific Plan (2017) notes the following proposed bicycle facilities nearby: Class II on Red Hill Avenue; Class II on Warner Avenue; Class II on Victory Road; and Class II on Armstrong Avenue. There is also an existing Class II on Barranca Parkway. The comment states to coordinate with the City of Tustin to discuss constructing the bicycle facilities on Red Hill Avenue and Warner Avenue as active transportation facilities increase mobility and regional connectivity, improve air quality, and reduce congestion and VMT.

**Response 2:** The comment is not related to the proposed Project nor does the comment reference specific concerns related to environmental impacts that could result from construction or operation of the Project or analysis within the Draft EIR. However, potential impacts to bicycle facilities are addressed on page 5.14-22 of the Draft EIR, which states that bicycle lanes exist along Red Hill Avenue between Barranca Parkway and Reynolds Avenue, Warner Avenue east of Red Hill Avenue, Tustin Ranch Road, Von Karman Avenue, Jamboree Road between Barranca Parkway and Main Street, Edinger Avenue between Red Hill Avenue and Newport Avenue, on the south side of Barranca Parkway west of Jamboree Road, Alton Parkway between Red Hill Avenue and Jamboree Road, and on Main Street. The Draft EIR describes that the Project would not involve any off-site improvements that would remove the existing or planned bicycle lanes or result in any identified impacts to bicycle routes. The existing bicycle routes would provide bicycle transportation opportunities for residents and employees of the Project site, and the Project would not conflict with any bicycle facilities. The comment related to coordination with the City of Tustin regarding bicycle facilities on Red Hill Avenue and Warner Avenue will be passed along to City decision makers as part of the Final EIR.

**Comment 3:** This comment states that connections to the Tustin Metrolink Station should be made. The comment also states that OCTA Bus Route 472 provides a direct connection to Tustin Metrolink and that bicycle facilities also improve first-/last- mile connections to the station. The comment further states that the Tustin Legacy Specific Plan (2017) proposes a Class I trail through the Tustin Legacy Park that runs diagonally from Red Hill Avenue and Barranca Parkway to the Tustin Metrolink Station.

**Response 3:** The comment does not reference specific concerns related to the environmental analysis within the Draft EIR. The OCTA Bus Route 472 currently operates along Red Hill Avenue and existing bus stops are located adjacent to the Project site. As described in Section 5.14, *Transportation*, of the Draft EIR, Route 472 provides service Monday thru Friday, and other OCTA bus routes that serve the Project area are 55, 59, 70, 76, 86, Intracounty OC Express Route 213/A, Metrolink Stationlink Route 463, and the IShuttle 400A, 401B, and 405F.

The proposed Project would not modify the existing transit services. Future residents and employees would be able to directly access transit services via Route 472 that provides transport to and from the Tustin Metrolink Station, which (per the comment) is located three miles away from the Project site. Also, as

described in the previous response, the Project would not involve any off-site improvements that would remove the existing or planned bicycle lanes or result in any identified impacts to bicycle routes. Likewise, the Project does not include any offsite improvements that would remove pedestrian facilities, including those planned within Tustin Legacy Park. The proposed Project would develop onsite sidewalks that would connect to the existing adjacent pedestrian facilities to provide for pedestrian circulation and reduce VMT. As described on page 3-13 of the Draft EIR, the Project would include pedestrian/bicycle paths to provide for non-vehicular onsite circulation and connection to existing sidewalks and bike lanes adjacent to the Project site.

**Comment 4:** This comment states that incorporating designated areas/parking for freight delivery and micro-transit pick up and drop off in the site plan design for the Project should be considered.

**Response 4:** The comment does not reference specific concerns related to the environmental analysis within the Draft EIR. As described in Section 3.0, *Project Description*, of the Draft EIR, the Project includes parking structures and one surface parking lot. These facilities would be designed to accommodate truck deliveries and trucks needed for residential move in and move outs. The City's construction permitting process would ensure that circulation and parking areas for trucks needed for operation of the project are appropriately designed and constructed.

**Comment 5:** This comment states that the use of transit should be promoted and that it should be insured that transit service will not be disrupted during construction.

**Response 5:** The comment does not reference specific concerns related to the environmental analysis within the Draft EIR. As described in Response 3, various bus routes currently serve the Project area and existing bus stops are located adjacent to the Project site. The proposed Project would not modify the existing transit services. Future residents and employees would be able to directly access transit services. During construction of the Project, it's possible that development of Project infrastructure adjacent to the Project site along the Red Hill Avenue sidewalk could occur, which could temporarily alter use of the bus stop at that location. However, other bus stops are located along Red Hill Avenue, including one approximately 1,200 feet to the south at Carnegie Avenue and one approximately 1,500 feet to the north at Valencia Avenue, would not be temporarily disrupted by construction activity. Therefore, other nearby stops could be used and the existing bus services would not be disrupted during construction.

**Comment 6:** This comment states that the Project should ensure high visibility pedestrian improvements to connect to the Tustin Legacy as families may cross Red Hill Avenue. The comment states that high visibility improvements at the intersection of Red Hill Avenue and Warner Avenue will increase safety for pedestrian travelers.

**Response 6:** The comment does not reference specific concerns related to the environmental analysis within the Draft EIR. The intersection of Red Hill Avenue and Warner Avenue is currently developed with a 4-way signaled crosswalk that provides connection between the Project site and areas across both Warner Avenue and Red Hill Avenue, including the Tustin Legacy. In addition, a signaled crosswalk is located at the southern leg of the Red Hill Avenue and Carnegie Avenue intersection, which is the closest intersection south of the Project site and, also provides pedestrian access to the Tustin Legacy.

The proposed Project does not include improvements to the existing crosswalks and would not result in impacts to pedestrian facilities. As detailed in Section 5.14, *Transportation*, of the Draft EIR, the Project site is bound by sidewalks along Red Hill Avenue and Warner Avenue. The proposed Project would retain the existing pedestrian facilities, which would facilitate walking to nearby locations; and the proposed Project would not conflict with pedestrian facilities. In addition, Section 5.14, *Transportation*, of the Draft EIR describes that the

intersection of Red Hill Avenue and Warner Avenue is under the joint jurisdiction of the City of Santa Ana and the City of Tustin. Thus, intersection improvements (including pedestrian facilities, such as higher visibility crosswalks) are subject to the approval of the City of Tustin. However, the comment to provide high visibility pedestrian improvements at the intersection of Red Hill Avenue and Warner Avenue will be passed along to City decision makers as part of the Final EIR.

**Comment 7:** This comment states that Project work in the vicinity of a State Right-of-Way (ROW) would require an encroachment permit and all environmental concerns must be adequately addressed pursuant to Caltrans' s requirements before approval of the encroachment permit.

**Response 7:** The Project does not include offsite improvements or other construction activities within or near a State ROW. Therefore, the Project would not require an encroachment permit from Caltrans.

**Comment 8:** This comment requests to continue to be advised of the Project and any future developments that could potentially impact State transportation facilities.

**Response 8:** This comment does not provide any concerns or questions regarding the adequacy of the Draft EIR. Caltrans District 12 will remain on the mailing list for the Project and will receive notification of availability of the Final EIR, in addition to all other public notices.

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**LETTER A4 Orange County Airport Land Use Commission (2 pages)****AIRPORT LAND USE COMMISSION**

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

February 18, 2020

Jerry C. Guevara, Assistant Planner I  
City of Santa Ana Planning & Building Agency  
PO Box 1988  
Santa Ana, CA 92701

**Subject: The Bowery Mixed Use Project Draft Environmental Impact Report (DEIR)**

Dear Mr. Guevara:

Thank you for the opportunity to review the DEIR for The Bowery Mixed-Use Project located at 2300, 2310, and 2320 South Redhill Avenue in the context of the Airport Land Use Commission's *Airport Environs Land Use Plan (AELUP) for John Wayne Airport (JWA)* and the *AELUP for Heliports*. The proposed project would redevelop the existing 14.58-acre light-industrial project site with a new mixed-use project that include 1,150 multi-family residential units and up to 80,000 square feet of commercial retail and restaurant space. The mixed-use buildings would be five to six stories high, and the parking structures would be six to seven stories high.

The proposed project is located under the primary aircraft approach corridor to John Wayne Airport and is within the Federal Aviation Administration (FAA) Federal Aviation Regulations (FAR) Part 77 Notification Area for JWA. The DEIR should emphasize that future residents would be exposed to significant aircraft overflight and single event noise due to the project's location under the aircraft approach corridor for JWA. Additionally, during reverse flow operations at JWA (approximately five percent (5%) of the time), future residents would experience noise associated with aircraft departures.

Because of the project's proximity to a noise impacted area, we concur with the DEIR inclusion of mitigation measure LU-1 that all prospective residents of the project site shall be notified of airport related noise, and that notification shall be included in lease/rental agreements and shall state the following:

**"NOTICE OF AIRPORT IN VICINITY:**

*This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration or odors). Individual sensitivities to those*

ALUC DEIR Comments The Bowery Mixed Use Project  
2/18/20  
Page 2

*annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."*

2

Additionally, we recommend that the DEIR include the City's maximum allowable building height for the proposed project area as permitted through the City's General Plan or Zoning Code. Because the proposed project site is located under the aircraft approach corridor and conical surface for JWA, we request that the DEIR discuss maximum building heights and existing ground elevation to address whether the proposed project remains below the imaginary surfaces for JWA. It is also recommended that the DEIR address land use compatibility impacts, safety impacts, visual impacts and outdoor recreational area impacts given the project's location within the JWA primary aircraft approach corridor, including the impacts of approving multi-family residential units at this project site.

3

The Draft EIR should also identify if the project will be impacted by helicopter overflight due to the close proximity of helicopter arrival and departure operations at JWA and if the project allows for heliports as defined in the *AELUP for Heliports*. Should the development of heliports occur within your jurisdiction, proposals to develop new heliports must be submitted through the City to the ALUC for review and action pursuant to Public Utilities Code Section 21661.5. Proposed heliport projects must comply fully with the state permit procedure provided by law and with all conditions of approval imposed or recommended by FAA, by the ALUC for Orange County and by Caltrans/Division of Aeronautics.

4

As you know, because this project falls within the *JWA AELUP* planning areas and requires a General Plan Amendment, it is recommended that the project be referred to the Airport Land Use Commission (ALUC) for a Consistency determination with the *JWA AELUP*. In this regard, please note that the Commission requests that such referrals to be submitted to the ALUC staff between the local agency's expected Planning Commission and City Council hearings. Since the ALUC meets on the third Thursday afternoon of each month, submittals must be received in the ALUC office by the first of the month to ensure sufficient time for placement on the agenda, review, and analysis.

5

Thank you again for the opportunity to comment on the initial study. Please contact Julie Fitch, Land Use Manager, at (949) 252-5284 or [jfitch@ocair.com](mailto:jfitch@ocair.com) should you have any questions related to the future referral of your project. You may also reach me at (949) 252-5123 or via email at [lchoum@ocair.com](mailto:lchoum@ocair.com).

Sincerely,



Lea U. Choum  
Executive Officer



## Letter A4: Orange County Airport Land Use Commission

**Comment 1:** This comment provides general background information about the Project, and states that the site is located within the Federal Aviation Administration (FAA) Federal Aviation Regulations (FAR)<sup>1</sup> Part 77 Notification Area for John Wayne Airport (JWA). The comment asserts that the Project site is located under the primary aircraft approach corridor (and departure corridor five percent of the time) for JWA and that future residents would be exposed to significant overflight and single-event noise due to the Project's location.

**Response 1:** JWA is located approximately 2.2 miles southwest of the Project, and the site is under the primary aircraft approach corridor. However, Project structures would not be within the FAA FAR Part 77 Notification Area for JWA. The JWA FAR Part 77 Notification Area is a three-dimensional imaginary surface that consists of a 100:1 aerial slope extending outward for 20,000 feet (or 3.79 miles) from the nearest runway, or areas higher than 200 feet above ground level (JWA AELUP page 13). As the Project site is located 2.2 miles from the airport, it is within 20,000 feet (or 3.79 miles) from the runway. However, the Project structures would not be above (or penetrate) the 100:1 imaginary surface slope, and therefore, would not be within the JWA FAR Part 77 Notification Area. As shown in Figure 1, the 100:1 imaginary surface area slope at the Project site is located above heights of 108.6 and 116.95 feet above the ground level. As the highest Project structure is 94 feet above the ground level, the structures would not penetrate the 108.6 through 116.96 foot-high imaginary surface area above the site. Therefore, Project structures would not be within the FAR Part 77 Notification Area (as defined in FAR Part 77.13).

Additionally, as described in Section 5.10, Noise, of the Draft EIR, and shown on Draft EIR Figure 5.10-2, the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA. According to the exterior noise thresholds outlined in the Airport Environs Land Use Plan (AELUP) for JWA, multi-family residential development is considered *normally consistent* with exterior noise levels of less than 60 dBA CNEL. As the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA, the residential land use is consistent with JWA aircraft noise exposure exterior noise level compatibility thresholds. Also, the airport related noise at the Project site does not exceed the City's municipal code permissible noise levels. Therefore, impacts related to single event noise from aircraft overflight would not occur. Additionally, the County's General Aviation Noise Ordinance prohibits commercial aircraft departures between the hours of 10:00 p.m. and 7:00 a.m. and arrivals between the hours of 11:00 p.m. and 7:00 a.m. These restrictions substantially limit the aircraft noise during nighttime hours. Therefore, future residential uses at the site would be consistent with airport noise planning and residents of the Project would not be exposed to significant noise from aircraft overflight.

**Comment 2:** This comment asserts that the Project is in proximity to a noise impacted area within the airport influence area and states concurrence with the Draft EIR inclusion of Mitigation Measure LU-I that all prospective residents of the Project site shall be notified of airport related noise, and that notification shall be included in lease/rental agreements.

**Response 2:** As described in Response 1, the Project is not located within or adjacent to an area that is impacted by noise from aircraft overflight. The Project site is located outside the 55 dBA CNEL aircraft noise level contour, where pursuant to the AELUP, multi-family residential development is considered consistent. Also, the airport related noise at the Project site does not exceed the City's municipal code permissible noise levels for multi-family residential uses.

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<sup>1</sup> 14 Code of Federal Regulations (CFR) Part 77, et seq.

In addition, the Project is not within the airport influence area. As described on page 6 of the AELUP, the airport influence area is the airport planning area boundary, and the two terms are synonymous. The AELUP sets the planning area as the furthest extent of the 60 CNEL contour, the FAR Part 77 Notification Area, and the runway safety zones (AELUP page 9).

Section 5.7, *Hazards and Hazardous Materials*, of the Draft EIR describes that the Project site is not located within JWA's Airport Safety Zone (Draft EIR Figure 5.7-1) and located outside of both the airport's actual (2018) and planned 60 CNEL contours (Draft EIR Figures 5.7-2 and 5.7-3). Therefore, the Project site does not meet the safety zone or noise zone criteria to be in the airport's planning area. In addition, as described in Response 1, the Project structures would not be within the JWA FAR Part 77 Notification Area.

Therefore, the Project is not within the airport influence/planning area, and within an area that the AELUP considers consistent with multi-family residential uses. Thus, the notice from the AELUP, included in the Draft EIR as Mitigation Measure LU-1, is not applicable to the Project. Likewise, potentially significant impacts related to residential land uses and JWA operations would not occur, and impacts would be less than significant. As result, Mitigation Measure LU-1, is not required and has been removed, as shown in Chapter 3, *Revisions to the Draft EIR*.

**Comment 3:** This comment states that the City's maximum allowable building height for the Project area as permitted through the City's General Plan or Zoning Code be included in the Draft EIR. The comment further states that because the proposed Project site is located under the aircraft approach corridor, it is requested that the maximum building heights and existing ground elevation be discussed to address whether the Project remains below the imaginary surfaces for JWA. The comment also recommends that the land use compatibility impacts, safety impacts, visual impacts, and outdoor recreational area impacts be discussed given the Project's location within the JWA primary aircraft approach corridor.

**Response 3:** The Project includes a zone change that would change the existing zoning designation from M-1 (Light Industrial) that limits structures to 35 feet in height to a Specific Development (SD) zone to implement the proposed mixed-use Project. The SD zone does not have specific building height restrictions but requires development plans to be submitted for the City to review subject to Planning Commission and City Council approvals, and, in the case of this development, to ensure hazards, such as those related to JWA, do not occur.

As described in Response 1 and shown in Figure 1, the FAR Part 77 Notification 100:1 imaginary surface area at the Project site is located above heights of 108.6 and 116.95 feet above the ground level. As the highest Project structure is 94 feet above the ground level, the structures would not penetrate the 108.6 through 116.96 foot-high FAR Part 77 Notification imaginary surface area above the site. In addition, the Project would not penetrate the FAR Part 77 Obstruction Imaginary Surfaces area (as shown on Draft EIR Figure 5.7-5), which is much higher than the 100:1 imaginary surface notification area. Therefore, the Project remains below both the notification and obstruction imaginary surfaces for JWA.

Also described in Response 1, the exterior noise thresholds outlined in the AELUP, multi-family residential development is considered normally consistent with exterior noise levels of less than 60 dBA CNEL. As the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA, the residential land use is considered normally consistent with JWA aircraft noise exposure exterior noise level compatibility thresholds. Thus, pursuant to the AELUP for JWA, impacts related to residential and recreational land use compatibility would not occur.

Safety impacts related to operation of JWA are described in Section 5.7, *Hazards and Hazardous Materials*, of the Draft EIR. As detailed, the Project site is not located within JWA's Airport Safety Zone (Draft EIR Figure 5.7-1) and it is described that the Project would not generate substantial light or glare. Exterior lighting

fixtures and security lighting would be installed in accordance with Municipal Code Division 3, Building Security Regulations, which includes specifications for shielding and intensity of security lighting. In addition, the proposed Project would not use highly reflective surfaces, and does not include large areas of glass on the buildings. Therefore, the Project would not generate substantial sources of glare. Thus, the Draft EIR determined that Project-related safety and visual impacts associated with JWA operations would be less than significant.

**Comment 4:** This comment states that it should be identified if the Project will be impacted by helicopter overflight due to the close proximity of helicopter arrival and departure operations at JWA and if the Project allows for heliports as defined in the AELUP for Heliports. The comment also provides procedures and regulations related to proposed heliport projects.

**Response 4:** The proposed Project does not include a heliport or any helicopter related activity. In addition, per the Orange County AELUP for Heliports (2008) the Project site is not located within a Helipad Protection Zone, and the height restrictions related to helicopter operations is the same imaginary surface area described in Response 3. As described above, the Project site is located within the three-dimensional FAR Part 77 Notification Area boundary, but the proposed structures would not penetrate the 100:1 Notification Area elevation (Figure 1). Therefore, the proposed structures would remain below the imaginary surface area for JWA and would not be affected by helicopter overflight. In addition, due to the 2.2 mile distance from the Project site to JWA, and a helicopter's 8:1 approach and departure transitional surface (the flight trajectory for landings and departures), helicopters fly over the Project site at a substantial altitude, such that noise from helicopter operations does not significantly impact the noise environment on the Project site. As described in Response 1, the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA, which includes noise related to helicopter operations.

**Comment 5:** This comment states that because this Project falls within the JWA AELUP planning area and requires a General Plan Amendment, it is recommended that the project be referred to the Airport Land Use Commission (ALUC) for a Consistency determination with the JWA AELUP. The comment also provides general information about the ALUC meetings and ALUC staff contacts.

**Response 5:** As described in Response 2, the Project structures would not be located within the JWA AELUP planning area. Pursuant to the AELUP, the JWA AELUP planning area includes areas that are: 1) within the JWA 60 CNEL contour; 2) within the FAR Part 77 Notification Area; 3) within the runway safety zones.

The Project site is 1) located outside of the JWA 60 CNEL contour (Draft EIR Figures 5.7-2 and 5.7-3); 2) not located within the airport safety zones (Draft EIR Figure 5.7-1); and 3) would not would not penetrate the FAR Part 77 100:1 Notification Area elevation, as shown in Figure 1. Therefore, pursuant to the JWA AELUP, the site is not within the JWA planning area boundary, and ALUC referral for a consistency determination would not be required.

In summary, as also described in Response 1, the Project is consistent with the noise thresholds outlined in the JWA AELUP that identify multi-family residential uses as normally consistent with exterior noise levels of less than 60 dBA CNEL. As the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA, the residential land use would be consistent with the JWA AELUP. Overall, the proposed Project and its related general plan amendment, would be consistent with the AELUP, and a referral to the ALUC would not be required. However, the City has forwarded the Project for ALUC consideration in response to this comment letter.

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Figure 1: FAR Part 77 Notification Area 100:1 Slope Building Elevation



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**LETTER A5 Orange County Fire Authority (2 pages)****ORANGE COUNTY FIRE AUTHORITY**

P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602-0125

Brian Fennessy, Fire Chief

(714) 573-6000

www.ocfa.org

February 18, 2020

City of Santa Ana  
 Planning Division  
 Attn: Jerry Guevara, Assistant Planner I  
 P.O. Box 1988  
 Santa Ana, CA 92702

Subject: Notice of Availability of an Environmental Impact Report for the Bowery Mixed Us Project

Dear Jerry Guevara,

Thank you for the opportunity to review the subject document. The Orange County Fire Authority (OCFA) provides fire protection and emergency medical services response to the project area. Services include: structural fire protection, emergency medical and rescue services, education and hazardous material response. OCFA also participates in disaster planning as it relates to emergency operations, which includes high occupant areas and schools sites and may participate in community disaster drills planned by others. Resources are deployed based upon a regional service delivery system, assigning personnel and equipment to emergency incidents without regard to jurisdictional boundaries. The equipment used by the department has the versatility to respond to both urban and wildland emergency conditions

We have the following comments regarding the subject document:

Page 5.12-1 (5.12.2.2)

- At the time of this document, OCFA serves 24 cities in Orange County and all unincorporated areas
- As provided by the OCFA 2018 Statistical Annual Report, there were 27,220 incidents with 33,983 unit responses calls-for-service from the 10 OCFA fire stations in the City in 2018. Of the calls for service, 65-81 percent (21,952) were for emergency medical calls, 4-7 2 percent (565) were for fire incidents, and 13-8 17 percent (4,703) were for other incidents, which includes: cancelled service calls, ruptures, hazardous conditions, false alarms, and miscellaneous calls.
- Fire Stations listed in Table 5.12-1 are not all located in Santa Ana, this should be labeled OCFA Fire Stations Near the Project Site.
  - Station 79 is located in Santa Ana
  - Station 37 is located in Tustin
  - Station 6 is located in Irvine
  - Station 74 is located in Santa Ana
  - Station 76 is located in Santa Ana

Serving the Cities of: Aliso Viejo • Buena Park • Cypress • Dana Point • Garden Grove • Irvine • Laguna Hills • Laguna Niguel • Laguna Woods  
 Lake Forest • La Palma • Los Alamitos • Mission Viejo • Placentia • Rancho Santa Margarita • San Clemente • San Juan Capistrano • Santa Ana  
 Seal Beach • Stanton • Tustin • Villa Park • Westminster • Yorba Linda • and Unincorporated Areas of Orange County

**RESIDENTIAL SPRINKLERS AND SMOKE ALARMS SAVE LIVES**

## City of Santa Ana – Bowery Mixed Use Project

2/18/2020

Page 2

- Staffing listed in Table is Daily Staffing | 3
- Page 5.12-4 (5.12.2.5)
- 81% of incidents in Santa Ana are calls for emergency medical services | 4
- Page 5.12-5 (5.12.2.5 – Guideline B-09)
- Access to and around structures which includes aerial ladder access on at least two sides of each structure | 5

In addition, we would like to point out that all standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, building materials, and the like will be applied to this project at the time of plan submittal. Thank you for providing us with this information. Please contact me at 714-573-6199 if you have any questions. | 6

Sincerely,



**Tamara Rivers**  
Management Analyst  
Planning and Development Section  
tamyrivers@ocfa.org  
714-573-6199



## Letter A5: Orange County Fire Authority

**Comment 1:** This comment provides general background information about the Orange County Fire Authority (OCFA) and states that resources are deployed on a regional basis without regard to jurisdictional boundaries and the OCFA has the capability to respond to both urban and wildland emergency conditions.

**Response 1:** This comment provides the basis for the OCFA letter and is general in nature. The comment does not reference a specific section or analysis within the Draft EIR. No further response is required or provided.

**Comment 2:** This comment states that OCFA currently serves 24 cities and all unincorporated areas of Orange County. The comment also provides updated statistics regarding the ODFA services that were provided in 2018.

**Response 2:** Pursuant to this comment, the information in Section 5.12, *Public Services*, of the Draft EIR will be updated as provided below and in Chapter 3, *Revisions to the Draft EIR*.

Changes made to the Draft EIR are identified here in ~~strikeout~~ text to indicate deletions and in underlined text to signify additions.

The fourth and fifth paragraphs on page 5.12-2, Section 5.12, *Public Services*, are revised as follows:

Fire protection and emergency medical services in the City of Santa Ana are provided by the OCFA through a contract for services. The OCFA provides fire suppression, emergency medical, rescue, fire prevention, hazardous materials coordination, and wildland management services. OCFA serves ~~23~~ 24 cities in Orange County and all unincorporated areas. Within the City of Santa Ana, OCFA provides services from 10 city-owned fire stations. There are currently 6 city-owned fire stations located within 3.5 miles of the Project site. Station 79, which is located 1 mile from the Project site is the first responding unit. The location, equipment, and staffing of the fire stations near the Project site are provided in Table 5.12-1.

As provided by the OCFA 2018 Statistical Annual Report, there were 27,220 incidents with 33,983 unit responses calls for service from the ~~10 fire stations in the City in 2018~~. Of the calls for service, ~~65~~ 81 percent (21,952) were for emergency medical calls, ~~1.7~~ 2 percent (565) were for fire incidents, and ~~13.8~~ 17 percent (4,703) were for other incidents, which includes: cancelled service calls, ruptures, hazardous conditions, false alarms, and miscellaneous calls.

**Comment 3:** This comment states that that fire stations listed in Table 5.12-1 are not all located in Santa Ana and the table should be revised.

**Response 3:** Pursuant to this comment, the information in Table 5.12-1 in Section 5.12, *Public Services*, of the Draft EIR is revised as follows:

**Table 5.12-1: ~~Santa Ana~~ OCFA Fire Stations Near the Project Site**

Fire Station	Location	Distance from Site	Equipment	Daily Staffing
Station 79	1320 East Warner, <u>Santa Ana</u>	1 mile	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 37	15011 Kensington Park Avenue, <u>Tustin</u>	1.8 miles	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 6	3180 Barranca Parkway, <u>Irvine</u>	2.2 miles	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 28	17862 Gillette Avenue, <u>Irvine</u>	2.5 miles	1 Paramedic Engine,	2 Fire Captain, 2 Engineer, 4 Firefighters

			1 Paramedic Truck	
Station 74	1427 S. Broadway Street, <u>Santa Ana</u>	2.8 miles	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 76	950 W. MacArthur Boulevard, <u>Santa Ana</u>	3.5 miles	1 Paramedic Truck	1 Fire Captain, 1 Engineer, 2 Firefighters

Source: OCFA 2019.

**Comment 4:** This comment refers text in Section 5.12.2.5 and states that 81 percent of the incidents in Santa Ana are for emergency medical services.

**Response 4:** Pursuant to this comment, the first full paragraph on page 5.12-4, Section 5.12, *Public Services*, is revised as follows:

This residential and employee population is expected to create the typical range of service calls to OCFA that are largely related to medical emergencies, which consist of ~~65~~ 81 percent of service calls; while fire calls consisted of ~~17~~ 2 percent of OCFA service calls in Santa Ana during 2018.

**Comment 5:** This comment refers text in Section 5.12.2.5 and Guideline B-09 and states that access to and around structures should include ladder access on at least two sides of each structure.

**Response 5:** Pursuant to this comment, the following bullet point is added as the fourth bullet point on page 5.12-5 in Section 5.12, *Public Services*, of the Draft EIR.

- Access to and around structures would include ladder access on at least two sides of each structure.

**Comment 6:** This comment states that all standards with regard to development, including water supply, built in fire protection systems, and circulation access, and building materials will be applied to the Project at the time of plan submittal.

**Response 6:** This comment is consistent with the information provided on page 5.12-5 in Section 5.12, *Public Services*, of the Draft EIR, which states that all projects within the City, the proposed Project would be required per City permitting to comply with existing regulations, including the California building and fire code regulations, included in the Santa Ana Fire Code and the OCFA Fire Prevention Guideline B-09, Fire Master Plans for Commercial and Residential Development, which include regulations for water supply, built in fire protection systems, adequate emergency access, fire hydrant availability, and fire-safe building materials. As detailed in the Draft EIR, the City's regular development permitting process ensures that all applicable fire code requirements would be implemented.

**LETTER A6 Orange County Transportation Agency (3 pages)**

## AFFILIATED AGENCIES

Orange County  
Transit District

Local Transportation  
Authority

Service Authority for  
Freeway Emergencies

Consolidated Transportation  
Service Agency

Congestion Management  
Agency

March 4, 2020

Mr. Jerry Guevara  
City of Santa Ana Planning and Building Agency  
PO Box 1988  
Santa Ana, CA 92702

Subject: **Notice of Availability of an Environmental Impact Report for the  
Bowery Mixed-Use Project**

Dear Mr. Guevara:

The Orange County Transportation Authority (OCTA) appreciates the opportunity to provide input on the Notice of Availability (NOA) of an Environmental Impact Report (EIR) for the City of Santa Ana's (City) Bowery Mixed-Use Project (Project). The following comments are provided for your consideration:

- Please include OCTA on the distribution list for future projects. The notices can be addressed to the following:
  - Orange County Transportation Authority
  - Division of Planning
  - 600 S. Main St.
  - Orange, CA 92868
- In DEIR Section 5.14.2 "Regulatory Setting," subsection "Orange County Congestion Management Plan" identifies the Orange County CMP as the "Congestion Management Plan." Please revise this and all additional document references to "Congestion Management Program."
- In DEIR Section 5.14.4 "Thresholds of Significance," subsection "Congestion Management Program (CMP) Intersections" states "if an intersection is operating at LOS E in the baseline condition, an addition of 0.01 to the ICU value would constitute a significant project impact." Please revise to state "if an intersection is operating at below LOS E in the baseline condition, an addition of 0.10 to the ICU value would constitute a significant project impact." You may refer to "Chapter 2: Traffic Level of Service Standards" of the latest CMP Report here: <http://www.octa.net/Projects-and-Programs/Plans-and-Studies/Congestion-Management-Program/Overview/>
- In DEIR Section 5.14.4 "Thresholds of Significance," subsection "Congestion Management Program (CMP) Intersections" incorrectly identifies intersection #13 Newport Avenue/Edinger Avenue as a CMP intersection. Please revise to identify intersection #14 SR-55 NB Ramps/Newport Avenue as a CMP intersection, rather than intersection #13.

Orange County Transportation Authority  
550 South Main Street / P.O. Box 14184 / Orange / California 92863-1584 / (714) 560-OCTA (6282)

Mr. Guevara  
March 4, 2020  
Page 2

- In the DEIR Appendix K: Traffic Impact Analysis, Section 3.1, Page 13, Table 4, the following roadways do not match the existing conditions:
  - Grand Avenue is described as a 6-lane undivided facility. Please note that Grand Avenue between the SR-55 Dyer East and Dyer West offramps is a 5-lane facility. Also please note that Grand Avenue is divided with a painted median.
  - Von Karman Avenue is described as a 4-lane undivided facility. Please note that Von Karman Avenue is divided with a painted median.
  - Warner Avenue is described as a 6-lane divided facility. Please note that Warner Avenue west of South Wright Street is a 5-lane divided facility.
  - MacArthur Boulevard is described as a 6- to 8-lane divided facility from Red Hill Avenue to the I-405 Ramps. Please note that MacArthur Boulevard is 6- to 7-lanes divided from Red Hill to the I-405 Ramps. MacArthur Boulevard only becomes an 8-lane facility south of Main Street.
- In the DEIR Appendix K: Traffic Impact Analysis, Page 17, Table 5: Existing Intersection Geometrics, the following intersections do not match existing on-ground conditions:
  - Intersection 14: Newport Ave/Del Amo Ave - Del Amo eastbound has one left turn, one through lane, and one through-right turn.
  - Intersection 17: Red Hill Ave/Interstate 5 NB Ramps – the I-5 NB off-ramp has two left turn lanes and one right turn lane.
  - Intersection 23: Redhill Ave/Valencia Ave – the Valencia eastbound has one left turn, one through lane, and one through-right turn. Valencia westbound has two left turns, two through lanes, and one right turn lane.
  - Intersection 44: Armstrong Avenue/Barranca Parkway – the westbound Barranca Parkway has two left turn lanes, four through lanes, and one dedicated right turn lane.
  - Intersection 48: Tustin Ranch Rd/Warner Ave – the geometrics for each approaching direction should be rotated once clockwise to match the existing conditions.

5

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Mr. Guevara  
March 4, 2020  
Page 3

- Intersection 51: Von Karman Ave/Alton Pkwy – the geometrics for all approaches is one left turn lane, one through lane, and one through-right lane. 6
  - Please note that the City of Santa Ana is planning to update their General Plan and Circulation Element to support safety and Complete Streets projects. Specifically, in the study area, the City is planning to reclassify Halladay Street and Standard Street as Divided Collectors (2-lane divided) facilities. Please coordinate with the City as appropriate. 7
  - For intersections that are within the jurisdiction of multiple agencies, please consider utilizing the lowest intersection threshold of significance amongst the agencies for analysis. 8
- Throughout the development of this project, we encourage communication with OCTA on any of the matters discussed herein. If you have any questions or comments, please contact me at (714) 560-5907 or at [dphu@octa.net](mailto:dphu@octa.net). 9

Sincerely,



Dan Phu  
Manager, Environmental Programs

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## Letter A6: Orange County Transportation Authority

**Comment 1:** This comment states that the OCTA appreciates the opportunity to comment on the Project and provides an address to be notified for future projects.

**Response 1:** This comment provides the basis for the OCFA letter and is general in nature. The comment does not reference a specific section or analysis within the Draft EIR. No further response is required or provided.

**Comment 2:** This comment states that in DEIR Section 5.14.2, Regulatory Setting," identifies the Orange County CMP as the "Congestion Management Plan" and requests this be revised along with all additional document references to "Congestion Management Program".

**Response 2:** Pursuant to this comment, the last header on Page 5.14-2, Section 5.14.2, *Regulatory Setting*, of the DEIR will be updated as provided below and in Chapter 3, *Revisions to the Draft EIR*.

### Congestion Management Plan Program

**Comment 3:** This comment states that Section 5.14.4, *Thresholds of Significance*, subsection "Congestion Management Program (CMP) Intersections" states "if an intersection is operating at LOS E in the baseline condition, an addition of 0.01 to the ICU value would constitute a significant project impact." The comment requests this to be revised to state "if an intersection is operating at below LOS E in the baseline condition, an addition of 0.10 to the ICU value would constitute a significant project impact." The comment refers to "Chapter 2: Traffic Level of Service Standards" of the latest CMP Report here: <http://www.octa.net/Projects-and-Programs/Plans-and-Studies/Congestion-Management-Program/Overview/>

**Response 3:** Pursuant to this comment, the last paragraph on Page 5.14-6, Section 5.14.4, *Thresholds of Significance*, of the DEIR will be updated as provided below and in Chapter 3, *Revisions to the Draft EIR*.

At CMP intersections, LOS E is considered acceptable. If an intersection is operating at below LOS E in the baseline condition, an addition of ~~0.01~~ 0.10 to the ICU value would constitute a significant project impact. The following two intersections are CMP intersections, where the below LOS E standard would apply:

**Comment 4:** This comment states that Section 5.14.4, *Thresholds of Significance*, subsection "Congestion Management Program (CMP) Intersections" incorrectly identifies intersection #13 Newport Avenue/Edinger Avenue as a CMP intersection. The comment requests this to be revised to identify intersection #14 SR-55 NB Ramps/Newport Avenue as a CMP intersection, rather than intersection #13.

**Response 4:** Pursuant to this comment, the last bullet point on Page 5.14-6, Section 5.14.4, *Thresholds of Significance*, of the DEIR will be updated as provided below and in Chapter 3, *Revisions to the Draft EIR*.

- ~~#13: Newport Avenue/Edinger Avenue (City of Tustin)~~
- #14: SR-55 NB Ramps/Newport Avenue (City of Costa Mesa/Caltrans)

**Comment 5:** This comment states that Appendix K: Traffic Impact Analysis, Section 3.1, Page 13, Table 4, the following roadways do not match the existing conditions:

- Grand Avenue is described as a 6-lane undivided facility. Please note that Grand Avenue between the SR-55 Dyer East and Dyer West offramps is a 5-lane facility. Also please note that Grand Avenue is divided with a painted median.

- Von Karman Avenue is described as a 4-lane undivided facility. Please note that Von Karman Avenue is divided with a painted median.
- Warner Avenue is described as a 6-lane divided facility. Please note that Warner Avenue west of South Wright Street is a 5-lane divided facility.
- MacArthur Boulevard is described as a 6- to 8-lane divided facility from Red Hill Avenue to the 1-405 Ramps. Please note that MacArthur Boulevard is 6- to 8-lanes divided from Red Hill to the 1-405 Ramps. MacArthur Boulevard only becomes an 8-lane facility south of Main Street.

**Response 5:** Pursuant to this comment, Table 4: Study Area Roadway Characteristics was updated with the correct existing conditions. The Final TIA is included as Appendix A of this Final EIR.

**Comment 6:** This comment states that Appendix K: Traffic Impact Analysis, Page 17, Table 5: Existing Intersection Geometrics, the following intersections do not match existing on- ground conditions:

- Intersection 14: Newport Ave/Del Amo Ave - Del Amo eastbound has one left turn, one through lane, and one through-right turn.
- Intersection 17: Red Hill Ave/Interstate 5 NB Ramps - the 1-5 NB off- ramp has two left turn lanes and one right turn lane.
- Intersection 23: Red Hill Ave/Valencia Ave - the Valencia eastbound has one left turn, one through lane, and one through-right turn. Valencia westbound has two left turns, two through lanes, and one right turn lane.
- Intersection 44: Armstrong Avenue/Barranca Parkway - the westbound Barranca Parkway has two left turn lanes, four through lanes, and one dedicated right turn lane.
- Intersection 48: Tustin Ranch Rd/Warner Ave - the geometrics for each approaching direction should be rotated once clockwise to match the existing conditions.

**Response 6:** Intersection 23: Red Hill Ave/Valencia Ave and Intersection 44: Armstrong Avenue/Barranca Parkway were updated in the Final TIA with the correct Lane Geometry.

For Intersection 17: Red Hill Ave/Interstate 5 NB Ramps, the intersection Lane Configuration in Table 5: *Existing Intersection Geometrics*, was updated to reflect the lane configuration as currently striped (i.e. without a northbound through lane). However, the intersection is analyzed as having an allowed northbound through movement because the traffic counts indicate 95 northbound through trips during the PM Peak Hour. Although the northbound through movement is an illegal movement at the intersection, because there are a significant number of vehicles proceed in the northbound through direction, they were included in the analysis.

Intersection 14: Newport Ave/Del Amo Ave and Intersection 51: Von Karman Ave/Alton Pkwy were updated to show the right turn lanes are defacto right turns. Finally, Intersection 48: Tustin Ranch Rd/Warner Ave was not changed to keep consistency with Tustin Ranch Rd being a north/south oriented street and Warner Ave being an east/west oriented street.

**Comment 7:** This comment states that that the City of Santa Ana is planning to update their General Plan and Circulation Element to support safety and Complete Streets projects. Specifically, in the study area, the City is planning to reclassify Halladay Street and Standard Street as Divided Collectors (2-lane divided) facilities.

**Response 7:** The comment is accurate in that the City is currently updating the General Plan, including the Circulation Element and that classifications of streets may change. The traffic analysis for the proposed Project does not include either Halladay Street or Standard Street, as impacts to intersections along these



roadways would not occur from implementation of the proposed Project. In addition, the comment does not reference a specific section or analysis within the Draft EIR. Thus, no further response is required or provided.

**Comment 8:** This comment states that for intersections that are within the jurisdiction of multiple agencies, please consider utilizing the lowest intersection threshold of significance amongst the agencies for analysis.

**Response 8:** As described in Section 5.14, *Transportation*, several intersections are within the jurisdiction of multiple agencies, including the Cities of Santa Ana, Tustin, Irvine, and Caltrans. Section 5.14.4, *Thresholds of Significance*, identifies the different thresholds for each agency, which are applied throughout the impact analysis in Tables 5.14-6 through 5.14-11. The study used the most conservative threshold for all shared intersections outside of the IBC within the project study area. IBC intersections were analyzed with a LOS E, which is consistent with other previously approved studies in the project vicinity.

**Comment 9:** This comment states that throughout the development of this project, it is encouraged to communicate with OCTA on any of the matters discussed in the letter. The comment provides contact information.

**Response 9:** This comment is conclusionary in nature. The comment does not reference a specific section or analysis within the Draft EIR. The City will continue to communicate with OCTA for matters discussing this proposed Project. No further response is required or provided.

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**LETTER A7 City of Irvine (3 pages)**

Community Development

1 Civic Center Plaza, Irvine, CA 92606-5208

[cityofirvine.org](http://cityofirvine.org)

949-724-6000

February 18, 2020

Mr. Jerry C. Guevara  
City of Santa Ana  
Planning and Building Agency  
PO Box 1988  
Santa Ana, CA 92702

**Subject: Environmental Impact Report (EIR) for the Bowery Mixed Use Project  
at 2300 South Red Hill Avenue in the City of Santa Ana.**

Dear Mr. Guevara:

The City of Irvine is in receipt of an EIR for the Bowery Mixed Use project located at 2300 South Red Hill Avenue in the City of Santa Ana. The proposed mixed use project consists of 80,000 square feet of retail, restaurant, and commercial space, and a five- to seven-story, 1,150-unit, multi-family residential development. To accomplish this, the project will demolish a 14.68-acre industrial site with three large-scale industrial, warehouse, and office buildings. Staff completed its review and enclosed the following comments. If you have any questions, please contact me at 949-724-6364 or at [jequina@cityofirvine.org](mailto:jequina@cityofirvine.org).

Sincerely,

Justin Equina  
Associate Planner

Enclosure: City of Irvine Comments

ec: Kerwin Lau, Manager of Planning Services  
Marika Poynter, Principal Planner  
Lisa Thai, Supervising Transportation Analyst

1

## CITY OF IRVINE COMMENTS

General Comments

1. If the proposed project does not include an on-site park, it may overburden park facilities in adjacent jurisdictions, such as the City of Irvine, and create a negative impact. Such impacts should be analyzed and mitigated. The analysis should focus on the potential to overburden and physically deteriorate existing recreation facilities in the City of Irvine, such as Bill Barber Park, which is only three miles away from the Project.

Page 5.13-7

2. The DEIR states "...the Project is not anticipated to increase the use of existing parks and recreation facilities such that substantial deterioration of the facility would occur or be accelerated."

There DEIR does not support that statement through any studies or analyses. The DEIR should analyze actual anticipated usage of existing and proposed parks in the City of Irvine, especially those that offer sports orientated recreational facilities and playing fields (e.g. Bill Barber Park).

Page 5.14-6, Intersection Thresholds

3. Include a discussion about the significant impacts occurring when the project's study area intersection operates from an acceptable level of service to an unacceptable level of service.

Red Hill/Barranca Proposed Mitigation

4. The City has concerns with implementing a westbound right-turn overlap as it will prohibit southbound Red Hill Avenue U-turns. This will impact motorists exiting the business and residential driveways on the west side of Red Hill Avenue, north of Barranca Parkway, intending to head northbound.

To minimize the impact, City staff recommends implementing a right-turn overlap and U-turn prohibition by time-of-day. The proposed times should be evaluated and conducted based on existing U-turn volumes, future U-turn volumes with completion of the residential development, and peak times for the westbound right turn movement.

A blank-out sign could also be utilized to prohibit U-turns when appropriate, with the overlap phase programmed for concurrent activation. An example of this

operation can be found at Newport Avenue and Old Irvine Boulevard in City of Tustin. | 4

Project Site Plan

5. Show a right-turn access into the project site from Red Hill as the street is a major roadway. | 5

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## Letter A7: City of Irvine

**Comment 1:** This comment describes the proposed Project and states that the City of Irvine staff has reviewed the EIR.

**Response 1:** This comment provides the basis for the City of Irvine letter and is general in nature. The comment does not reference a specific section of the Draft EIR or concern; therefore, no further response is required or provided.

**Comment 2:** This comment expresses concern that the proposed Project does not include an on-site park, and that it may overburden and physically deteriorate existing recreation facilities in the City of Irvine, such as Bill Barber Park. This comment also asserts that the EIR determination that parks would be less than significantly impacted is not supported by any studies and that the EIR should analyze the actual anticipated usage of existing and proposed parks in the City of Irvine, especially those that offer sports-oriented recreational facilities.

**Response 2:** As detailed in Section 3.0, *Project Description*, the proposed Project includes 174,555 square feet of exterior open space recreation area and approximately 8,008 square feet of interior amenities to total 183,363 square feet of recreational and open space onsite. Each of the four residential buildings would have a recreational open space area that would include a pool, spa/hot tub, outdoor kitchen, seating areas, fitness center, and club room. These onsite amenities are anticipated to meet many of the park and recreation needs of Project residents. Based on a standard of 2 acres of public park and/or recreational space per 1,000 residents (Municipal Code Section 35-108), the proposed Project would require 4.2 acres of parkland to serve the new residents; and the Project includes a total of 4.2 acres (183,363 square feet) of park and recreation area. Therefore, the Project would include the Municipal Code required park and/or recreational space. In addition, the 81.88 acres of Santa Ana parkland within 3-miles of the Project site provides a variety of facilities that include sports fields, exercise equipment, picnic areas, and playgrounds to serve the park and recreational needs of the Project residents and employees.

Page 5.13-7 of the Draft EIR states that based on the California State Parks information for the southern California Region, the anticipated number of Project residents at full occupancy (2,081 residents), the distance and type of recreational facilities near the Project site, it is anticipated that the Project would generate 348 additional park users two or more times per week, 287 additional park users about once per week, 429 additional park users once or twice per month, 508 additional park users several times a year, and 314 additional park users once or twice a year. The California State Parks information also states that users spent an average of 30 minutes per visit. This level of use would average approximately sixteen 30-minute users per week per acre of parkland within 3 miles of the Project site.

There is approximately 243.38 acres of parkland within 3 miles of the Project site, including the City of Irvine and Tustin parkland. Therefore, the level of use from the Project would average approximately five 30-minute users per week per acre of parkland. In addition, use of sports fields by approximately 14 percent of adults and 33.1 percent of those under 18 years old that utilize park and recreation facilities (per California State Parks data<sup>2</sup>) is largely used by organized sports leagues that pay fees to the City in which they are in for use of the facilities, which is used to fund maintenance and improvements related to use of the facilities. Based on this level of use and sport league fees associated with sports field/court use, the Project is not anticipated to increase the use of existing and future parks and recreation facilities, including

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<sup>2</sup> Draft EIR Section 5.13, *Parks and Recreation*, and California State Parks, Survey on Public Opinions and Attitudes on Outdoor Recreation in California, January 2014 (California State Parks 2014). Accessed: <https://www.parks.ca.gov/pages/795/files/2012%20spoa.pdf>

those in the City of Irvine, such that substantial physical deterioration of any facility would occur or be accelerated.

**Comment 3:** This comment requests that page 5.14-6, *Intersection Thresholds*, include a discussion about the significant impacts occurring when the project's study area intersection operates from an acceptable level of service to an unacceptable level of service.

**Response 3:** Pursuant to this comment, page 5.14-6, *Intersection Thresholds*, has been revised to describe that a project would result in a significant impact if it causes an intersection operating at acceptable LOS in the baseline condition to deteriorate to unacceptable LOS. The revised section 5.14, *Transportation*, is provided as Attachment A to Chapter 3, *Revisions to the Draft EIR*, of this Final EIR.

**Comment 4:** This comment states that the City of Irvine has concerns with implementing a westbound right-turn overlap because it could prohibit southbound Red Hill Avenue U-turns, which would impact northbound motorists exiting driveways on the west side of Red Hill Avenue, north of Barranca Parkway. To minimize the impact, the comment recommends implementing a right-turn overlap and U-turn prohibition by time-of-day. The comment offers evaluation criteria and a suggestion that a blank-out sign could be utilized to prohibit U-turns when appropriate, with the overlap phase programmed for concurrent activation.

**Response 4:** The Project impact at Red Hill Avenue/Barranca Parkway does not occur until the 2040 cumulative condition. As a result, it is likely that the Project would not construct the improvement but would instead pay an in-lieu fee to the City of Santa Ana for future implementation of the improvement. As noted in the Draft EIR, the implementation of the improvement is subject to the approval of the Cities of Tustin and Irvine. The modifications to the design of Mitigation Measure TR-2 that are suggested in the comment will be considered once design of the improvement is commenced.

**Comment 5:** The comment requests that the Site Plan show a right-turn access into the Project site from Red Hill as the street is a major roadway.

**Response 5:** A right-turn access is shown on the project site plan. A right-turn lane is not proposed at the driveway, nor has been recommended by the City of Santa Ana. Please see response to comment A-8-11 below.



**LETTER A8 City of Tustin (5 pages)**

## Community Development Department

February 5, 2020

Mr. Minh Thai  
 Executive Director  
 City of Santa Ana  
 Planning and Building Agency  
 PO BOX 1988 (M-20)  
 Santa Ana, CA 92702



**SUBJECT: REVIEW OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE BOWERY MIXED USE PROJECT IN THE CITY OF SANTA ANA**

Dear Mr. Thai:

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report (DEIR) for The Bowery Mixed Use Project proposed at the southwesterly corner of Warner Avenue and Red Hill Avenue in the City of Santa Ana. According to the DEIR, the proposed project consists of the development of a 14.58-acre site with 1,150 multiple family residences within five-story to six-story buildings, wrapped parking structures, and 80,000 square feet of retail and restaurant commercial space. Also proposed is approximately 174,555 square feet of open space within courtyards, common areas, roof decks, perimeter plazas, and other open space areas. Recreation amenities for residents would include four (4) pool and spa areas, fitness areas, and community rooms. The project includes a proposed General Plan Amendment from Professional and Administrative Office to a mixed-use designation and a Zone Change from Light Industrial to Specific Development.

The City of Tustin offers the following comments at this time:

1. The City of Tustin is concerned with the significant changes in land uses (i.e., from commercial and industrial buildings to residential mixed use) along Red Hill Avenue, Warner Avenue, and Dyer Road in Santa Ana that are proposed by The Bowery project or have occurred recently with the approval and construction of The Heritage project at 2001 East Dyer Road. The City of Santa Ana has already demonstrated that these significant use intensifications will likely continue, as evidenced by proposed land use changes that are already being contemplated through the public outreach efforts for Santa Ana's next comprehensive General Plan Update. These land use changes could result in significant modifications to the anticipated traffic and park impacts and planned mitigations. While individually each project may cause relatively modest changes in traffic patterns or impacts to parks, the cumulative impacts are likely to be substantial. Therefore, there should be some overall projections of the anticipated changes in land uses, so the cumulative impacts related to traffic and parks and the associated mitigation can be documented. The proposed Santa Ana General Plan Update or a focused General Plan Amendment for the Red Hill Avenue corridor should be completed before the proposed project is considered so that cumulative impacts are properly analyzed and mitigated.

300 Centennial Way, Tustin, CA 92780 • P: (714) 573-3100 • F: (714) 573-3113 • [www.tustinca.org](http://www.tustinca.org)

Mr. Jerry Guevara  
 The Bowery Project DEIR  
 February 5, 2020  
 Page 2

2. The City of Santa Ana Municipal Code will require the project to pay park acquisition and development fees or dedicate land for park and recreational purposes. According to the DEIR, approximately 174,555 square feet of open space is proposed. However, this area includes private open space and perimeter open space and is not equivalent to park land provided. In any event, the project should be required to provide land for park and recreational purposes to meet the City of Santa Ana's minimum standard of "two (2) acres of property devoted to parks and recreational purposes for each thousand (1,000) persons residing within the City of Santa Ana." If on-site parkland is not required for the proposed project, residents of the project may be unable to find adequate parks in Santa Ana and may negatively impact parks and overburden parkland facilities in adjacent jurisdictions, including Tustin. These impacts must be mitigated. An analysis of the proposed project's compliance with the City of Santa Ana's park standards should focus on the potential to physically deteriorate existing and future recreational facilities in the City of Tustin, as the nearest existing and planned large scale recreational facilities are located in the City of Tustin. 2
3. According to Table 5.13-1 on page 5.13-2 of the DEIR, with one exception, the nearest City of Santa Ana parks are approximately two (2) to three (3) miles from the project site. As a comparison, the DEIR should analyze the distances from other similar existing City of Santa Ana residential neighborhoods to their nearest community parks. In addition, Table 5.13-2 on pages 5.13-3 and 5.13-4 of the DEIR, which lists City of Tustin and City of Irvine parks within the vicinity of the project site, should be modified to also include Ron Foell (Greenwood) Park. 3
4. It is stated on page 5.13-7 of the DEIR that based "on the existing amount of park and recreation facilities in the vicinity of the Project site, the recreation facilities that would be provided as part of the Project, and the number of residents at full capacity of the proposed Project, the Project is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated." However, this statement is not supported by any studies in the DEIR, which should analyze the actual anticipated usage of existing and proposed parks in the City of Tustin, especially those that will offer sports-oriented recreational facilities and playing fields that will not be provided as part of The Bowery Mixed Use Project. The proposed Veterans Sports Park at Tustin Legacy, for example, will be three times larger and about half the distance from the Project site than the closest park in Santa Ana and will offer new, state of art facilities that will be attractive to park users. The analysis in the DEIR should consider the quality, amenities, and attractiveness of nearby parks when estimating park usage. 4
5. The DEIR notes that any park fees collected for the Project would be expended for the acquisition, construction, and renovation of park and recreation facilities in Santa Ana. Therefore, it should also be noted in the DEIR that the collected park fees would not directly benefit any park facilities in Tustin. The statement in the DEIR that "by payment of the required park fees, the Project would provide funding to offset any increased usage at other park and recreation facilities within Santa Ana. Overall, the proposed Project would not result in substantial physical deterioration of park and recreation facilities, and impacts would be less than significant." is misleading because it only applies to parks in Santa Ana and should not be used to reach the conclusion regarding deterioration of parks in Tustin. 5

Mr. Jerry Guevara  
 The Bowery Project DEIR  
 February 5, 2020  
 Page 3

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|-----|---|----|
| 6.  | It is incorrectly stated on page 5.13-5 of the DEIR that 5,136.35 acres of parkland will be provided per Project resident at full occupancy.  | 6  |
| 7.  | Table 5.13-3 appears to be missing a column for average travel times between 13 and 20 minutes.   | 7  |
| 8.  | The project consists of 1,150 multi-family units and 80,000 square feet (SF) of commercial uses broken down into 18,000 SF of retail and 62,000 SF of quality, casual sit-down, fast food with and without drive-through and coffee/donut shop types of restaurant uses. The project trip generation is 1,012 AM, 1,315 PM and 16,785 average daily trips (ADT). The use of discounts to reduce project trip generation, such as internal and pass-by trips, results in a projected reduction of project trips as great as 42% in the PM peak hour. The reduced project trip generation with these discounts is 691 AM, 762 PM and 12,872 ADT. The use of these trip discounts results in reduced anticipated off-site impacts. The City of Tustin recommends that the worst-case scenario be presented rather than the best-case scenario. It should be noted that the analysis for The Heritage Project at 2001 East Dyer Road did not factor in pass-by trips to discount project trips. | 8  |
| 9.  | The Industrial Park trip generation for the existing land use is higher than the trip generation based on the Institute of Transportation Engineers (ITE) industrial park classification (i.e., per thousand square feet (TSF): .32 and .08 for AM in and out and PM in and out and 3.37 for ADT). The use of the higher trip generation for existing uses results in a reduced net trip generation change when compared to the proposed project, which would not be the worst-case scenario. Again, a worst-case scenario should be used when projecting trip generation for the proposed project.   | 9  |
| 10. | A queuing analysis should be provided for the left-turn into Driveway 1 at Warner Avenue to determine if the forecasted 290 vehicles in the PM peak hour can be accommodated in the proposed left-turn pocket and not have a negative impact on through traffic.  | 10 |
| 11. | Due to the high inbound southbound peak hour volume of 265 vehicles into Driveway 3 on Red Hill Avenue, the City of Tustin recommends a dedicated right-turn lane to separate the right-turns from through traffic in the #3 lane where speeds are 50 mph. The right-turn pocket length should be based on Synchro.   | 11 |
| 12. | At Red Hill Avenue and Warner Avenue, the northbound left-turn volume in the PM peak hour increases from 578 to 860 with the project. Please demonstrate that the left-turn pocket length for northbound Red Hill Avenue can accommodate the additional 282 vehicles.   | 12 |
| 13. | 2040 PM Peak Hour Mitigation: A right-turn overlap implies that there is a right-turn lane. Will the project construct one and operate it with a right-turn overlap? To remain eligible and qualify for Measure M funding, the City of Tustin does not support the conversion of the #3 through lane into a right-turn lane which would result in a downgrade of Red Hill Avenue. Should an alternative mitigation be selected, the City of Tustin's preference would be the addition of a dedicated right-turn lane on eastbound Warner Avenue to serve the high right-turn volume in the AM Peak Hour (i.e., 346 vehicles).   | 13 |

Mr. Jerry Guevara  
 The Bowery Project DEIR  
 February 5, 2020  
 Page 4

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|-----|--|----|
| 14. | Tustin Ranch Road and Warner Avenue North: For City of Tustin locations where the intersection capacity utilization (ICU) is greater than the acceptable level of service (i.e., LOS E or ICU is greater than .90), mitigation of the project contribution is required to bring the intersection back to no-project conditions or better if the project contribution is greater than .02 or greater at non-Congestion Management Program (CMP) locations. Therefore, this intersection is not considered adversely impacted by the proposed project. The DEIR indicates that the intersection is adversely impacted and should be revised. | 14 |
| 15. | Project feature of a new signal at Driveway 1/Warner Avenue intersection: Due to its proximity to the Red Hill Avenue and Warner Avenue signalized intersection maintained by the City of Tustin, it is expected that the proposed new signal at Driveway 1/Warner Avenue be also maintained by the City of Tustin. The Project shall be required to collaborate with the City of Tustin in its design and construction.   | 15 |
| 16. | Future Project of a Class II Bicycle Facility on Warner Avenue: The proposed project shall be required to collaborate on the proposed joint Santa Ana/Tustin project to add a Class II Bike Lane on Warner Avenue on the northern boundary of the Project, with the City of Santa Ana as the lead.   | 16 |
| 17. | The through traffic volumes on Warner Avenue west of Red Hill Avenue decrease significantly to/from the Red Hill Avenue and Warner Avenue intersection, which may underestimate the project impact at the proposed signalized project driveway on Warner Avenue. Please provide an explanation of the decreased through traffic volumes.   | 17 |
| 18. | In Tables 8 and 12, please correct the level of service (LOS) for Intersection 22 – Red Hill Avenue at Edinger Avenue to LOS D in the PM peak hour.  | 18 |

Thank you again for the opportunity to provide comments on the proposed project. The City of Tustin would appreciate receiving early responses to our comments as well as a copy of the Final EIR when it becomes available and all future public hearing notices with respect to this project. Please provide all future CEQA notices regarding this project to the undersigned pursuant to Public Resources Code Section 21092.2.	19
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If you have any questions regarding the City's comments, please call Scott Reekstin, Principal Planner, at (714) 573-3016 or Krys Saldivar, Public Works Manager, at (714) 573-3172.

Sincerely,



Elizabeth A. Binsack  
 Community Development Director

Mr. Jerry Guevara  
The Bowery Project DEIR  
February 5, 2020  
Page 5

cc: Jerry Guevara, Assistant Planner I, Santa Ana Planning and Building Agency  
Matthew S. West, City Manager  
Nicole Bernard, Assistant City Manager  
David Kendig, City Attorney  
Douglas S. Stack, Public Works Director  
Chad Clanton, Parks and Recreation Director  
Ken Nishikawa, Deputy Director of Public Works/Engineering  
Chris Koster, Deputy Director of Economic Development  
Justina Willkom, Assistant Director – Planning  
Krys Saldivar, Public Works Manager  
Scott Reekstin, Principal Planner

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## Letter A8: City of Tustin

**Comment 1:** This comment describes the proposed Project and states that the City is concerned with the significant changes in land uses (i.e., from commercial and industrial buildings to residential mixed use) along Red Hill Avenue, Warner Avenue, and Dyer Road that are proposed by the Project and have occurred recently with the approval and construction of The Heritage project at 2001 East Dyer Road. The comment also states that the City of Santa Ana has already demonstrated that land use intensifications will likely continue, as evidenced by proposed land use changes in the Santa Ana General Plan Update, and while individually each project may cause relatively modest changes in traffic patterns or impacts to parks, the cumulative impacts are likely to be substantial. Therefore, the comment states that there should be some overall projections of the anticipated changes in land uses, so the cumulative impacts related to traffic and parks and the associated mitigation can be documented. The comment also states that the Santa Ana General Plan Update or a focused General Plan Amendment for the Red Hill Avenue corridor should be completed before the proposed Project is considered so that cumulative impacts are properly analyzed and mitigated.

**Response 1:** This comment provides concerns related to overall growth from land use intensifications and related cumulative impacts. Cumulative impacts are evaluated throughout Chapter 5 of the Draft EIR pursuant to the requirements of CEQA. The EIR is a “Project” EIR. As described in CEQA Guidelines Section 15161, a “Project” EIR should focus primarily on the changes in the environment that would result from the development project. A project EIR’s evaluation of cumulative impacts may be based on a list of past, present, and probable future projects producing related impacts (CEQA Guidelines Section 15130(b)(1)(A)). “Probable future projects” include those for which an actual development application has been filed and for which actual environmental review is underway (*San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151 Cal.App.3d 61, 74). The City of Santa Ana sets the date of the project’s Notice of Preparation (NOP) as the reasonable cutoff date for determining what projects have environmental review underway and should be included in the cumulative impacts analysis (See *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1128 [reasonable to set a project’s application date as the cutoff]). Cumulative CEQA review for future projects that submitted applications after publication of the NOP for the proposed Project would include the proposed Project in their cumulative analyses, as appropriate. In addition, CEQA Guidelines Section 15130(b)(1) states that it is appropriate for cumulative analysis to utilize projections contained in an adopted local, regional or statewide plan, related planning document, or regionally accepted criteria thresholds; or a reasonable combination of the two.

For example, pursuant to CEQA, the cumulative noise analyses in the Draft EIR is based on identification of the closest project on the list of known projects and whether if it within hearing distance of the project site; whereas the cumulative analyses of air quality emissions are based on emissions thresholds identified by the South Coast Air Quality Management District (SCAQMD). The cumulative population and household analyses, and related growth impacts (such as park and recreation) is based upon a combination of the Southern California of Governments (SCAG) growth projections and the list of known cumulative projects within the Santa Ana, Irvine, and Tustin, and Newport Beach area. Similarly, cumulative traffic analyses are based on the growth projections from the Orange County Transportation Analysis Model (OCTAM) and the number of vehicular trips from the list of cumulative projects within the traffic study area that is provided in the Draft EIR. Based on these growth projections, the Draft EIR includes mitigation measures to reduce cumulative impacts. The cumulative analyses differ with each environmental topic because the geographic scope and other parameters of each cumulative analysis discussion can vary, and mitigation is incorporated as needed, as described for each environmental topical section in the Draft EIR. Thus, based on the CEQA requirements for a “project” EIR, the Draft EIR has properly analyzed and mitigated cumulative impacts.

However, the City is currently also working through preparation of an EIR for the General Plan Update. The NOP for the EIR for the General Plan has been released for a 30-day public review from February 26, 2020 to March 27, 2020 and identifies the anticipated growth throughout the City, as broken down into Focus Areas and Specific Plan areas. In addition to the project level CEQA required cumulative analysis that was prepared by the Draft EIR, the General Plan Update EIR will include evaluation of the anticipated changes in land uses and growth throughout the City, including those in the vicinity of the Project site, and provide an appropriate cumulative analysis, with mitigation, as needed.

**Comment 2:** This comment states that the open space proposed by the Project this area includes private open space and perimeter open space and is not equivalent to park land provided, and the Project should be required to provide land for park and recreational purposes to meet the City of Santa Ana's minimum standard of 2 acres of property devoted to parks and recreational purposes for each thousand persons residing within the City of Santa Ana. The comment also states that if on-site parkland is not required for the proposed Project parkland facilities in Tustin may be impacted and must be mitigated. The comment states that the analysis of the Project's compliance with the City's park standards should focus on the potential to physically deteriorate existing and future recreational facilities in the City of Tustin, as the nearest existing and planned large scale recreational facilities are located in the City of Tustin.

**Response 2:** As detailed in Section 3.0, *Project Description*, the proposed Project includes 174,555 square feet of exterior open space recreation area and approximately 8,008 square feet of interior amenities to total 183,363 square feet of recreational and open space onsite. Each of the four residential buildings would have a recreational open space area that would include a pool, spa/hot tub, outdoor kitchen, seating areas, fitness center, and club room. These onsite amenities are anticipated to meet many of the park and recreation needs of Project residents. Based on a standard of 2 acres of public park and/or recreational space per 1,000 residents (Municipal Code Section 35-108), the proposed Project would require 4.2 acres of parkland to serve the new residents; and the Project includes a total of 4.2 acres (183,363 square feet) of park and recreation area. Therefore, the Project would include the Municipal Code required park and/or recreational space. In addition, the 81.88 acres of Santa Ana parkland within 3-miles of the Project site provides a variety of facilities that include sports fields, exercise equipment, picnic areas, and playgrounds to serve the park and recreational needs of the Project residents and employees.

Page 5.13-7 of the Draft EIR states that based on the California State Parks<sup>3</sup> information for the Southern California Region, the anticipated number of Project residents at full occupancy (2,081 residents), the distance and type of recreational facilities near the Project site, it is anticipated that the Project would generate 348 additional park users two or more times per week, 287 additional park users about once per week, 429 additional park users once or twice per month, 508 additional park users several times a year, and 314 additional park users once or twice a year. The California State Parks information also states that users spent an average of 30 minutes per visit. This level of use would average approximately sixteen 30-minute users per week per acre of Santa Ana parkland within 3 miles of the Project site. Including the City of Tustin and Irvine parkland within 3 miles of the Project site (totaling approximately 243.38 acres), the level of use would average approximately five 30-minute users per week per acre of parkland. In addition, use of sports fields by approximately 14 percent of adults and 33.1 percent of those under 18 years old that utilize park and recreation facilities (per California State Parks data) is largely used by organized sports leagues that pay fees to the City in which they are in for use of the facilities, which is used to fund maintenance and improvements related to use of the facilities. Based on this level of use and sport league fees associated with sports field/court use, the Project is not anticipated to increase the use of existing and

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<sup>3</sup> Draft EIR Section 5.13, Parks and Recreation, and California State Parks, Survey on Public Opinions and Attitudes on Outdoor Recreation in California, January 2014 (California State Parks 2014). Accessed: <https://www.parks.ca.gov/pages/795/files/2012%20spoa.pdf>



future parks and recreation facilities, including those in the City of Tustin, such that substantial physical deterioration of any facility would occur or be accelerated.

**Comment 3:** This comment states that according to Table 5.13-1 on page 5.13-2 of the Draft EIR, with one exception, the nearest City of Santa Ana parks are approximately two to three miles from the Project site. The comment states that as a comparison, the Draft EIR should analyze the distances from other similar existing City of Santa Ana residential neighborhoods to their nearest community parks. The comment also states that Table 5.13-2 on pages 5.13-3 and 5.13-4 of the DEIR, which lists City of Tustin and City of Irvine parks within the vicinity of the project site, should be modified to also include Ron Foell (Greenwood) Park.

**Response 3:** As described in Response 1, the EIR is a “Project” EIR. As described in CEQA Guidelines Section 15161, a “Project” EIR should focus primarily on the changes in the environment that would result from the development project. The location of other City residential neighborhoods and park locations is not an impact related to the proposed Project. However, as detailed in Table 5.13-1 in Section 5.13, *Parks and Recreation of the Draft EIR*, and described in the previous response, the City of Santa Ana has 11 existing parks that provide 81.88 acres of parkland within 3 miles of the Project site. The Draft EIR Table 5.13-3 shows that over 37 percent of people regularly drive within 10 minutes to reach typical outdoor recreation uses; 20.8 percent drive between 11-20 minutes; and another 31.3 percent drive between 20 and 60 minutes. Also, 79.3 percent walk 12 minutes or less to outdoor recreation. All of the 81.88 acres of Santa Ana parkland are within a 10-minute driving distance of the Project site and all of the parkland within both Santa Ana and Tustin are beyond the 12-minute walking distance. Thus, both parkland within Santa Ana and Tustin from residents at the Project site would be generally accessed by vehicle. Moreover, per the California State Parks data, the existing parkland within 3 miles of the Project site is within the geographical area that most park visitors utilize.

In addition, pursuant to this comment, Table 5.13-2 of the DEIR, was modified to include Ron Foell (Greenwood) Park, as provided below and in Chapter 3, *Revisions to the Draft EIR*.

<u>Ron Foell (Greenwood) Park, Windrow Rd</u>	<u>Playground, Amphitheater, Basketball Court, 2 Bocce Ball courts, 1.4 miles of Walking Trails, Picnic Pavilions</u>	<u>5 acres</u>	<u>1.9 miles</u>	<u>Driving: 4 minutes</u> <u>Walking: 39 minutes</u>
<b>Total of Tustin Parkland Within 3 Miles of the Project Site</b>		<b>92.9 <u>97.9</u> acres</b>		

**Comment 4:** This comment asserts that the EIR determination that parks would be less than significantly impacted is not supported by any studies and that the EIR should analyze the actual anticipated usage of existing and proposed parks in the City of Tustin, especially those that offer sports-oriented recreational facilities. The comment also states that the proposed Veterans Sports Park at Tustin Legacy would be larger and about half the distance from the Project site than the closest park in Santa Ana and will offer new, state of art facilities that will be attractive to park users. The comment further states that the EIR should consider the quality, amenities, and attractiveness of nearby parks when estimating park usage.

**Response 4:** As described in Responses 2 and 3 previously, based on the California State Parks information the Project would average approximately five 30-minute users per week per acre of parkland within 3 miles of the Project site (including those in the City of Tustin). Regarding City of Santa Ana sports-oriented recreational facilities, of the 10 Santa Ana parks listed in Table 5.13-1 of the Draft EIR, that are 3-miles from the Project site, 6 provide sports-oriented recreational facilities, that include: baseball fields, basketball courts, multi-purpose fields, handball courts, swimming pool, tennis courts, and volleyball courts. The closest City of Santa Ana park with sports-oriented recreational facilities is Delhi Park, which is 10.4 acres and located 1.4 miles from the Project site.

As described previously, sports fields are used by approximately 14 percent of the adults and 33.1 percent of those under 18 years old that utilize park and recreation facilities (per California State Parks data). The use of the sports-oriented recreational facilities is largely by organized sports leagues that pay fees to the City for use of the facilities, which is used to fund maintenance and improvements related to use of the facilities. Although the proposed Veterans Sports Park at Tustin Legacy, which is 31.5 acres and 0.9 mile from the Project site would offer new amenities that would be attractive to Project site residents, the anticipated usage of the facility based on the data from the California State Parks indicates that the potential deterioration of the facility from use by Project residents would be less than significant.

**Comment 5:** This comment states that the park fees collected by the Project would not directly benefit any park facilities in the City of Tustin. The comment also states that the payment of fees to offset park usage would only apply to parks in Santa Ana and should not be used to reach the conclusion regarding deterioration of parks in Tustin.

**Response 5:** Although the Draft EIR states on page 5.13-7 that the payment of fees would provide funding for park and recreation facility improvements, the statement is not the basis for the less than significant determination. The basis for the less than significant determination is described previously in Response 2. As described previously, and detailed on page 5.13-7 of the Draft EIR, based on the data from the California State Parks, the existing amount of park and recreation facilities in the vicinity of the Project site, the amount and quality of recreation facilities that would be provided as part of the Project, and the number of residents at full capacity of the proposed Project, the Project is not anticipated to increase the use of existing parks and recreation facilities, including those within the City of Tustin, such that substantial physical deterioration of the facility would occur or be accelerated.

**Comment 6:** This comment states that it is incorrectly stated on page 5.13-5 of the DEIR that 5,136.35 acres of parkland will be provided per Project resident at full occupancy.

**Response 6:** The last sentence on page 5.13-5 of the Draft EIR contains a typographical error, referring to acres instead of square feet, and has been modified as provided below and in Chapter 3, *Revisions to the Draft EIR*. In addition, the existing parkland information in the second to last sentence has been updated to reflect the additional park information provided previously in Comment 3. Thus, the last two sentences on page 5.13-5 have been revised as provided below.

In addition, there are ~~92.9~~ 97.9 acres of parkland within the City of Tustin and 63.6 acres of parkland within the City of Irvine Park facilities (listed in Table 5.13-2) that are also within 3 miles of the Project site and are likely (due to location) to be used by residents of the proposed Project. This equals approximately ~~245.38~~ 243.38 acres of existing parkland within three miles of the site, which equates to ~~5,136.35 acres~~ 5,094.49 square feet of parkland per Project resident at full occupancy.

**Comment 7:** This comment states that Table 5.13-3 appears to be missing a column for average travel times between 13 and 20 minutes.

**Response 7:** Table 5.13-3 includes a typographical error. The fourth column was to provide average travel times between 11 and 20 minutes and has been modified as provided below and in Chapter 3, *Revisions to the Draft EIR*.

**Table 5.13-3: Average Travel Time in Southern California to Outdoor Recreation Areas**

Mode	<5 min	6-10 min	<del>11-12</del> 20 min	21-60 min	>60 min
Driving	20.1%	17.2%	20.8%	31.3%	10.6%
Walking	27.5%	20.3%	31.5%	18.9%	1.8%

Source: California State Parks, 2014.

**Comment 8:** This comment identifies the Project trip generation as identified in the Draft EIR and states that the use of trip discounts results in reduced anticipated off-site impacts. The City of Tustin recommends that the worst-case scenario be presented rather than the best-case scenario. It should be noted that the analysis for The Heritage Project at 2001 East Dyer Road did not factor in pass-by trips to discount project trips.

**Response 8:** The application of pass-by and internal trip capture reductions provide a realistic estimate of Project trips that reflects a reasonable estimate of the operation of the mixed-use Project that would provide residences, retail and restaurant uses, and employment; and is located on a site that is geographically in between homes and business, and lends itself to by-pass trips. Neither CEQA, nor City practice, requires the Project to evaluate an unrealistic worst-case scenario. It is reasonable and supported by published data to anticipate that there will be pass-by trips and internal capture, which is the goal of mixed-use development. All pass-by rates and internal capture percentages were referenced by widely used and accepted rates from the Institute of Transportation Engineers (ITE). The City notes that The Heritage project did not include pass-by trips in their trip generation analysis. However, The Heritage proposed a different mix of land uses and did not include coffee shop and fast-food uses, as proposed by the proposed Project. The Heritage did include reductions for internal trip capture.

**Comment 9:** This comment states that the Industrial Park trip generation for the existing land use is higher than the trip generation based on the Institute of Transportation Engineers (ITE) industrial park classification (i.e., per thousand square feet (TSF): 0.32 and 0.08 for AM in and out and PM in and out and 3.37 for ADT). The use of the higher trip generation for existing uses results in a reduced net trip generation change when compared to the proposed project, which would not be the worst-case scenario. The comment states that a worst-case scenario should be used when projecting trip generation for the proposed Project.

**Response 9:** The Industrial Park trip rate used for this study came from the ITE Trip Generation Handbook 10<sup>th</sup> Edition. To accurately represent project trip generation, truck trips were calculated and a PCE factor was added to truck trips. Because the previous land use would generate more truck trips than the proposed land use, this is an appropriate method to represent the actual impact of the existing land uses on the adjacent roadways and intersections.

**Comment 10:** This comment states that a queuing analysis should be provided for the left-turn into Driveway 1 at Warner Avenue to determine if the forecasted 290 vehicles in the PM peak hour can be accommodated in the proposed left-turn pocket and not have a negative impact on through traffic.

**Response 10:** As a project design feature and condition of approval, the project applicant will implement the median modifications on Warner Avenue. A queuing analysis was prepared using Synchro for the northbound left-turn queue at Red Hill Ave/Warner Ave and the westbound left-turn lane at the project driveway. The table in this response provides the calculated queues. At the intersection of Red Hill Avenue/Warner Avenue, the northbound left-turn lane would accommodate the expected queue in all scenarios. At the project driveway, the worst-case left-turn queue is approximately 179 feet during the PM peak hour. The final design of the left-turn lane has not been completed, however, to accommodate the forecast queue, a minimum of 180 feet of storage plus a 60-foot transition would be provided (240 feet total). The westbound left-turn pocket on Warner just east of the project driveway would be removed to accommodate the required left-turn lane at the project driveway. This modification would change access to the Warner Corporate Park site located on the north side of Warner Avenue. Currently, there are two driveways to the Warner Corporate Park, a right-in/right-out only driveway at the location of the proposed project driveway (western driveway) and a full-access driveway approximately 270 feet to the east of the project driveway (eastern driveway). The proposed turn lane modification would revise the eastern driveway to Warner Corporate Park to right-in/right-out only and a full-access signalized driveway would be provided at the western driveway. As shown in the table below, the Project queuing would be adequately accommodated.

	Red Hill Ave/Warner Ave	Driveway 1/Warner Ave
	NBL Queue	WBL Queue
Available Storage	395 Feet	670* Feet (approx. 270 Feet to first intersecting driveway).
<b>Existing Plus Project</b>		
Queue Length	157/388	104/179
<b>Opening Year Plus Project</b>		
Queue Length	152/232	122/172
<b>2040 Plus Project</b>		
Queue Length	145/373	155/155
*Space between conflicting intersections due to final median design not known yet. Queue length reported in feet for the AM/PM peak periods		

**Comment 11:** This comment states that due to the high inbound southbound peak hour volume of 265 vehicles into Driveway 3 on Red Hill Avenue, the City of Tustin recommends a dedicated right-turn lane to separate the right-turns from through traffic in the #3 lane where speeds are 50 mph. The comment states that the right-turn pocket length should be based on Synchro.

**Response 11:** A right-turn lane is not proposed at the driveway, nor has been recommended by the City of Santa Ana. The comment notes that during the PM peak hour, approximately 265 trips are expected to turn right into the Project. However, during this time the southbound through traffic is only forecast to be 770 trips in the 2040 baseline scenario. There are three southbound lanes at the project driveway with a total hourly capacity of 5,100, which corresponds to LOS A on southbound Red Hill Avenue adjacent to the Project. Southbound through vehicles would be able to utilize the #1 and #2 lane for through traffic if right-turning vehicles significantly impede traffic in the #3 lane. Additionally, there are no right-turn lanes along Red Hill Avenue between Barranca Parkway/Dyer Road and Edinger Avenue, yet there are business parks with driveways on Red Hill Avenue on the west side of the roadway. According to SWITRS data, no collisions have been reported in the last three years at any driveway on Red Hill Avenue.

**Comment 12:** This comment states that at Red Hill Avenue and Warner Avenue, the northbound left-turn volume in the PM peak hour increases from 578 to 860 feet with the Project. The comment requests demonstration that the left-turn pocket length for northbound Red Hill Avenue can accommodate the additional 282 vehicles.

**Response 12:** A queuing analysis was prepared using Synchro for the northbound left-turn lane at the Red Hill Avenue/Warner Avenue intersection (queue sheets attached). The results show that the projected queue can be adequately contained in the northbound left turn storage.

**Comment 13:** This comment states that for the 2040 PM Peak Hour mitigation includes a right-turn overlap, which implies that there is a right-turn lane. The comment asks if the Project would construct a right turn and operate it with a right-turn overlap and states that to remain eligible and qualify for Measure M funding, the City of Tustin does not support the conversion of the #3 through lane into a right-turn lane which would result in a downgrade of Red Hill Avenue. The comment further states that should an alternative mitigation be selected, the City of Tustin's preference would be the addition of a dedicated right-turn lane on eastbound Warner Avenue to serve the high right-turn volume in the AM Peak Hour (i.e., 346 vehicles).

**Response 13:** The comment is correct that the mitigation measure is in error and can not be implemented

without construction of a right-turn lane. However, the mix of retail and restaurant types of uses included in the Project has been modified, as shown below and listed in Chapter 3, *Revisions to the Draft EIR*. The proposed 80,000 square feet of commercial space would consist of the following uses:

- Retail Shopping Center: ~~18,000~~ 31,000 square feet
- Fast Casual Restaurant: ~~5,000~~ 3,500 square feet
- Quality Restaurant: ~~25,000~~ 20,000 square feet
- High-Turnover Sit-Down Restaurant: ~~25,000~~ 20,000 square feet
- Fast Food Restaurant: ~~5,000~~ 3,500 square feet
- Coffee/Donut Shop: 2,000 square feet

The resulting trip generation of the Project would be lower; and as detailed in the Final TIA, included as Appendix A of this Final EIR. Due to the lower trip generation, the Project would no longer result in significant impact at the intersection of Red Hill Avenue/Warner Avenue in the 2040 PM Peak Hour condition, and mitigation measures are not required.

**Comment 14:** This comment refers to Tustin Ranch Road and Warner Avenue North and states that for City of Tustin locations where the intersection capacity utilization (ICU) is greater than the acceptable level of service (i.e., LOS E or ICU is greater than 0.90), mitigation of the project contribution is required to bring the intersection back to no-project conditions or better if the project contribution is greater than 0.02 or greater at non-Congestion Management Program (CMP) locations. Therefore, this intersection is not considered adversely impacted by the proposed Project. The comment states that Draft EIR indicates that the intersection is adversely impacted and should be revised.

**Response 14:** The methodology section in the TIA has been modified to accurately reflect the thresholds. The impact and mitigation measure for Intersection 47, Tustin Ranch Road and Warner Avenue North, were removed. The Final TIA is included as Appendix A of this Final EIR.

**Comment 15:** This comment refers to the proposed a new signal at Driveway 1/Warner Avenue intersection, and states that due to its proximity to the Red Hill Avenue and Warner Avenue signalized intersection maintained by the City of Tustin it is expected that the proposed new signal at Driveway 1/Warner Avenue be also maintained by the City of Tustin. The comment also states that the Project shall be required to collaborate with the City of Tustin in its design and construction.

**Response 15:** Language was added to the Final TIA to indicate that the design and construction of the signal will be coordinated with the City of Tustin. The Final TIA is included as Appendix A of this Final EIR.

**Comment 16:** This comment refers to a Class II Bicycle Facility on Warner Avenue and states that the proposed Project shall be required to collaborate on the proposed joint Santa Ana/Tustin project to add a Class II Bike Lane on Warner Avenue on the northern boundary of the Project, with the City of Santa Ana as the lead.

**Response 16:** Language was added in Table 4. Study Area Roadway Characteristics to indicate planned Class II Bike Lanes along Warner Avenue. According to the City of Santa Ana, the Project would maintain the existing southern curb lines on Warner Avenue. The Bowery Project's street improvements will coordinate with the bike lane project to ensure that the bikeway project is not precluded. The Final TIA is included as Appendix A of this Final EIR.

**Comment 17:** This comment states that the through traffic volumes on Warner Avenue west of Red Hill Avenue decrease significantly to/from the Red Hill Avenue and Warner Avenue intersection, which may underestimate the Project impact at the proposed signalized Project driveway on Warner Avenue. The comment requests an explanation of the decreased through traffic volumes.

**Response 17:** The through volumes on Warner Avenue have been corrected and the Project driveways were re-evaluated with the higher volumes, as shown in the Final TIA, included as Appendix A. Both driveways would operate with satisfactory LOS D or better with the corrected volumes.

**Comment 18:** This comment refers to Traffic Impact Analysis Tables 8 and 12, and states that the Level of Service (LOS) for Intersection 22, Red Hill Avenue at Edinger Avenue needs to be corrected to LOS D in the PM peak hour.

**Response 18:** The LOS tables have been modified to correctly indicated that 0.90 indicates LOS D. This is shown in the Final TIA, included as Appendix A.

**Comment 19:** This comment states that the City of Tustin would receiving early responses to our comments as well as a copy of the Final EIR when it becomes available and all future public hearing notices with respect to the Project pursuant to Public Resources Code Section 21092.2.

**Response 19:** This comment does not provide any concerns or questions regarding the adequacy of the Draft EIR. The City of Tustin will remain on the mailing list for the Project and will receive notification of availability of the Final EIR, in addition to all other public notices.

**LETTER O1: Lozeau Drury LLP (2 pages)**

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*Via Email and U.S. Mail*

January 29, 2020

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**Re: Comment on Draft Environmental Impact Report, The Bowery Mixed Use Project (SCH 2019080011)**

Dear Mr. Guevara, Mr. Thai, Ms. Gomez:

I am writing on behalf of Supporters Alliance for Environmental Responsibility (“SAFER”) regarding the Draft Environmental Impact Report (“DEIR”) prepared for the project known as The Bowery Mixed Use Project (SCH 2019080011), including all actions related or referring to the proposed construction of a three phase mixed-use project consisting of 1,150 multifamily residential units in three buildings with 7 stories of structured parking, 80,000 square feet of retail and restaurant commercial space, 236,000 square feet of open space in common area amenities located at 2300, 2310, and 2320 Red Hill Avenue in Santa Ana (“Project”).

After reviewing the DEIR, we conclude that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project’s impacts. SAFER requests that the Planning and Building Agency address these shortcomings in a revised draft environmental impact report (“RDEIR”) and recirculate the RDEIR prior to considering approvals for the Project. We reserve the right to supplement

January 29, 2020

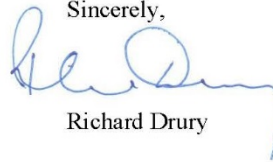
DEIR Comment on The Bowery Mixed Use Project (SCH 2019080011)

Page 2 of 2

these comments during review of the Final EIR for the Project and at public hearings concerning the Project. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

1

Sincerely,



Richard Drury



## Letter O1: Lozeau Drury LLP

**Comment 1:** This comment states that it is being written on behalf of Supporters Alliance for Environmental Responsibility (SAFER) and provides a summary of the proposed Project. The comment also states that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. The comment further states that SAFER requests that these shortcomings in a revised draft environmental impact report (RDEIR) to be recirculated prior to considering approvals for the Project. In addition, the commenter states that these comments may be supplemented during review of the Final EIR and at public hearings concerning the Project.

**Response 1:** This comment is general in nature and does not reference a specific section of the Draft EIR or environmental concern. As detailed throughout the Draft and Final EIRs, evaluation of the proposed Project has been conducted pursuant to CEQA and mitigation measures have been imposed in addition to incorporation of existing policies, plans, and regulations to reduce impacts related to construction and operation of the Project. Therefore, no further response is required or provided.

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**LETTER O2: Sirco/Irvine Business Park I Association (1 page)**

**From:** Ed Rendl [mailto:ed@proformaprinting.com]  
**Sent:** Monday, February 03, 2020 3:15 PM  
**To:** MICHAEL JARRETT <mjstudio@cox.net>; brigid@solvistapark.com; Shannon Thornhill <shannon@mcmiskey.com>  
**Cc:** Guevara, Jerry <jguevara@santa-ana.org>  
**Subject:** Comments on The Bowery EIR

Good Afternoon Jerry,

My name is Ed Rendl and I am the President of Sirco/Irvine Business Park I Association. We are the group of 3 buildings bordering the western edge of the Proposed Bowery Development along where the proposed parking structure will be.

1

Overall, we as an Association representing all of the Owners welcome this project, we do have some minor concerns and one major concern which must be addressed before this project is to proceed.

Minor Concern, this project will add to a significant increase in pollution and traffic to the area.

Major Concern, with a massive 7 story parking structure bordering our property we are very concerned about the noise and pollution that will be right next door to us as parking structures are in use 24 hours a day, 7 days a week. To mitigate this concern, we request that the western wall of the parking lot which borders our property be a solid wall and that ventilation be provided to the structure from the North, South and East Ends of the parking lot. We also request that significant green landscaping be deployed on and near this massive wall to minimize the sight of a seven story concrete structure looming over our single level Business Park which has been here since the 1980s.

2

Jerry please acknowledge that this email of our comments and concerns regarding this project is appropriate and will be added into the EIR record and addressed by the EIR or if we need to submit our comments and concerns via hard copy in the mail.

3

I would also like to request notification of any and all meetings that will be happening regarding the development of this project.

Sincerely,

Ed Rendl  
President  
Sirco/Irvine Business Park I Association  
1900 E. Warner Ave  
1910 E. Warner Ave.  
1920 E. Warner Ave  
Santa Ana, CA 92705  
949 296 1995

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## Letter O2: Sirco/Irvine Business Park I Association

**Comment 1:** This comment states that the business park association represents the group of 3 buildings that is located adjacent to the west of the site. The comment also states that overall, the project is welcomed, but there are some minor concerns and one major concern. The commenter's minor concern is that the project will add to a significant increase in pollution and traffic to the area.

**Response 1:** As described in Section 5.2, *Air Quality*, of the Draft EIR, emissions from the proposed Project are largely from vehicle trips. As shown in Draft EIR Table 5.2-8, emissions from operation of the proposed Project would result in 65.33 lbs/day of Volatile organic compounds (VOCs), which would exceed the threshold of significance of 55 lbs/day. However, these emissions are regional emissions that would be generated from the total vehicle miles traveled and would not be focused on or adjacent to the Project site. In addition, the Draft EIR describes that Project traffic on nearby arterial roadways is not substantial enough to result in a localized adverse carbon monoxide concentration, known as a "hot spot". As detailed in Section 5.2, *Air Quality*, of the Draft EIR, the SCAQMD estimated that a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a CO hot spot. As shown on Draft EIR Table 5.2-10, the highest trips on a segment of road with the Project traffic study area is 9,378 vehicles per hour on Jamboree Road and Barranca Parkway. This is much lower than 44,000 vehicles per hour and is not high enough to generate a CO "hot spot" per SCAQMD.

The Draft EIR also describes that the proposed mixed uses do not involve the types of uses that would emit other emissions, such as objectionable odors affecting a substantial number of people. Therefore, the proposed Project would not result in significant air quality pollutants at or adjacent to the Project site. Likewise, Section 5.7, *Hazards and Hazardous Materials*, of the Draft EIR demonstrates that development and operation of the Project would not result in significant hazardous pollutants.

Regarding the increase in traffic, page 5.14-6 of the Draft EIR describes that with implementation of the project in the opening year the intersection of Red Hill Avenue/Barranca Parkway (#30) would not operate at satisfactory levels of service in the p.m. peak hour. As a result, improvements for the intersection have been identified, which involve addition of a westbound protected right-turn overlap phase and prohibit southbound U-turns that have been included as Mitigation Measure TR-1. As shown on Draft EIR Table 5.14-9, impacts at the intersection would be reduced to a less than significant impact with implementation of the improvement. All other intersections would be less than significantly impacted by the traffic generated by the Project. Therefore, although, the Project would generate new traffic during peak hours, the traffic can be accommodated with implementation of Mitigation Measure TR-1. Similarly, the Project's cumulative traffic impact would be reduced to a less than significant level with the roadway improvements that have been identified. Although the physical impacts would be remedied, the improvements require authorization from other jurisdictions; thus, these impacts have been identified as significant and unavoidable in the EIR.

**Comment 2:** This comment states that the major concern is regarding the noise and pollution from the 7-story parking structure bordering the commenters property that would be in use 24 hours a day, 7 days a week. To mitigate this concern, the comment requests that the western wall of the parking lot which borders the west side of the site be a solid wall and that ventilation be provided to the structure from the north, south and east ends; and that green landscaping be located on and near the wall to minimize the sight of the seven story structure.

**Response 2:** As described in Response 1, the proposed Project would not result in significant localized air quality pollutants at or adjacent to the Project site. Regarding noise generated by the Project, the Draft EIR Section 5.10, *Noise*, details that onsite operational noise sources, such as parking lot vehicle movements that are 33.5 dBA  $L_{50}$  at 50 feet from the noise source, would not result in an exceedance of the City's Municipal

Code Section 18-313 noise standards. In addition, Draft EIR Table 5.10-8, details that noise from vehicular movements on the site would range from 45.1 to 57.7 dBA CNEL, which is below the General Plan Noise Element 65 dBA CNEL exterior noise level standard for outdoor common areas. Also, Draft EIR Tables 5.10-9 through 5.10-11 details that the off-site traffic noise generated by the Project would also be less than significant.

Also, as described in Section 3.0, *Project Description*, the existing 6-foot wall that bounds the project site on the west side would remain, and new ornamental landscaping including a variety of 24- through 48-inch box trees would be installed as shown on Figure 3-4, *Proposed Site Plan*, of the Draft EIR. Additionally, as shown on Figure 3-4, only a small portion of the project along the western boundary of the site would be developed with a parking structure. Development along the west side would also include residential and commercial structures with small areas of open space. Although significant impacts would not result, the comment's request regarding the parking structure will be passed along to the City's Planning Department for consideration during review of architectural and construction planning documents.

**Comment 3:** This comment requests acknowledgement that the comments have been received, will be included in the EIR record, and to be notified of any meetings about the project.

**Response 3:** All comment letters received are included within this Final EIR, and pursuant to this request, the commenter will be notified of future meetings about the project. This comment is not related to the environmental analysis in the EIR. Therefore, no further response is required or included.

### 3. Revisions to the Draft EIR

This section contains revisions to the Draft EIR based upon: (1) clarifications required to prepare a response to a specific comment; and/or (2) typographical errors. The provision of these additional mitigation measures does not alter any impact significance conclusions as disclosed in the Draft EIR. Changes made to the Draft EIR are identified here in ~~strikeout~~ text to indicate deletions and in underlined text to signify additions.

#### 3.1 Revisions in Response to Written Comments and City Changes to Text

The following text, organized by Draft EIR Chapters and Sections, has been revised in response to comments received on the Draft EIR and corrections identified by the City.

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#### Chapter 1.0, Executive Summary

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The last row of Table 1-2 on Page 1-17, Section 1.0, Executive Summary, is revised as follows:

<b>Impact LU-2:</b> The Project would not 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.		<u>Potentially Less than</u> significant	<p><del>Mitigation Measure</del> <b>PPP LU-1:</b> <del>The Development Agreement that is required for implementation of the proposed Project shall include a clause</del> <u>Prior to issuance of certificates of occupancy, the Project Applicant shall demonstrate compliance to the City of Santa Ana with the Federal Aviation Administration Federal Aviation Regulations Part 77 Notification Area for John Wayne Airport</u> requiring that all prospective residents of the Project site shall be notified of airport related noise. Notification shall be included in lease/rental agreements and shall state the following:</p> <p>"Notice of Airport in Vicinity. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations related to noise. Individual sensitivities to noise annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property and determine whether they are acceptable to you."</p>	Less than significant
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The third row of Table 1-2 on Page 1-18, Section 1.0, Executive Summary, is revised as follows:

<b>Impact NOI-3:</b> The Project would not expose people residing or working in the Project area to excessive noise levels.		<u>Potentially Less than</u> significant	<del>Mitigation Measure</del> <b>PPP LU-1:</b> Airport, listed above.	Less than significant
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The last row of Table 1-2 on Page 1-20, Section 1.0, Executive Summary, is revised as follows:

<b>Impact TR-1:</b> The Project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.		Significant	<p><b>Mitigation Measure TR-1: Grand Avenue/Warner Avenue (#4) (Santa Ana):</b> The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of a fair share contribution to the improvement to add an eastbound protected right-turn overlap phase and prohibit northbound U-turns at the intersection of Grand Avenue/Warner Avenue.</p> <p><del><b>Mitigation Measure TR-2: Red Hill Avenue/Warner Avenue (#25) (Santa Ana/Tustin):</b> The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of the full cost or implementation of an additional westbound protected right turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the City of Tustin.</del></p> <p><b>Mitigation Measure TR-32: Red Hill Avenue/Barranca Parkway (#30) (Santa Ana/Irvine):</b> The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of the full cost or implementation of an additional westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the Cities of Tustin and Irvine.</p> <p><b>Mitigation Measure TR-3 2: Red Hill Avenue/Alton Parkway (#32) (Santa Ana/Irvine):</b> The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of the full cost or implementation of a westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the City of Irvine.</p> <p><del><b>Mitigation Measure TR-5: Tustin Ranch Road/Warner Avenue North (#47) (Tustin):</b> The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of a fair share contribution to restripe the 3rd northbound through lane as a shared through right lane and remove the northbound right turn overlap. The installation of this improvement is subject to the approval of the City of Tustin.</del></p>	Significant and Unavoidable
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The fifth row of Table 1-2 on Page 1-21, Section 1.0, Executive Summary, is revised as follows:

<b>Cumulative</b>		Significant	Mitigation Measures TR-1 through TR-4 3, listed above.	Significant and Unavoidable
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## Chapter 3.0, Project Description

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**The fifth paragraph on Page 3-10, Section 3.5, *Description of the Project*, is revised as follows:**

Parking spaces would be provided at a rate of approximately ~~1.7~~ 2.0 spaces per residential unit and 5 spaces per 1,000 square feet of commercial space.

**The first paragraph and bullet points on Page 3-13, Section 3.5, *Description of the Project*, is revised as follows:**

The proposed 80,000 square feet of commercial space would consist of the following uses:

- Retail Shopping Center: ~~18,000~~ 31,000 square feet
- Fast Casual Restaurant: ~~5,000~~ 3,500 square feet
- Quality Restaurant: ~~25,000~~ 20,000 square feet
- High-Turnover Sit-Down Restaurant: ~~25,000~~ 20,000 square feet
- Fast Food Restaurant: ~~5,000~~ 3,500 square feet
- Coffee/Donut Shop: 2,000 square feet

**The fourth paragraph and bullet points on Page 3-13, Section 3.5, *Description of the Project*, is revised as follows:**

### Site Access

Vehicular access to the Project site would be provided via a full-access driveway and a right-in/right-out driveway on Warner Avenue and a right-in/right-out driveway on Red Hill Avenue. ~~The proposed full-access driveway on Warner Avenue would be slightly offset to the east from the adjacent driveway on the north side of Warner Avenue. This driveway would be signalized with split-phase operation in the northbound and southbound direction. The split-phase operation is necessary to ensure safety of ingress and egress for the project and for the driveway on the north side of Warner Avenue.~~

**The fourth paragraph on Page 3-14, Section 3.5, *Description of the Project*, is revised as follows:**

The Project would provide new ornamental landscaping throughout the Project site that would include a variety of 24- through 48-inch box trees, 1 – 5-gallon shrubs, and ground covers. New plant species would be drought-tolerant, non-invasive, and compliant with the City of Santa Ana's landscaping requirements. Likewise, the new irrigation installed onsite would meet the City's requirements for water efficiency (Santa Ana Municipal Code Section 41-1503; Landscape Water Use Standards). In addition, the Project includes the following Project Description Feature:

PDF AQ-1: As part of lease or service contracts the Project operator shall provide information to commercial tenants and Project landscape management about the availability of electric landscaping equipment through SCAQMD's Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program.

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## Chapter 4.0, Environmental Setting

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**The fifth paragraph on Page 4-8, Section 4.9, *Hazards and Hazardous Materials*, is revised as follows:**

### John Wayne Airport

John Wayne Airport (JWA) is located approximately 2.2 miles southwest of the Project site under the primary aircraft approach corridor. The Project site is not located within JWA's Airport Safety Zone, as

shown in Figure 5.7-1. In addition, the Project site is located outside of both the airport's actual (2018) and planned 60 CNEL contours (Figures 5.7-2 and 5.7-3 in Section 5.7, *Hazards and Hazardous Materials*).

~~However, the Project site is also outside of the 200-foot high FAR Part 77 Notification Imaginary Surface area (shown on Figure 5.7-5 in Section 5.7, *Hazards and Hazardous Materials*); and therefore, the site is not within the JWA planning area boundary, and FAA and AELUP notification would not be required. located within the AELUP Notification area for JWA (shown on Figure 5.7-4 in Section 5.7, *Hazards and Hazardous Materials*), within the JWA planning area boundary, and under the FAR Part 77 Notification Imaginary Surface area, but outside of the 200-foot high surface area (shown on Figure 5.7-5 in Section 5.7, *Hazards and Hazardous Materials*).~~

**The third and fourth paragraphs on Page 4-12, Section 4.11, *Land Use and Planning*, is revised as follows:**

#### **John Wayne Airport**

John Wayne Airport (JWA) is located approximately 2.2 miles southwest of the Project site under the primary aircraft approach corridor, but not within the AELUP Notification area ~~and or~~ or JWA planning area boundary, as detailed in Section 5.7, *Hazards and Hazardous Materials*.

Because the Project site is not located within the AELUP Notification area ~~and or~~ or JWA planning area boundary (shown on Figures 5.7-4 and 5.7-5 in Section 5.7, *Hazards and Hazardous Materials*), ~~and the Project proposes a General Plan Amendment and a zone change,~~ the City is would not be required to refer the proposed Project to the ALUC for review, ~~pursuant to the California Public Utilities Code Section 21676, as listed previously.~~

**The sixth paragraph on Page 4-12, Section 4.12, *Noise*, is revised as follows:**

As described previously in Section 5.9, *Land Use and Planning*, the Project site is not located within the JWA Planning Area's FAR Part 77 Notification Surface, ~~but and~~ and outside of the airport's 60 CNEL Contour.

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## **Chapter 5.1, Aesthetics**

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**The third paragraph on Page 5.1-24, Section 5.1.6, *Environmental Impacts*, is revised as follows:**

The proposed mixed-used Project would result in a visual change from the existing development on the site to a higher intensity development, consisting of 3 mixed use buildings that would be 6-stories in height and one residential building that would be 5-stories in height. Each of these buildings would have an adjacent parking structure for a total of 4 parking structures. Two parking structures would provide 7 levels of above ground parking and would be ~~xx~~ 76 feet in height and two would provide 6 levels of above ground parking and would be ~~xx~~ 70 feet in height. In addition, the Project would develop 2 one-story retail/restaurant commercial buildings and a surface parking lot. The tallest point of the Project would be approximately 94 feet from the ground level, which would be at the top of the architectural trim of the of the 3 mixed use 6-story buildings.

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## **Section 5.4, Energy**

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**The last paragraph on Page 5.4-5, Section 5.4.6, *Environmental Impacts*, is revised as follows:**

Also, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Additionally, construction contractors are required to demonstrate

compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy duty diesel on- and off-road equipment during the City's construction permitting process. Compliance with existing CARB idling restrictions and the use of newer engines and equipment would reduce fuel combustion and energy consumption. The energy modeling shows that the Project construction electricity usage over the ~~24~~ 27-month construction period would be approximately 1,674,604 kWh, which is summarized in Table 5.4-1.

## Section 5.7, Hazards and Hazardous Materials

**The last two paragraphs on Page 5.7-10, Section 5.7.3, *Environmental Setting*, is revised as follows:**

~~However, the Project site is not located within the AELUP Notification area for JWA (shown on Figure 5.7-4), or within the JWA planning area boundary, and under the FAR Part 77 Notification Imaginary Surface area (shown on Figure 5.7-5). The ALUC has adopted Federal Aviation Regulations (FAR) Part 77 as the criteria for determining height restrictions in Orange County. FAR Part 77 requires notification to Federal Aviation Administration (FAA) for any project that would be more than 200 feet in height above ground level or within the imaginary surface of a 100:1 slope extending outward for 20,000 feet from the nearest runway. As shown on Figure 5.7-5, the Project site is located outside of the 200-foot-high imaginary surface area for JWA. Therefore, FAA notification for the proposed Project would not be required.~~

~~Additionally, bBecause the ALUC has adopted the FAR Part 77 criteria, the Project site is also not located within the AELUP Notification area for JWA and not within the JWA planning area boundary. Therefore, (shown on Figures 5.7-4 and 5.7-5), and the Project proposes a General Plan Amendment and a zone change, the City is required to refer the proposed the Project review does not include to the ALUC for review, pursuant to the California Public Utilities Code Section 21676, as listed previously.~~

**The fourth paragraph on Page 5.7-26, Section 5.7.6, *Environmental Impacts*, is revised as follows:**

~~HoweverAlso, because the Project site is located outside of the 200-foot-high imaginary surface area for JWA (100:1 slope extending outward for 20,000 feet), the Project site is not located within the AELUP Notification area for JWA (shown on Figure 5.7-4), and not within the JWA planning area boundary, and under the FAR Part 77 Notification Imaginary Surface area, but because the Project site is located outside of the 200 foot high imaginary surface area for JWA, FAA notification for the proposed Project would not be required. The Project would nonetheless comply with the AELUP JWA notification policy.~~

**The third paragraph on Page 5.7-27, Section 5.7.6, *Environmental Impacts*, is revised as follows:**

~~Due to the nature of the required City approvals (i.e., the General Plan and zoning amendment), the City of Santa Ana is required, pursuant to Public Utilities Code Section 21676, to refer the proposed Project to the ALUC for ALUC review. The proposed Project would comply with this ALUC notification and all other applicable rules and regulations as they pertain to JWA and airport safety. Overall, because the Project is not located within the JWA Airport Safety Zone, the Airport Impact Zone, or the JWA 60 CNEL noise contour; and it would not penetrate the imaginary surfaces area or result in hazards related to excessive glare, light, steam, smoke, dust, or electronic interference, the proposed Project would not introduce a safety hazard associated with airport operations for people residing, working, and visiting the Project site. Thus, Project-related hazard and noise impacts associated with JWA operations would be less than significant.~~

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## Section 5.9, Land Use and Planning

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**The last sentence of the second paragraph on Page 5.9-2, Section 5.9.2, *Regulatory Setting*, is revised as follows:**

The Project site is not located within the JWA Planning Area's FAR Part 77 Notification Surface, ~~but~~ and outside of the airport's 60 CNEL Contour.

**The third paragraph on Page 5.9-19, Section 5.9.3, *Environmental Setting*, is revised as follows:**

John Wayne Airport (JWA) is located approximately 2.2 miles southwest of the Project site under the primary aircraft approach corridor, but not within the AELUP Notification area ~~and or~~ planning area boundary, as detailed in Section 5.7, *Hazards and Hazardous Materials*.

Because the Project site is not located within the AELUP Notification area ~~and or~~ planning area boundary (~~shown on Figures 5.7-4 and 5.7-5 as detailed in Section 5.7, *Hazards and Hazardous Materials*~~), ~~and the Project proposes a General Plan Amendment and a zone change, the City is required to refer the proposed Project is not referred~~ to the ALUC for review, pursuant to the California Public Utilities Code Section 21676, as listed previously.

**The impact significance header on Page 5.9-21, Section 5.7.6, *Environmental Impacts*, is revised as follows:**

**~~Less than Significant Impact with Mitigation Incorporated.~~**

**The first paragraph on Page 5.9-22, Section 5.7.6, *Environmental Impacts*, is revised as follows:**

As described previously, JWA is located approximately 2.2 miles southwest of the Project site under the primary aircraft approach corridor and within the AELUP Notification area and planning area boundary for the airport. Table 5.9-2 provides an assessment of the proposed Project's consistency with the JWA AELUP. As detailed, the proposed Project would be consistent with airport land use plan policies. The Project would nonetheless comply with an AELUP notification policy with implementation of Mitigation Measure PPP LU-1, which requires resident notification of airport operations and potential annoyances. ~~With implementation of Mitigation Measure LU-1, which is an AELUP policy, the proposed Project would not conflict with the JWA AELUP.~~

**The last row of Table 5.9-2 on Page 5.9-23, Section 5.9.6, *Environmental Impacts*, is revised as follows:**

<p><b>Policy 3.3.6:</b> Condition which may serve to mitigate a project/action and thus may permit the ALUC to make a finding of consistency includes providing noticing that states "Notice of Airport in Vicinity: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."</p>	<p><b>Consistent.</b> <del>Mitigation Measure LU-1 has been included in compliance with this policy, in order to mitigate potential impacts related to inconsistency with a related policy that was adopted for the purpose of mitigating an environmental effect.</del> <u>As described in Section 5.7, <i>Hazards and Hazardous Materials</i>, and Section 5.10, <i>Noise</i>, the Project site is not located within JWA's Airport Safety Zone, as shown in Figure 5.7-1) and is located outside of the airport's 60 CNEL contours (Figures 5.7-2 and 5.7-3). Table 1 of the Airport Environs Land Use Plan for John Wayne Airport shows that residential land uses outside of the 60 CNEL contour are "normally consistent."</u> Therefore, the proposed Project <u>would not be subject to noise, vibration, or odors related to JWA, and is consistent with Policy 3.3.6.</u></p>
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**The third row of Table 5.9-2 on Page 5.9-26, Section 5.9.6, Environmental Impacts, is revised as follows:**

<b>Policy 2.1:</b> Comply with FAA regulations and ALUC requirements on new development and redevelopment located within the height restriction zone for JWA per PUC Section 21676.	<b>Consistent.</b> According to the General Plan Airport Environs Element, the Project site is <u>not</u> located within the Airport Environs Land Use Plan (AELUP) Notification Area for JWA. <del>However Also,</del> the site is not within the FAR Part 77 200-foot height restriction area. In addition, the highest point of the Project buildings would be 94-feet from ground level. Thus, the proposed Project would not exceed the 200-foot high height restriction zone for JWA, and the proposed Project is consistent with Policy 2.1.
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**The fifth and sixth rows of Table 5.9-2 on Page 5.9-26, Section 5.9.6, Environmental Impacts, is revised as follows:**

<b>Policy 2.3:</b> Comply with FAR Part 77 and the AELUPs for JWA and Heliports as they may be amended from time to time.	<b>Consistent.</b> According to the General Plan Airport Environs Element, the Project site is <u>not</u> located within the Airport Environs Land Use Plan (AELUP) Notification Area for JWA. <del>However Also,</del> the site is not within the FAR Part 77 200-foot height restriction area. In addition, the highest point of the Project buildings would be 94-feet from ground level. Thus, the proposed Project would not exceed the 200-foot high height restriction zone for JWA. Further, the Project does not propose any heliport features and is not located within the vicinity of a heliport. Thus, the proposed Project is consistent with Policy 2.3.
<b>Policy 2.4:</b> Prior to the amendment of the City's general plan or a specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the ALUC, and pursuant to PUC Section 21676, the local agency shall first refer the proposed action to the ALUC.	<b>Consistent.</b> <u>The project site is not located within the FAR Part 77 200-foot height restriction area and not within JWA planning boundaries.</u> City of Santa Ana <u>would not be required to refer the</u> proposed Project to the ALUC prior to being considered for adoption by the City Planning Commission or City Council. Therefore, the proposed Project is consistent with Policy 2.4.

**Section 5.9.8 Existing Standard Conditions and Plans, Programs, or Policies, on page 5.9-41 is revised as follows:**

**PPP LU-1:** Prior to issuance of certificates of occupancy, the Project Applicant shall demonstrate compliance to the City of Santa Ana with the Federal Aviation Administration Federal Aviation Regulations Part 77 Notification Area for John Wayne Airport requirement that all prospective residents of the Project site shall be notified of airport related noise. Notification shall be included in lease/rental agreements and shall state the following:

“Notice of Airport in Vicinity. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations related to noise. Individual sensitivities to noise annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property and determine whether they are acceptable to you.”

~~There are no applicable regulations related to land use and planning that would reduce potential impacts.~~

**Section 5.9.3, Level of Significance Before Mitigation, on Page 5.9-41 is revised as follows:**

~~Without mitigation, Impact LU-2 would be **potentially significant**.~~

Impact LU-1 and Impact LU-2 would be less than significant.

**Section 5.9.10, Mitigation Measures, on Page 5.9-41 is revised as follows:**

**Mitigation Measure LU-1:** The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring that all prospective residents of the Project site shall be notified of airport related noise. Notification shall be included in lease/rental agreements and shall state the following:

~~"Notice of Airport in Vicinity. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations related to noise. Individual sensitivities to noise annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property and determine whether they are acceptable to you."~~

No mitigation measures are required.

**Section 5.9.11, Level of Significance After Mitigation, on Page 5.9-41 is revised as follows:**

~~The mitigation measure would reduce potential impacts associated with land use and planning to a level that is less than significant. Therefore, n~~No significant unavoidable adverse impacts related to land use and planning would occur.

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**Section 5.10, Noise**

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**The second paragraph on page 5.10-9, Section 5.10.3, Environmental Setting, is revised as follows:**

John Wayne Airport (JWA) is located approximately 2.2 miles southwest of the Project site and under the primary aircraft approach corridor ~~but is not and~~ within the Airport Environs Land Use Plan (AELUP) notification area for JWA. As shown on Figure 5.10-2, the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA. In addition, the County of Orange has adopted the General Aviation Noise Ordinance that prohibits commercial aircraft departures from JWA between the hours of 10:00 p.m. and 7:00 a.m. and arrivals between the hours of 11:00 p.m. and 7:00 a.m. These restrictions substantially limit the aircraft noise during the noise sensitive nighttime hours for residential use.

**The third bullet point at the top of Page 5.10-13, Section 5.10.4, Thresholds of Significance, is revised as follows:**

- Generate temporary Project construction-related noise level increases which exceed the ~~10~~ 12 dBA Leq noise level increase threshold (per Caltrans Traffic Noise Analysis Protocol) at residential noise-sensitive receiver locations.

**The first sentence of the first paragraph on page 5.10-27, Section 5.10.2, Environmental Impacts, is revised as follows:**

~~Less than Significant with Mitigation Incorporated.~~

**The third and fourth paragraphs on page 5.10-27, Section 5.10.2, Environmental Impacts, is revised as follows:**

As shown on Figure 5.10-2, the Project site is located outside the 55 dBA CNEL aircraft noise level contour boundaries of JWA. Therefore, according to the AELUP, the Project residential and commercial retail land use is considered *normally consistent* with JWA aircraft noise exposure exterior noise level compatibility thresholds. Also, the airport related noise at the Project site does not exceed the City's municipal code permissible noise levels. Additionally, the County's General Aviation Noise Ordinance that prohibits

commercial aircraft departures between the hours of 10:00 p.m. and 7:00 a.m. and arrivals between the hours of 11:00 p.m. and 7:00 a.m. These restrictions substantially limit the aircraft noise during the noise sensitive nighttime hours for residential use. Therefore, the Project would not expose people residing and working at the site to excessive noise related to JWA, and impacts would be less than significant.

~~However, since the Project site is located within the JWA influence area, all future residents shall be notified of potential aircraft overflight consistent with the requirements of the AELUP, which is included as Mitigation Measure LU-1 follows:~~

~~"The property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration or odors). Individual sensitivities to those annoyances, if any are associated with the property before you complete your purchase and determine where they are acceptable to you."~~

**Section 5.10.3, Level of Significance Before Mitigation, on Page 5.10-28 is revised as follows:**

~~Without mitigation, Impact NOI-3 would be **potentially significant**.~~

Upon implementation of regulatory requirements impacts NOI-1 and NOI-2 would be less than significant.

**Section 5.10.10, Mitigation Measures, on Page 5.10-29 is revised as follows:**

**Mitigation Measure LU-1:** ~~The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring that all prospective residents of the Project site shall be notified of airport related noise. Notification shall be included in lease/rental agreements and shall state the following:~~

~~"Notice of Airport in Vicinity. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations related to noise. Individual sensitivities to noise annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property and determine whether they are acceptable to you."~~

No mitigation measures are required.

**Section 5.10.11, Level of Significance After Mitigation, on Page 5.10-29 is revised as follows:**

~~The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with noise to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to noise would occur.~~

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## Section 5.12, Public Services

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**The fourth and fifth paragraphs on page 5.12-2, Section 5.12, Public Services, are revised as follows:**

Fire protection and emergency medical services in the City of Santa Ana are provided by the OCFA through a contract for services. The OCFA provides fire suppression, emergency medical, rescue, fire prevention, hazardous materials coordination, and wildland management services. OCFA serves 23 24 cities in Orange County and all unincorporated areas. Within the City of Santa Ana, OCFA provides services from 10 city-owned fire stations. There are currently 6 city-owned fire stations located within 3.5 miles of the Project site. Station 79, which is located 1 mile from the Project site is the first responding unit. The location, equipment, and staffing of the fire stations near the Project site are provided in Table 5.12-1.

As provided by the OCFA 2018 Statistical Annual Report, there were 27,220 incidents with 33,983 unit responses~~calls for service from the 10 fire stations in the City in 2018~~. Of the calls for service, 65.81 percent (21,952) were for emergency medical calls, 1.72 percent (565) were for fire incidents, and 13.81 percent (4,703) were for other incidents, which includes: cancelled service calls, ruptures, hazardous conditions, false alarms, and miscellaneous calls.

The information in Table 5.12-1 in Section 5.12, *Public Services*, of the Draft EIR is revised as follows:

**Table 5.12-1: ~~Santa Ana~~ OCFA Fire Stations Near the Project Site**

<b>Fire Station</b>	<b>Location</b>	<b>Distance from Site</b>	<b>Equipment</b>	<b>Daily Staffing</b>
Station 79	1320 East Warner, <u>Santa Ana</u>	1 mile	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 37	15011 Kensington Park Avenue, <u>Tustin</u>	1.8 miles	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 6	3180 Barranca Parkway, <u>Irvine</u>	2.2 miles	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 28	17862 Gillette Avenue, <u>Irvine</u>	2.5 miles	1 Paramedic Engine, 1 Paramedic Truck	2 Fire Captain, 2 Engineer, 4 Firefighters
Station 74	1427 S. Broadway Street, <u>Santa Ana</u>	2.8 miles	1 Paramedic Engine	1 Fire Captain, 1 Engineer, 2 Firefighters
Station 76	950 W. MacArthur Boulevard, <u>Santa Ana</u>	3.5 miles	1 Paramedic Truck	1 Fire Captain, 1 Engineer, 2 Firefighters

Source: OCFA 2019.

The first full paragraph on page 5.12-4, Section 5.12, *Public Services*, is revised as follows:

This residential and employee population is expected to create the typical range of service calls to OCFA that are largely related to medical emergencies, which consist of 65.81 percent of service calls; while fire calls consisted of 1.72 percent of OCFA service calls in Santa Ana during 2018.

The following bullet point is added as the fourth bullet point on page 5.12-5 in Section 5.12, *Public Services*.

- Access to and around structures would include ladder access on at least two sides of each structure.

### Section 5.13, Parks and Recreation

The paragraph on Page 5.13-3, Section 5.13.2 *Environmental Setting*, is revised as follows:

In addition, there are 9.10 existing City of Tustin park facilities that provide 92.9 97.9 acres of parkland and 3 existing City of Irvine park facilities within 3 miles of the Project site that provide 63.6 acres of park and recreation space, as listed in Table 5.13-2. Thus, the total existing parkland within 3 miles of the Project site is 238.38 243.38 acres.

Table 5.13-2, Tustin and Irvine Park and Recreation Facilities Within Three Miles of the Project Site, on Pages 5.13-3 and 5.14-4 is revised as follows:



<u>Ron Foell (Greenwood) Park, Windrow Rd</u>	<u>Playground, Amphitheater, Basketball Court, 2 Bocce Ball courts, 1.4 miles of Walking Trails, Picnic Pavilions</u>	<u>5 acres</u>	<u>1.9 miles</u>	<u>Driving: 4 minutes Walking: 39 minutes</u>
<b>Total of Tustin Parkland Within 3 Miles of the Project Site</b>		<b><u>92.9 97.9 acres</u></b>		

**The last two sentences on Page 5.13-5, Section 5.13.2, *Environmental Impacts*, is revised as follows:**

In addition, there are 92.9 97.9 acres of parkland within the City of Tustin and 63.6 acres of parkland within the City of Irvine Park facilities (listed in Table 5.13-2) that are also within 3 miles of the Project site and are likely (due to location) to be used by residents of the proposed Project. This equals approximately 245.38 243.38 acres of existing parkland within three miles of the site, which equates to 5,136.35 acres 5,094.49 square feet of parkland per Project resident at full occupancy.

**Table 5.13-3, Average Travel Time in Southern California to Outdoor Recreation Areas, on Page 5.13-6 is revised as follows:**

**Table 5.13-3: Average Travel Time in Southern California to Outdoor Recreation Areas**

Mode	<5 min	6-10 min	11-12 20 min	21-60 min	>60 min
Driving	20.1%	17.2%	20.8%	31.3%	10.6%
Walking	27.5%	20.3%	31.5%	18.9%	1.8%

Source: California State Parks, 2014.

## Section 5.14, Transportation

**All of the revisions to Section 5.14, *Transportation*, of the Draft EIR are provided in Attachment A, to this Chapter 3, Revisions to the Draft EIR.**

## Chapter 6.0, Alternatives

**The last paragraph on Page 6-9, which carries over to page 6-10, Section 6.6.1, *Environmental Impacts*, is revised as follows:**

The No Project/No Build Alternative would operate the existing industrial buildings on the Project site, which would not require a General Plan Amendment or zoning change. No impacts related to land use and planning would occur by retention of the existing onsite uses. ~~Because the No Project/No Build Alternative would not include residential uses, it would not require implementation of Mitigation Measure LU 1, which requires resident notification of airport operations and potential annoyances. Because this alternative would not require implementation of mitigation that would be required by the proposed Project, impacts from implementation of this alternative would be less than those of the proposed Project.~~ However, this alternative would not implement the SCAG policies related to high-density, infill development, and improvement of the job/housing balance and corresponding reduction in vehicle miles traveled.

**The second sentence of the third paragraph on Page 6-16, Section 6.7.1, *Environmental Impacts*, is revised as follows:**

JWA is located 2.2 miles southwest of the Project site. ~~It is not~~ within the Airport Environs Land Use Plan (AELUP) Notification Area, ~~but is not~~ the Airport Safety Zone, ~~or~~ the Airport Impact Zone~~;~~, and is outside of the 60 CNEL noise contours, as shown in Section 5.7, *Hazards and Hazardous Materials* (Figures 5.7-2 and 5.7-3).

**The second paragraph on Page 6-17, Section 6.7.1, *Environmental Impacts*, is revised as follows:**

~~In addition, because the Reduced Project Alternative would result in an onsite residential population, the alternative would require implementation of Mitigation Measure LU-1, which requires resident notification of airport operations and potential annoyances. The Reduced Project Alternative would develop similar uses that would be less dense, and two-stories lower in height than the proposed Project. Like the proposed Project, the Reduced Project Alternative would be consistent with the JWA AELUP with implementation of Mitigation Measure LU-1. As a result, the proposed Project and the Reduced Project Alternative would have similar less than significant impacts after implementation of mitigation.~~

**The first paragraph on Page 6-23, Section 6.8.1, *Environmental Impacts*, is revised as follows:**

~~Because the Build Out of the Existing Land Use and Zoning Alternative would not include residential uses, it would not require implementation of Mitigation Measure LU-1, which requires resident notification of airport operations and potential annoyances. Because this alternative would not require implementation of mitigation that would be required by the proposed Project, impacts from implementation of this alternative would be less than those of the proposed Project. However, this alternative would not implement the SCAG policies to the same degree as the proposed Project, because this alternative would not locate new housing near existing jobs and reduce the jobs-housing ratio or the corresponding reduction in vehicle miles traveled.~~

**The second paragraph on Page 6-28, Section 6.9, *Environmental Superior Alternative*, is revised as follows:**

~~The Build Out of the Existing Land Use and Zoning Alternative would reduce the Project's significant and unavoidable operational air quality and transportation/traffic impacts to a less than significant level, would implement the existing General Plan land use and zoning designations for the Project site, and would not require a General Plan amendment or zoning change. Because the Build Out of the Existing Land Use and Zoning Alternative would not include residential uses, it would not require implementation of Mitigation Measure LU-1, which requires resident notification of airport operations and potential annoyances.~~

**Revised Draft EIR Chapter 5.14 Transportation**

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# 5.14 Transportation

## 5.14.1 INTRODUCTION

This section describes the existing transportation and circulation conditions, criteria for the level of service, and impacts from implementation of the proposed Project. As necessary, mitigation measures for significant transportation impacts resulting from the construction and operation of the proposed Project are also included. The proposed Project's impacts are analyzed in the context of existing (2019), Project opening (2022), and future (2040) conditions. This analysis is based on information contained in the Traffic Impact Analysis (TIA ~~2019~~2020), which is included as Appendix ~~K~~ A.

### Traffic Analysis Terminology

**Level of Service (LOS):** is a measure of the quality of operational conditions within a traffic stream and is generally expressed in terms of such measures as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience. Levels range from A to F, with LOS A representing excellent (free-flow) conditions and LOS F representing extreme congestion.

**Peak Hour:** The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m. The p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

**Volume/Capacity (V/C) Ratio:** is one of the most used index to assess traffic status in cities, in which V is the total number of vehicles passing a point in one hour and C for the maximum number of cars that can pass a certain point at the reasonable traffic condition

## 5.14.2 REGULATORY SETTING

### Congestion Management Program

In 1990, the California Legislature enacted the Congestion Management Program (CMP) to implement Proposition 111, a state-wide transportation funding proposal that required local governments to implement mitigation measures to offset the impacts from new development on the regional transportation system. The CMP addresses the impact of local growth on the regional transportation system; the goal is to examine the interactions among land use, transportation, and air quality and to make decisions at the regional and local level in consideration of these interactions.

When LOS requirements are not maintained on portions of the CMP highway and roadway system, a deficiency plan is required that analyzes the cause of the deficiency and the implementation costs of various alternatives such as roadway modifications, programs, or actions to measurably improve performance. Highways must maintain at least LOS E, which is essentially one grade better than gridlock and is defined by a level of service where traffic flow fluctuates in terms of speed and flow rates, operating speeds average 35 miles per hour, and delays are significant. For arterial streets, LOS E occurs where long queues of vehicles are waiting upstream of an intersection and it may take several signal cycles for a vehicle to clear the intersection. A jurisdiction failing to comply with the CMP may have its allocation of the state gas tax withheld.

### Senate Bill 743 and CEQA Guidelines Section 15064.3

On September 27, 2013, Senate Bill (SB) 743 was signed into State law. The California legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and

investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas (GHG) emissions, as required by the California Global Warming Solutions Act of 2006 (AB 32).

~~SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts in many parts of California (if not statewide). As part of the new CEQA Guidelines, SB 743 directed that the new criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (Public Resources Code Section 21099[b][1]). On January 20, 2016, the Governor’s Office of Planning and Research released revisions to its proposed CEQA guidelines for the implementation of SB 743. Final review and rulemaking for the new guidelines are ongoing. Once the guidelines are prepared and certified, and that “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment” (Public Resources Code Section 21099[b][2]). Since the Governor’s Office of Planning and Research has not yet amended the CEQA Guidelines to implement this change, automobile delay is still considered a significant impact, and the City of Santa Ana continues to use the established LOS criteria.~~

The 2019 adopted changes to the CEQA Guidelines include a new section (15064.3) that specifies that VMT is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects. The revised CEQA guidelines related to VMT take effect July 1, 2020.

The City of Santa Ana adopted VMT Thresholds for SB 743 compliance in June 2019. The City’s thresholds assess whether further VMT analysis is required based on project location, size, or consistency with the SCAG Regional Transportation Plan/Sustainable Communities Strategy.

### **SCAG 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy**

On April 7, 2016 SCAG’s Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) and the goals and policies relevant to the proposed project are listed below:

#### **Goals**

1. Align the plan investments and policies with improving regional economic development and competitiveness.
2. Maximize mobility and accessibility for all people and goods in the region.
3. Ensure travel safety and reliability for all people and goods in the region.
4. Preserve and ensure a sustainable regional transportation system.
5. Maximize the productivity of our transportation system.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
7. Actively encourage and create incentives for energy efficiency, where possible.
8. Encourage land use and growth patterns that facilitate transit and active transportation.

### **Orange County Congestion Management Plan Program**

The Orange County CMP was established in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions. Compliance with the CMP requirements ensures a city’s eligibility to compete for the State gas tax funds for local transportation projects. The Orange County CMP is implemented by the Orange County Transportation Authority (OCTA).

As part of the CMP, a CMP Highway Network was identified for Orange County that consists of Orange County's State highway system, and highway and arterials from OCTA's Smart Street network. OCTA has implemented an Intersection Capacity Utilization (ICU) monitoring method, developed with technical staff members from local and State agencies, for measuring the LOS at CMP Highway System (CMPHS) intersections. The CMP requires analysis of off-site intersections potentially affected by the project, which the CMP defines as intersections at which the project is forecast to add 51 or more peak hour trips. The CMP also requires the analysis of freeway segments and ramp merge/diverge areas where a project is forecast to add more than 100 two-way trips.

## City of Santa Ana General Plan

### Circulation Element

The City is currently undergoing a comprehensive update to the General Plan. The Circulation Element of the Santa Ana General Plan serves as the City's primary guide for transportation planning. The following goals and policies in the existing General Plan Circulation Element are relevant to the proposed Project:

- Goal 1:** Provide and maintain a comprehensive circulation system that facilitates the efficient movement of people and goods throughout the City and enhances its economic viability.
- Policy 1.4:** Maintain at least a level of service "D" on arterial street intersections, except in major development areas.
- Policy 1.11:** Minimize travel impediments on bicycle and pedestrian paths.
- Goal 2:** Provide design and construction that facilitates safe utilization of the City's transportation systems.
- Policy 2.1:** Limit the number of driveways on arterial streets to reduce vehicular conflict and facilitate traffic flow.
- Goal 3:** Provide a full spectrum of travel alternatives for the community's residents, employees, and visitors.
- Policy 3.4:** Encourage the development of multi-modal transit opportunities within major development areas.
- Policy 3.5:** Enhance sidewalks and pedestrian systems to promote their use as a means of travel.
- Goal 4:** Fully coordinate transportation and land use planning activities.
- Policy 4.2:** Assess land use and transportation project impacts through the development review process.
- Policy 4.3:** Assess all development projects in order to identify their traffic impacts and require that they pay their fair-share of the system improvements necessary to accommodate traffic generated by the project.
- Goal 5:** Create attractive circulation corridors to enhance the City's image.
- Policy 6.1:** Implement street design features that discourage through traffic on residential streets.

## 5.14.3 ENVIRONMENTAL SETTING

### Traffic Study Area and Existing Levels of Service

Access to the Project site is provided by Red Hill Avenue and Warner Avenue. Red Hill Avenue is a 7-lane divided north-south arterial roadway adjacent to the Project site that has a speed limit of 50 mph, and 45 mph north of Valencia Avenue. Red Hill Avenue connects to Interstate 405 (I-405) to the south and Interstate 5 (I-5) to the north. Warner Avenue is a 6-lane divided east-west arterial roadway that has a speed limit of 45 mph west of Red Hill Avenue and 50 mph east of Red Hill Avenue.

The traffic study area for the proposed Project, as determined through coordination with the Cities of Santa Ana, Irvine, and Tustin includes 57 intersections, which are listed in Tables 5.14-1 and shown in Figure 5.14-1. The existing traffic volumes for intersections based on peak hour intersection turn movement counts and daily counts collected in April and May 2019. Table 5.14-1 shows that all study area intersections are currently operating at acceptable levels of service.

**Table 5.14-1: Existing Intersection Levels of Service**

	Intersection	City	Signal Control	AM Peak		PM Peak	
				V/C or Delay	LOS	V/C or Delay	LOS
1.	Grand Ave./Edinger Ave.	Santa Ana	Signal	0.710	C	0.843	D
2.	Grand Ave./St. Andrew Pl.	Santa Ana	Signal	0.349	A	0.506	A
3.	Grand Ave./St. Gertrude Pl.	Santa Ana	Signal	0.407	A	0.484	A
4.	Grand Ave./Warner Ave.	Santa Ana	Signal	0.549	A	0.716	C
5.	Grand Ave./SR 55 SB Off-Ramp	Santa Ana	Signal	0.486	A	0.509	A
6.	SR 55 SB Ramps/Dyer Rd.	Santa Ana	Signal	0.663	B	0.739	C
7.	Grand Ave./Dyer Rd.	Santa Ana	Signal	0.585	A	0.622	B
8.	SR 55 NB Ramps/Dyer Rd.	Santa Ana	Signal	0.562	A	0.389	A
9.	Wright St./Warner Ave.	Santa Ana	Signal	0.398	A	0.646	B
10.	Pullman St./Warner Ave.	Santa Ana /Tustin	Signal	0.335	A	0.434	A
11.	Pullman St./Dyer Rd.	Santa Ana	Signal	0.467	A	0.702	C
12.	SR 55 SB Ramps/Edinger Ave.	Santa Ana	Signal	0.600	A	0.591	A
13.	Newport Ave./Edinger Ave.	Tustin	Signal	0.645	B	0.357	A
14.	Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Tustin	Signal	0.461	A	0.613	B
15.	Newport Ave./Valencia Ave.	Tustin	Signal	0.147	A	0.306	A
16.	Red Hill Ave./El Camino Real	Tustin	Signal	0.610	B	0.534	A
17.	Red Hill Ave./Interstate 5 NB Ramps	Tustin	Signal	0.618	B	0.582	A
18.	Red Hill Ave./Interstate 5 SB Ramps	Tustin	Signal	0.724	C	0.666	B
19.	Red Hill Ave./Nissan Rd.	Tustin	Signal	0.561	A	0.606	B
20.	Red Hill Ave./Mitchell Ave.	Tustin	Signal	0.529	A	0.509	A
21.	Red Hill Ave./Walnut Ave.	Tustin	Signal	0.590	A	0.684	B
22.	Red Hill Ave./Edinger Ave.	Tustin	Signal	0.500	A	0.760	C
23.	Red Hill Ave./Valencia Ave.	Tustin	Signal	0.471387	A	0.441414	A
24.	Red Hill Ave./Victory Rd.	Tustin	Signal	0.357	A	0.409	A
25.	Red Hill Ave./Warner Ave.	Santa Ana /Tustin	Signal	0.500	A	0.567	A
26.	Driveway 1/Warner Ave.	Santa Ana	Signal	-	-	-	-
27.	Driveway 2/Warner Ave.	Santa Ana	TWSC	-	-	-	-
28.	Red Hill Ave./Driveway 3	Santa Ana	TWSC	-	-	-	-
29.	Red Hill Ave./Carnegie Ave.	Santa Ana /Tustin	Signal	0.334	A	0.382	A
30.	Red Hill Ave./Barranca Pkwy.	Santa Ana /Tustin/Irvine	Signal	0.564	A	0.785	C
31.	Red Hill Ave./Deere Ave.	Santa Ana /Irvine	Signal	0.410	A	0.699	B
32.	Red Hill Ave./Alton Pkwy.	Santa Ana /Irvine	Signal	0.489	A	0.833	D
33.	Red Hill Ave./McGaw Ave.	Irvine	Signal	0.462	A	0.719	C
34.	Red Hill Ave./MacArthur Blvd.	Irvine	Signal	0.604	B	0.762	C
35.	Halladay St. E/Alton Ave.	Santa Ana	TWSC	10.5	B	9.9	A
36.	Halladay St. W/Alton Ave.	Santa Ana	TWSC	12.2	B	11.6	B
37.	Daimler St./Alton Pkwy.	Santa Ana /Irvine	AWSC	9.9	A	10.6	B



	Intersection	City	Signal Control	AM Peak		PM Peak	
				V/C or Delay	LOS	V/C or Delay	LOS
38.	MacArthur Blvd./Sky Park East	Irvine	Signal	0.328	A	0.503	A
39.	MacArthur Blvd./Main St.	Irvine	Signal	0.533	A	0.696	B
40.	MacArthur Blvd./Interstate 405 NB Ramps	Irvine	Signal	0.759	C	0.696	B
41.	MacArthur Blvd./Interstate 405 SB Ramps	Irvine	Signal	0.533	A	0.643	B
42.	Reserve Center Driveway/Warner Ave.	Tustin	Signal	0.122	A	0.183	A
43.	Armstrong Ave./Warner Ave.	Tustin	Signal	0.153	A	0.196	A
44.	Armstrong Ave./Barranca Pkwy.	Tustin/Irvine	Signal	0.433	A	0.681	B
45.	Legacy Rd./Warner Ave.	Tustin	Signal	0.103	A	0.188	A
46.	Tustin Ranch Rd./Valencia Ave.	Tustin	Signal	0.465	A	0.493	A
47.	Tustin Ranch Rd./Warner Ave. N	Tustin	Signal	0.365	A	0.659	B
48.	Tustin Ranch Rd./Warner Ave. S	Tustin	Signal	0.386	A	0.543	A
49.	Tustin Ranch Rd./Park Ave.	Tustin	Signal	0.515	A	0.663	B
50.	Tustin Ranch Rd./Barranca Pkwy.	Tustin/Irvine	Signal	0.711	C	0.819	D
51.	Von Karman Ave./Alton Pkwy.	Irvine	Signal	0.676	B	0.819	D
52.	Park Ave./Warner Ave.	Tustin/Irvine	Signal	0.449	A	0.693	B
53.	Millikan Ave./Barranca Pkwy.	Tustin/Irvine	Signal	0.436	A	0.632	B
54.	Jamboree Rd./Barranca Pkwy.	Tustin/Irvine	Signal	0.760	C	0.904	E
55.	Jamboree Rd./Alton Pkwy.	Irvine	Signal	0.721	C	0.806	D
56.	Jamboree Rd./Main St.	Irvine	Signal	0.754	C	0.800	C
57.	Corporate Park/Barranca Pkwy.	Irvine	Signal	0.333	A	0.549	A

### Caltrans Analysis

	Intersection	Signal Control	AM Peak		PM Peak	
			Delay	LOS	Delay	LOS
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	11.8	B	14.1	B
6.	SR 55 SB Ramps/Dyer Rd.	Signal	41.5	D	42.5	D
8.	SR 55 NB Ramps/Dyer Rd.	Signal	21.8	C	15.2	B
12.	SR 55 SB Ramps/Edinger Ave.	Signal	37.5	D	41.9	D
14.	Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	30.4	C	38.0	D
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	25.5	C	21.5	C
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	41.8	D	34.1	C
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	33.9	C	20.5	C
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	25.1	C	25.5	C

Source: Appendix K A.

TWSC = Two-Way Stop Controlled (evaluated using the HCM Methodology)

AWSC = All-Way Stop Controlled (evaluated using the HCM Methodology)

<sup>1</sup> Volume to Capacity Ratio for Signalized Intersections using ICU methodology. Delay for signalized Caltrans intersections or unsignalized intersections.

<sup>2</sup> Level of Service

<sup>3</sup> Seconds of control delay

### Existing Transit Service

The Project site is currently served by Orange County Transportation Authority (OCTA) Bus Routes 71 (Red Hill) and 72 (Warner), as well as Metrolink Stationlink Route 472 (Red Hill). Bus routes 71 and 72 provide service seven days a week. Route 472 provides service Monday thru Friday. Other Bus Routes servicing areas within the Project area are OCTA bus routes 55, 59, 70, 76, 86, Intracounty OC Express Route 213/A, Metrolink Stationlink Route 463, and the IShuttle 400A, 401B, and 405F.

### Existing Bicycle and Pedestrian Facilities

There are several roadways in the Project vicinity that currently have bicycle lanes, which include:

- Red Hill Avenue between Barranca Parkway and Reynolds Avenue,
- Warner Avenue east of Red Hill Avenue,
- Tustin Ranch Road,
- Von Karman Avenue,
- Jamboree Road between Barranca Parkway and Main Street,
- Edinger Avenue between Red Hill Avenue and Newport Avenue,
- South side of Barranca Parkway west of Jamboree Road,
- Alton Parkway between Red Hill Avenue and Jamboree Road, and
- Main Street.

Additionally, sidewalks currently exist adjacent to the site along both Red Hill Avenue and Warner Avenue.

### 5.14.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

- |      |  |
|------|--|
| TR-1 | Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;           |
| TR-2 | Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);   |
| TR-3 | Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or |
| TR-4 | Result in inadequate emergency access.   |

### Intersection Thresholds

#### City of Santa Ana

The City of Santa Ana General Plan Circulation Element indicates that acceptable LOS is LOS D or better, except within the City's defined major development areas where LOS E is considered acceptable. A project would result in a significant impact if it causes an intersection operating at acceptable LOS in the baseline condition to deteriorate to unacceptable LOS. If a signalized intersection is operating at unsatisfactory LOS in the baseline condition, an addition of 0.01 to the ICU value would constitute a significant project impact. For unsignalized intersections, an intersection that operates at an unacceptable LOS E or worse and meets the peak hour signal warrant would constitute a significant project impact.

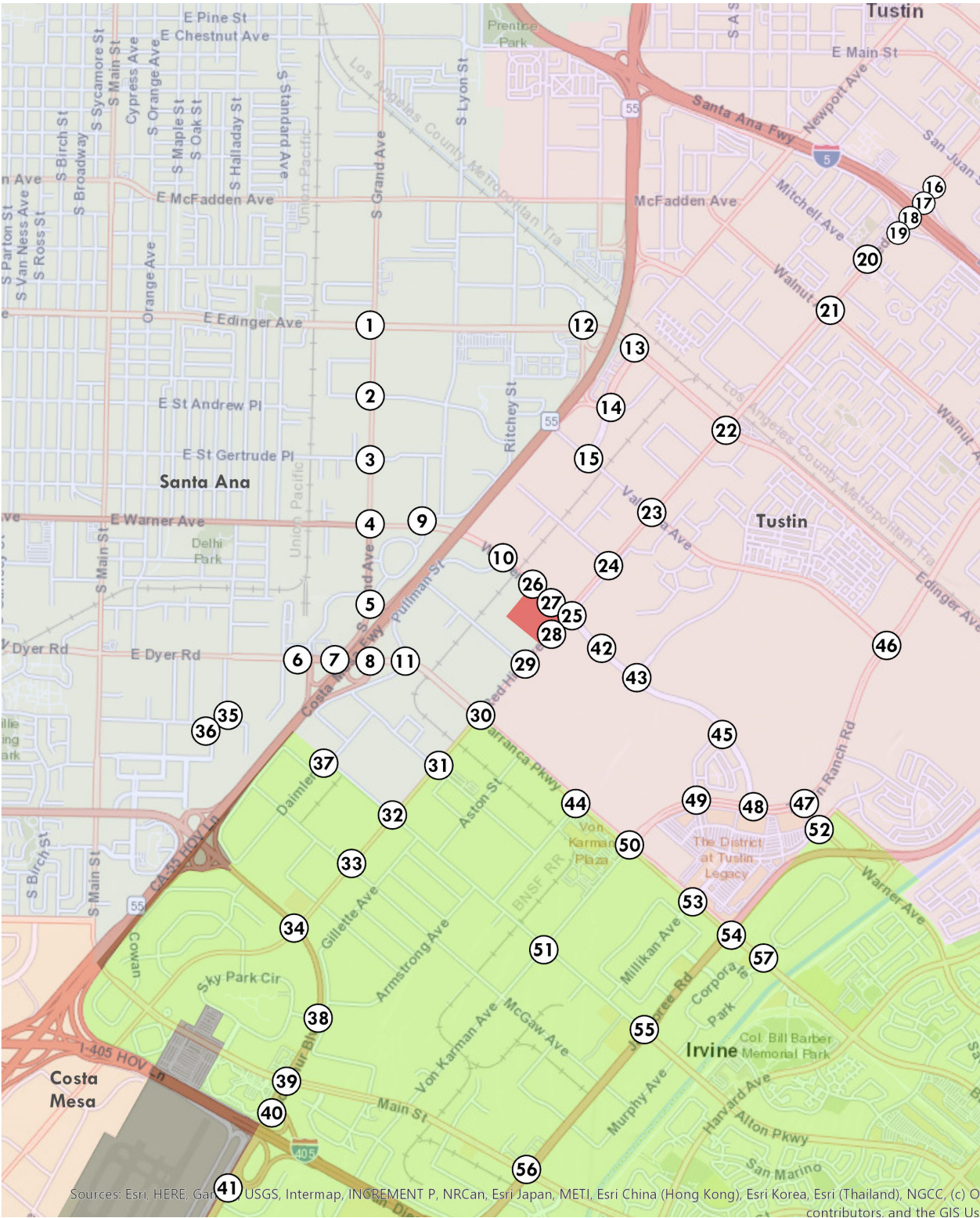
#### City of Irvine

The City of Irvine considers acceptable LOS to be LOS D or better, except within the Irvine Business Complex (IBC) where LOS E is acceptable. A project would result in a significant impact if it causes an intersection operating at acceptable LOS in the baseline condition to deteriorate to unacceptable LOS. If an intersection is operating at unsatisfactory LOS in the baseline condition, an addition of 0.02 (rounded to the 2nd decimal place) to the ICU value would constitute a significant project impact. Every study intersection in the City of Irvine is located in the IBC, where the LOS E standard would apply.

#### City of Tustin

The City of Tustin considers acceptable LOS to be LOS D or better. A project would result in a significant impact if it causes an intersection operating at acceptable LOS in the baseline condition to deteriorate to unacceptable LOS. If an CMP intersection is operating at unsatisfactory LOS in the baseline condition, an addition of 0.01 to the ICU value would constitute a significant project impact. At non-CMP locations, an addition of 0.02 would constitute a significant project impact.

# Study Area Intersections



Project Site



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### Congestion Management Program (CMP) Intersections

At CMP intersections, LOS E is considered acceptable. If an intersection is operating at worse than LOS E in the baseline condition, an addition of ~~0.01~~ 0.10 to the ICU value would constitute a significant project impact. If an intersection is operating at or below LOS E in the baseline condition, an addition of 0.1 to the ICU value would constitute a significant project impact. The following two intersections are CMP intersections, where the below LOS E standard would apply:

- #12: SR-55 SB Ramps/Edinger Avenue (City of Santa Ana/Caltrans)
- ~~#13: Newport Avenue/Edinger Avenue (City of Tustin)~~
- #14: SR-55 NB Ramps/Newport Avenue (City of Costa Mesa/Caltrans)

### VMT Thresholds

The City of Santa Ana adopted VMT Thresholds for SB 743 compliance in June 2019. The City's thresholds assess whether further VMT analysis is required based on project location, size, or consistency with the SCAG Regional Transportation Plan/Sustainable Communities Strategy. Projects are required to prepare a VMT analysis if they are not located within a Transit Priority Area or a High-Quality Transit Area and are not considered a locally serving retail use. Should a VMT analysis be required, the following thresholds are applied:

- **Direct Project Impact:** A significant project impact would occur if the project generates a VMT per service population (VMT/SP) above 15 percent below the Countywide Average.
- **Cumulative Impact:**
  - **Screening Criteria:** A significant cumulative impact would occur if the project is determined to be inconsistent with the RTP/SCS or if the project causes daily VMT within the City to be higher than the no project alternative under cumulative conditions.
  - **Impact Criteria:** A cumulative impact would occur if the project results in a negative effect on VMT/SP at the citywide level.

## 5.14.5 METHODOLOGY

### Project Trip Distribution Methodology

Trip distribution patterns for the proposed Project were developed based on select zone model runs from the Orange County Transportation Analysis Model (OCTAM) and consideration of the Project location in relation to the surrounding land uses and regional transportation network. The Project trip generation was applied to the trip distribution patterns to develop the Project trip assignment. Project trip distribution details are provided in the Traffic Impact Analysis Report, which is included as Appendix ~~K~~ A.

### Intersection Operations Methodology

Intersection operations are evaluated using LOS, which is a measure of the delay experienced by drivers on a roadway facility. LOS A indicates free-flow traffic conditions and is generally the best operating conditions. LOS F is an extremely congested condition and is the worst operating condition from the driver's perspective. In this analysis, LOS at all signalized intersections is calculated using the Intersection Capacity Utilization (ICU) methodology. Intersections under the jurisdiction of Caltrans is also evaluated using the Highway Capacity Manual (HCM), 6<sup>th</sup> Edition methodology. LOS at unsignalized intersections is calculated using the HCM, 6<sup>th</sup> Edition methodology. The ICU methodology is a planning-level operational methodology and provides an estimate of the volume to capacity (v/c) ratio at a signalized intersection. The LOS at the intersection is determined according to the values shown in Table 5.14-2.

**Table 5.14-2: Relationship between ICU and LOS**

LOS	ICU (V/C Ratio)
A	$\leq 0.60$
B	0.61 to $\leq 0.70$
C	0.71 to $\leq 0.80$
D	0.81 to $\leq 0.90$
E	0.91 to $\leq 1.00$
F	$>1.00$

Using the HCM methodology, LOS at signalized intersections is defined in terms of the weighted average control delay for the intersection as a whole. Control delay is a measure of the increase in travel time that is experienced due to traffic signal control and is expressed in terms of average control delay per vehicle (in seconds). Control delay is determined based on the intersection geometry and volume, signal cycle length, phasing and coordination along the arterial corridor. Table 5.14-3 shows the relationship between control delay and LOS at a signalized intersection.

**Table 5.14-3: Relationship between Control Delay and LOS at a Signalized Intersection**

LOS	Delay (Seconds per Vehicle)
A	$\leq 10$
B	$>10 - 20$
C	$>20 - 35$
D	$>35 - 55$
E	$>55 - 80$
F	$>80$

There are only two unsignalized intersections in the Project study area and both are two-way stop control (TWSC) intersections. The Highway Capacity Manual TWSC intersection methodology calculates LOS based on the delay experienced by drivers on the minor (stop-controlled) approaches to the intersection. For TWSC intersections, LOS is determined for each minor-street movement, as well as the major-street left-turns. The relationship between delay and LOS at TWSC intersections is shown in Table 5.14-4.

**Table 5.14-4: Relationship between Delay and LOS at a TWSC Intersection**

LOS	Delay (seconds)
A	0-10
B	$>10 - 15$
C	$>15 - 25$
D	$>25 - 35$
E	$>35 - 50$
F	$>50$

## Volume Forecast Methodology

Forecast traffic volumes for the Opening Year conditions were developed by applying a growth rate of 1.02 percent per year to the 2019 traffic counts and adding traffic from nearby cumulative development projects (approved and not yet build and those under review). The growth rate was calculated by comparing existing and forecast year 2040 traffic volumes in the study area. Cumulative projects were provided by the Cities of Santa Ana, Irvine and Tustin.

The 2040 Buildout traffic volumes were forecast using the Orange County Transportation Analysis Model (OCTAM). At the request of the City of Irvine, the OCTAM land use database was reviewed and modified as needed to include all cumulative development projects identified by the Cities of Irvine and Tustin. OCTAM

model data was post-processed using the NCHRP 765 methodology. See the Traffic Impact Analysis (Appendix K A) for additional detail.

### **VTM Methodology**

Based on the City's screening thresholds, the Project is required to prepare a VMT analysis as the Project is not located within a Transit Priority Area or a High-Quality Transit Area and is not considered a locally serving retail use.

The Project VMT analysis was prepared using the Orange County Traffic Analysis Model (OCTAM) to forecast the total daily VMT per service population (VMT/SP) for the Project, the County of Orange, and the City of Santa Ana. The service population used for the Project is population plus employment pursuant to the OCTAM, since the Project includes both residential and commercial land uses. In addition, for cumulative conditions, the 2040 OCTAM was modified to include all known cumulative projects.

## 5.14.6 ENVIRONMENTAL IMPACTS

### **IMPACT TR-1: THE PROJECT WOULD CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE, AND PEDESTRIAN FACILITIES.**

**Significant and Unavoidable Impact.** The proposed Project would generate traffic from development of the proposed 1,150 multi-family residential units and the 80,000 square feet of commercial space. As described in Section 3.0, *Project Description*, the proposed commercial space would consist of the following uses:

- Shopping Center: ~~18,000~~ 31,000 square feet
- Fast Casual Restaurant: ~~5,000~~ 3,500 square feet
- Quality Restaurant: ~~25,000~~ 20,000 square feet
- High-Turnover Sit-Down Restaurant: ~~25,000~~ 20,000 square feet
- Fast Food Restaurant (no drive-through): ~~5,000~~ 3,500 square feet
- Coffee/Donut Shop (no drive-through): 2,000 square feet

Access to the proposed Project would be provided via a full-access driveway and a right-in/right-out driveway on Warner Avenue and a right-in/right-out driveway on Red Hill Avenue. ~~The proposed full-access driveway on Warner Avenue would be slightly offset to the east from the adjacent driveway on the north side of Warner Avenue. This driveway would be signalized with split-phase operation in the northbound and southbound direction.~~

### **Project Trip Generation**

Vehicle trips for the Project were generated by using the trip rates from the Institute of Transportation Engineers (ITE) Trip Generation (10th Edition, 2017), and takes credit for the existing development on the site. As shown in Table 5.14-5, the Project is anticipated to generate ~~11,546~~ 10,443 new daily trips, including ~~534~~ 476 a.m. peak hour and ~~604~~ 523 p.m. peak hour trips.

**Table 5.14-5 Proposed Project Trip Generation**

		A.M. Peak Hour			P.M. Peak Hour			-
Land Use	Units	In	Out	Total	In	Out	Total	Daily
Future Uses								
Apartments								
Trip Generation Rates <sup>1</sup>		0.09	0.27	0.36	0.27	0.17	0.44	5.44
Trip Generation	1,150 DU	108	306	414	309	197	506	6,256

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Internal Trips <sup>2</sup>		(6)	(63)	(69)	(58)	(37)	(95)	(164)
Total Net Trip Generation		102	243	345	251	160	411	6,092
<b>High-Turnover Sit-Down Restaurant</b>								
Trip Generation Rates <sup>3</sup>	25,000 TSF	5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation		137	112	249	151	94	245	2,805
Internal Trips <sup>2</sup>		(27)	(3)	(29)	(15)	(20)	(36)	(65)
External Trips		110	109	220	136	74	209	2,740
Pass-By Trips		0	0	0	(58)	(32)	(90)	(589)
Total Net Trip Generation		110	109	220	77	42	119	2,151
<b>Retail</b>								
Trip Generation Rates <sup>4</sup>	18,000 TSF	0.58	0.36	0.94	1.83	1.98	3.81	37.75
Trip Generation		10	7	17	33	36	69	680
Internal Trips <sup>2</sup>		(3)	(2)	(5)	(20)	(19)	(39)	(44)
External Trips		7	5	12	13	17	30	636
Pass-By Trips		(2)	(1)	(3)	(4)	(6)	(10)	(153)
Total Net Trip Generation		5	4	9	9	11	20	483
<b>Quality Restaurant</b>								
Trip Generation Rates <sup>5</sup>	25,000 TSF	0.37	0.37	0.73	5.23	2.57	7.80	83.84
Trip Generation		9	9	18	131	64	195	2,096
Internal Trips <sup>2</sup>		(2)	(0)	(2)	(13)	(14)	(27)	(29)
External Trips		7	9	16	118	50	168	2,067
Pass-By Trips		0	0	0	(52)	(22)	(74)	(455)
Total Net Trip Generation		7	9	16	66	28	94	1,612
<b>Fast-Casual Restaurant</b>								
Trip Generation Rates <sup>6</sup>	5,000 TSF	1.39	0.68	2.07	7.77	6.36	14.13	315.17
Trip Generation		7	3	10	39	32	71	1,576
Internal Trips <sup>2</sup>		(1)	(0)	(1)	(4)	(7)	(11)	(12)
External Trips		6	3	9	35	25	60	1,564
Pass-By Trips		0	0	0	(15)	(11)	(26)	(336)
Total Net Trip Generation		6	3	9	20	14	34	1,228
<b>Fast-Food Restaurant without Drive-Through Window</b>								
Trip Generation Rates <sup>7</sup>	5,000 TSF	15.06	10.04	25.10	14.17	14.17	28.34	346.23
Trip Generation		75	51	126	71	71	142	1,731
Internal Trips <sup>2</sup>		(15)	(1)	(16)	(7)	(15)	(23)	(38)
External Trips		60	50	110	64	56	119	1,693
Pass-By Trips		(24)	(19)	(43)	(26)	(22)	(48)	(660)
Total Net Trip Generation		37	30	67	38	33	72	1,033
<b>Coffee/Donut Shop without Drive-Through Window</b>								
Trip Generation Rates <sup>8</sup>	2,000 TSF	45.38	43.61	88.99	21.69	21.69	43.38	820.38
Trip Generation		91	87	178	43	44	87	1,641
Internal Trips <sup>2</sup>		(18)	(2)	(20)	(4)	(10)	(14)	(34)
External Trips		73	85	158	39	34	73	1,607
Pass-By Trips		(61)	(71)	(131)	(32)	(29)	(61)	(1,334)
Total Net Trip Generation		12	14	27	7	6	12	273
<b>Existing Uses</b>								
<b>Industrial Park<sup>9</sup></b>								
Passenger Vehicles	212,121 TSF	36	9	45	9	36	45	379
Trucks		89	25	114	22	92	114	947
Total Net Trip Generation		125	34	159	31	128	159	1,326
Total Net Trip Generation		155	379	534	437	167	604	11,546

		A.M. Peak Hour			P.M. Peak Hour			-
Land Use	Units	In	Out	Total	In	Out	Total	Daily
Future Uses								
Apartments								
Trip Generation Rates 1		0.09	0.27	0.36	0.27	0.17	0.44	5.44
Trip Generation	1,150 DU	108	306	414	309	197	506	6,256
Internal Trips 2		(6)	(63)	(69)	(58)	(37)	(95)	(164)
Total Net Trip Generation		102	243	345	251	160	411	6,092



Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>High-Turnover Sit Down Restaurant</b>								
Trip Generation Rates <sup>3</sup>		5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation	20,000 TSF	109	90	199	121	75	196	2,244
Internal Trips <sup>2</sup>		(22)	(2)	(25)	(18)	(22)	(40)	(65)
External Trips		87	88	174	103	53	156	2,179
Pass-By Trips		0	0	0	(44)	(23)	(67)	(468)
Total Net Trip Generation		87	88	174	59	30	89	1,710
<b>Retail</b>								
Trip Generation Rates <sup>4</sup>		0.58	0.36	0.94	1.83	1.98	3.81	37.75
Trip Generation	31,000 TSF	18	11	29	57	62	119	1,170
Internal Trips <sup>2</sup>		(4)	(3)	(7)	(34)	(33)	(67)	(74)
External Trips		14	8	22	23	29	52	1,096
Pass-By Trips		(3)	(2)	(5)	(8)	(10)	(18)	(263)
Total Net Trip Generation		11	6	17	15	19	34	833
<b>Quality Restaurant</b>								
Trip Generation Rates <sup>5</sup>		0.37	0.37	0.73	5.23	2.57	7.80	83.84
Trip Generation	20,000 TSF	7	8	15	105	51	156	1,677
Internal Trips <sup>2</sup>		(1)	(0)	(2)	(16)	(15)	(31)	(33)
External Trips		6	8	13	89	36	125	1,644
Pass-By Trips		0	0	0	(39)	(16)	(55)	(362)
Total Net Trip Generation		6	8	13	50	20	70	1,283
<b>Fast Casual Restaurant</b>								
Trip Generation Rates <sup>6</sup>		1.39	0.68	2.07	7.77	6.36	14.13	315.17
Trip Generation	3,500 TSF	5	2	7	27	23	50	1,103
Internal Trips <sup>2</sup>		(1)	(0)	(1)	(4)	(7)	(11)	(12)
External Trips		4	2	6	23	16	39	1,091
Pass-By Trips		0	0	0	(10)	(7)	(17)	(235)
Total Net Trip Generation		4	2	6	13	9	22	856
<b>Fast-Food Restaurant without Drive-Through Window</b>								
Trip Generation Rates <sup>7</sup>		15.06	10.04	25.10	14.17	14.17	28.34	346.23
Trip Generation	3,500 TSF	53	35	88	50	50	100	1,212
Internal Trips <sup>2</sup>		(11)	(1)	(12)	(8)	(15)	(22)	(34)
External Trips		42	34	76	42	35	78	1,178
Pass-By Trips		(16)	(13)	(30)	(17)	(14)	(31)	(459)
Total Net Trip Generation		26	21	47	25	21	47	719
<b>Coffee/Donut Shop without Drive-Through Window</b>								
Trip Generation Rates <sup>8</sup>		45.38	43.61	88.99	21.69	21.69	43.38	820.38
Trip Generation	2,000 TSF	91	87	178	43	44	87	1,641
Internal Trips <sup>2</sup>		(18)	(2)	(20)	(4)	(10)	(14)	(34)
External Trips		73	85	158	39	34	73	1,607
Pass-By Trips		(61)	(71)	(131)	(32)	(29)	(61)	(1,334)
Total Net Trip Generation		12	14	27	7	6	12	273
<b>Existing Uses</b>								
<b>Industrial Park<sup>9</sup></b>								
Passenger Vehicles		36	9	45	9	36	45	379
Trucks	212,121 TSF	89	25	114	22	92	114	947
Total Net Trip Generation		125	34	159	31	128	159	1,326
<b>Total Net Trip Generation</b>		<b>121</b>	<b>355</b>	<b>476</b>	<b>389</b>	<b>135</b>	<b>523</b>	<b>10,443</b>

Source: Appendix K A. Trip generation based on rates from Institute of Transportation Engineers' (ITE) Trip Generation (10th Edition) for:

<sup>1</sup> Land Use 221 - "Multifamily Housing (Mid-Rise)".

<sup>2</sup> Internal trip capture is from ITE Trip Generation Handbook (3rd Edition).

<sup>3</sup> Land Use 820 - "Shopping Center"

<sup>4</sup> Land Use 931 - "Quality Restaurant"

<sup>5</sup> Land Use 930 - "Fast Casual Restaurant"

<sup>6</sup> Land Use 933 - "Fast-Food Restaurant without Drive-Through Window"

<sup>7</sup> Land Use 937 - "Coffee/Donut Shop without Drive Through Window"

<sup>8</sup> Land Use 130 - "Industrial Park"

### Existing Plus Project

The Existing plus Project traffic volumes were determined by adding the net new Project trips to Existing Without Project traffic volumes. Table 5.14-6 provides a comparison between the Existing Without and With Project conditions. As shown, all study area intersections would continue to operate at satisfactory LOS in the Existing plus Project condition. However, the Project driveway on Red Hill Avenue is forecast to operate at LOS F E for vehicles leaving the site in the a.m. peak hour. The forecast delay of ~~53.4~~ 46.0 seconds with a queue of ~~six~~ 5.1 vehicles would be experienced by drivers making an eastbound right-turn out of the Project site. Vehicles traveling along on Red Hill Avenue would not experience a delay. Project traffic using the driveway on Red Hill Avenue could utilize one of the two driveways on Warner Avenue during the a.m. peak hour, should they choose not to wait at the Red Hill Avenue driveway. The signalized driveway on Warner Avenue is forecast to operate at LOS A and the unsignalized driveway on Warner Avenue is forecast to operate at LOS C. Therefore, both of the Warner Avenue driveways have residual capacity to accommodate the additional traffic from the Red Hill Avenue driveway. Because this is an effect at an onsite driveway location, which could be avoided by use of other driveways, impacts would be less than significant.

Table 5.14-6: Existing Plus Project Peak Hour Intersection Levels of Service

Intersection		Signal Control	Existing				Existing plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
1.	Grand Ave./Edinger Ave.	Signal	0.710	C	0.843	D	0.718	C	0.844	D	0.008	0.001	No	No
2.	Grand Ave./St. Andrew Pl.	Signal	0.349	A	0.506	A	0.354	A	0.508	A	0.005	0.002	No	No
3.	Grand Ave./St. Gertrude Pl.	Signal	0.407	A	0.484	A	0.410	A	0.491	A	0.003	0.007	No	No
4.	Grand Ave./Warner Ave.	Signal	0.549	A	0.716	C	0.560	A	0.740	C	0.011	0.024	No	No
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	0.486	A	0.509	A	0.486	A	0.509	A	0.000	0.000	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	0.663	B	0.739	C	0.670	B	0.742	C	0.007	0.003	No	No
7.	Grand Ave./Dyer Rd.	Signal	0.585	A	0.622	B	0.587	A	0.624	B	0.002	0.002	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	0.562	A	0.389	A	0.563	A	0.391	A	0.001	0.002	No	No
9.	Wright St./Warner Ave.	Signal	0.398	A	0.646	B	0.413	A	0.654	B	0.015	0.008	No	No
10.	Pullman St./Warner Ave.	Signal	0.335	A	0.434	A	0.346	A	0.438	A	0.011	0.004	No	No
11.	Pullman St./Dyer Rd.	Signal	0.467	A	0.702	C	0.473	A	0.702	C	0.006	0.000	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	0.600	A	0.591	A	0.601	B	0.592	A	0.001	0.001	No	No
13.	Newport Ave./Edinger Ave.	Signal	0.645	B	0.357	A	0.646	B	0.378	A	0.001	0.021	No	No
14.	Newport Ave./SR 55 NB Ramp Del Amo Ave.	Signal	0.461	A	0.613	B	0.465	A	0.613	B	0.004	0.000	No	No
15.	Newport Ave./Valencia Ave.	Signal	0.147	A	0.306	A	0.149	A	0.310	A	0.002	0.004	No	No
16.	Red Hill Ave./El Camino Real	Signal	0.610	B	0.534	A	0.611	B	0.535	A	0.001	0.001	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	0.618	B	0.582	A	0.618	B	0.583	A	0.000	0.001	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	0.724	C	0.666	B	0.724	C	0.666	B	0.000	0.000	No	No
19.	Red Hill Ave./Nisson Rd.	Signal	0.561	A	0.606	B	0.561	A	0.606	B	0.000	0.000	No	No
20.	Red Hill Ave./Mitchell Ave.	Signal	0.529	A	0.509	A	0.529	A	0.510	A	0.000	0.001	No	No
21.	Red Hill Ave./Walnut Ave.	Signal	0.590	A	0.684	B	0.590	A	0.684	B	0.000	0.000	No	No
22.	Red Hill Ave./Edinger Ave.	Signal	0.500	A	0.760	C	0.500	A	0.760	C	0.000	0.000	No	No
23.	Red Hill Ave./Valencia Ave.	Signal	0.471	A	0.441	A	0.485	A	0.447	A	0.014	0.006	No	No
24.	Red Hill Ave./Victory Rd.	Signal	0.357	A	0.409	A	0.357	A	0.409	A	0.000	0.000	No	No
25.	Red Hill Ave./Warner Ave.	Signal	0.500	A	0.567	A	0.571	A	0.690	B	0.071	0.123	No	No
26.	Driveway 1/Warner Ave.	Signal	-	-	-	-	0.436	A	0.577	A	-	-	No	No
27.	Driveway 2/Warner Ave.	FWSC	-	-	-	-	15.5	C	19.1	C	-	-	No	No
28.	Red Hill Ave./Driveway 3	FWSC	-	-	-	-	53.4	F	16.2	C	-	-	No	No
29.	Red Hill Ave./Carnegie Ave.	Signal	0.334	A	0.382	A	0.369	A	0.406	A	0.035	0.024	No	No
30.	Red Hill Ave./Barranca Pkwy.	Signal	0.564	A	0.785	C	0.583	A	0.859	D	0.019	0.074	No	No
31.	Red Hill Ave./Deere Ave.	Signal	0.410	A	0.699	B	0.427	A	0.732	C	0.017	0.033	No	No
32.	Red Hill Ave./Alton Pkwy.	Signal	0.489	A	0.833	D	0.503	A	0.859	D	0.014	0.026	No	No
33.	Red Hill Ave./McGaw Ave.	Signal	0.462	A	0.719	C	0.475	A	0.733	C	0.013	0.014	No	No
34.	Red Hill Ave./MacArthur Blvd.	Signal	0.604	B	0.762	C	0.614	B	0.770	C	0.010	0.008	No	No
35.	Halladay St. E/Alton Ave.	FWSC	10.5	B	9.9	A	10.5	B	9.9	A	0.000	0.000	No	No
36.	Halladay St. W/Alton Ave.	FWSC	12.2	B	11.6	B	12.2	B	11.6	B	0.000	0.000	No	No
37.	Daimler St./Alton Pkwy.	AWSC	9.9	A	10.6	B	10.0	A	10.6	B	0.100	0.000	No	No
38.	MacArthur Blvd./Sky Park East	Signal	0.328	A	0.503	A	0.331	A	0.508	A	0.003	0.005	No	No

Intersection	Signal Control	Existing				Existing plus Project				V/C Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
39.	MacArthur Blvd./Main St.	0.533	A	0.696	B	0.536	A	0.697	B	0.003	0.001	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	0.759	C	0.696	B	0.762	C	0.702	C	0.003	0.006	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	0.533	A	0.643	B	0.534	A	0.645	B	0.001	0.002	No	No
42.	Reserve Center Driveway/Warner Ave.	0.122	A	0.183	A	0.135	A	0.195	A	0.013	0.012	No	No
43.	Armstrong Ave./Warner Ave.	0.153	A	0.196	A	0.172	A	0.221	A	0.019	0.025	No	No
44.	Armstrong Ave./Barranca Pkwy.	0.433	A	0.681	B	0.450	A	0.687	B	0.017	0.006	No	No
45.	Legacy Rd./Warner Ave.	0.103	A	0.188	A	0.112	A	0.199	A	0.009	0.011	No	No
46.	Fustin Ranch Rd./Valencia Ave.	0.465	A	0.493	A	0.468	A	0.496	A	0.003	0.003	No	No
47.	Fustin Ranch Rd./Warner Ave. N	0.365	A	0.659	B	0.371	A	0.669	B	0.006	0.010	No	No
48.	Fustin Ranch Rd./Warner Ave. S	0.386	A	0.543	A	0.400	A	0.552	A	0.014	0.009	No	No
49.	Fustin Ranch Rd./Park Ave.	0.515	A	0.663	B	0.515	A	0.665	B	0.000	0.002	No	No
50.	Fustin Ranch Rd./Barranca Pkwy.	0.711	C	0.819	D	0.713	C	0.825	D	0.002	0.006	No	No
51.	Von Karman Ave./Alton Pkwy.	0.676	B	0.819	D	0.679	B	0.820	D	0.003	0.001	No	No
52.	Park Ave./Warner Ave.	0.449	A	0.693	B	0.458	A	0.697	B	0.009	0.004	No	No
53.	Millikan Ave./Barranca Pkwy.	0.436	A	0.632	B	0.440	A	0.632	B	0.004	0.000	No	No
54.	Jamboree Rd./Barranca Pkwy.	0.760	C	0.904	E	0.765	C	0.911	E	0.005	0.007	No	No
55.	Jamboree Rd./Alton Pkwy.	0.721	C	0.806	D	0.723	C	0.808	D	0.002	0.002	No	No
56.	Jamboree Rd./Main St.	0.754	C	0.800	C	0.754	C	0.800	D	0.000	0.000	No	No
57.	Corporate Park/Barranca Pkwy.	0.333	A	0.549	A	0.340	A	0.559	A	0.007	0.010	No	No

**Caltrans Analysis**

Intersection	Signal Control	Existing				Existing plus Project				Delay Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS				
5.	Grand Ave./SR 55 SB Off Ramp	11.8	B	14.1	B	11.8	B	14.3	B	0.00	0.20	No	No
6.	SR 55 SB Ramps/Dyer Rd.	41.5	D	42.5	D	41.6	D	42.8	D	0.10	0.30	No	No
8.	SR 55 NB Ramps/Dyer Rd.	21.8	C	15.2	B	21.8	C	15.3	B	0.00	0.10	No	No
12.	SR 55 SB Ramps/Edinger Ave.	37.5	D	41.9	D	37.5	D	42.2	D	0.00	0.30	No	No
14.	Newport Ave./SR 55 NB Ramp Del Amo Ave.	30.4	C	38.0	D	32.1	C	41.4	D	1.70	3.40	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	25.5	C	21.5	C	26.2	C	21.6	C	0.70	0.10	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	41.8	D	34.1	C	44.2	D	34.1	C	2.40	0.00	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	35.3	C	20.5	C	34.0	D	21.0	A	-1.30	0.50	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	25.1	C	25.5	C	25.3	C	25.5	C	0.20	0.00	No	No

Intersection	Signal Control	Existing				Existing plus Project				V/C Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
1.	Grand Ave./Edinger Ave.	0.710	C	0.843	D	0.717	C	0.844	D	0.007	0.001	No	No
2.	Grand Ave./St. Andrew Pl.	0.349	A	0.506	A	0.354	A	0.508	A	0.005	0.002	No	No

Intersection		Signal Control	Existing				Existing plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
3.	Grand Ave./St. Gertrude Pl.	Signal	0.407	A	0.484	A	0.410	A	0.491	A	0.003	0.007	No	No
4.	Grand Ave./Warner Ave.	Signal	0.549	A	0.716	C	0.559	A	0.738	C	0.010	0.022	No	No
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	0.486	A	0.509	A	0.486	A	0.509	A	0.000	0.000	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	0.663	B	0.739	C	0.669	B	0.741	C	0.006	0.002	No	No
7.	Grand Ave./Dyer Rd.	Signal	0.585	A	0.622	B	0.586	A	0.623	B	0.001	0.001	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	0.562	A	0.389	A	0.563	A	0.390	A	0.001	0.001	No	No
9.	Wright St./Warner Ave.	Signal	0.398	A	0.646	B	0.412	A	0.653	B	0.014	0.007	No	No
10.	Pullman St./Warner Ave.	Signal	0.335	A	0.434	A	0.345	A	0.437	A	0.010	0.003	No	No
11.	Pullman St./Dyer Rd.	Signal	0.467	A	0.702	C	0.472	A	0.702	C	0.005	0.000	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	0.600	A	0.591	A	0.601	B	0.591	A	0.001	0.000	No	No
13.	Newport Ave./Edinger Ave.	Signal	0.645	B	0.357	A	0.646	B	0.376	A	0.001	0.019	No	No
14.	Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	0.461	A	0.613	B	0.465	A	0.613	B	0.004	0.000	No	No
15.	Newport Ave./Valencia Ave.	Signal	0.147	A	0.306	A	0.149	A	0.310	A	0.002	0.004	No	No
16.	Red Hill Ave./El Camino Real	Signal	0.610	B	0.534	A	0.611	B	0.535	A	0.001	0.001	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	0.618	B	0.582	A	0.618	B	0.583	A	0.000	0.001	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	0.724	C	0.666	B	0.724	C	0.666	B	0.000	0.000	No	No
19.	Red Hill Ave./Nissan Rd.	Signal	0.561	A	0.606	B	0.561	A	0.606	B	0.000	0.000	No	No
20.	Red Hill Ave./Mitchell Ave.	Signal	0.529	A	0.509	A	0.529	A	0.510	A	0.000	0.001	No	No
21.	Red Hill Ave./Walnut Ave.	Signal	0.590	A	0.684	B	0.590	A	0.684	B	0.000	0.000	No	No
22.	Red Hill Ave./Edinger Ave.	Signal	0.500	A	0.760	C	0.500	A	0.760	C	0.000	0.000	No	No
23.	Red Hill Ave./Valencia Ave.	Signal	0.387	A	0.414	A	0.401	A	0.424	A	0.014	0.010	No	No
24.	Red Hill Ave./Victory Rd.	Signal	0.357	A	0.409	A	0.357	A	0.409	A	0.000	0.000	No	No
25.	Red Hill Ave./Warner Ave.	Signal	0.500	A	0.567	A	0.561	A	0.681	B	0.061	0.114	No	No
26.	Driveway 1/Warner Ave.	Signal	-	-	-	-	0.471	A	0.592	A	-	-	No	No
27.	Driveway 2/Warner Ave.	TWSC	-	-	-	-	15.2	C	18.8	C	-	-	No	No
28.	Red Hill Ave./Driveway 3	TWSC	-	-	-	-	46.0	E	15.5	C	-	-	No	No
29.	Red Hill Ave./Carnegie Ave.	Signal	0.334	A	0.382	A	0.367	A	0.404	A	0.033	0.022	No	No
30.	Red Hill Ave./Barranca Pkwy.	Signal	0.564	A	0.785	C	0.582	A	0.851	D	0.018	0.066	No	No
31.	Red Hill Ave./Deere Ave.	Signal	0.410	A	0.699	B	0.426	A	0.731	C	0.016	0.032	No	No
32.	Red Hill Ave./Alton Pkwy.	Signal	0.489	A	0.833	D	0.501	A	0.857	D	0.012	0.024	No	No
33.	Red Hill Ave./McGaw Ave.	Signal	0.462	A	0.719	C	0.474	A	0.732	C	0.012	0.013	No	No
34.	Red Hill Ave./MacArthur Blvd.	Signal	0.604	B	0.762	C	0.613	B	0.769	C	0.009	0.007	No	No
35.	Halladay St. E/Alton Ave.	TWSC	10.5	B	9.9	A	10.5	B	9.9	A	0.000	0.000	No	No
36.	Halladay St. W/Alton Ave.	TWSC	12.2	B	11.6	B	12.2	B	11.6	B	0.000	0.000	No	No
37.	Daimler St./Alton Pkwy.	AWSC	9.9	A	10.6	B	10.0	A	10.6	B	0.100	0.000	No	No
38.	MacArthur Blvd./Sky Park East	Signal	0.328	A	0.503	A	0.331	A	0.508	A	0.003	0.005	No	No
39.	MacArthur Blvd./Main St.	Signal	0.533	A	0.696	B	0.536	A	0.696	B	0.003	0.000	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	0.759	C	0.696	B	0.761	C	0.699	B	0.002	0.003	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	0.533	A	0.643	B	0.534	A	0.645	B	0.001	0.002	No	No
42.	Reserve Center Driveway/Warner Ave.	Signal	0.122	A	0.183	A	0.133	A	0.193	A	0.011	0.010	No	No

Intersection	Signal Control	Existing				Existing plus Project				V/C Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
43. Armstrong Ave./Warner Ave.	Signal	0.153	A	0.196	A	0.169	A	0.218	A	0.016	0.022	No	No
44. Armstrong Ave./Barranca Pkwy.	Signal	0.433	A	0.681	B	0.444	A	0.687	B	0.011	0.006	No	No
45. Legacy Rd./Warner Ave.	Signal	0.103	A	0.188	A	0.111	A	0.198	A	0.008	0.010	No	No
46. Tustin Ranch Rd./Valencia Ave.	Signal	0.465	A	0.493	A	0.468	A	0.496	A	0.003	0.003	No	No
47. Tustin Ranch Rd./Warner Ave. N	Signal	0.365	A	0.659	B	0.370	A	0.667	B	0.005	0.008	No	No
48. Tustin Ranch Rd./Warner Ave. S	Signal	0.386	A	0.543	A	0.398	A	0.551	A	0.012	0.008	No	No
49. Tustin Ranch Rd./Park Ave.	Signal	0.515	A	0.663	B	0.515	A	0.665	B	0.000	0.002	No	No
50. Tustin Ranch Rd./Barranca Pkwy.	Signal	0.711	C	0.819	D	0.713	C	0.823	D	0.002	0.004	No	No
51. Von Karman Ave./Alton Pkwy.	Signal	0.676	B	0.819	D	0.679	B	0.820	D	0.003	0.001	No	No
52. Park Ave./Warner Ave.	Signal	0.449	A	0.693	B	0.456	A	0.696	B	0.007	0.003	No	No
53. Millikan Ave./Barranca Pkwy.	Signal	0.436	A	0.632	B	0.439	A	0.632	B	0.003	0.000	No	No
54. Jamboree Rd./Barranca Pkwy.	Signal	0.760	C	0.904	E	0.764	C	0.910	E	0.004	0.006	No	No
55. Jamboree Rd./Alton Pkwy.	Signal	0.721	C	0.806	D	0.722	C	0.808	D	0.001	0.002	No	No
56. Jamboree Rd./Main St.	Signal	0.754	C	0.800	C	0.754	C	0.800	D	0.000	0.000	No	No
57. Corporate Park/Barranca Pkwy.	Signal	0.333	A	0.549	A	0.338	A	0.558	A	0.005	0.009	No	No

**Caltrans Analysis**

Intersection	Signal Control	Existing				Existing plus Project				Delay Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS				
5. Grand Ave./SR 55 SB Off-Ramp	Signal	11.8	B	14.1	B	11.8	B	14.3	B	0.00	0.20	No	No
6. SR 55 SB Ramps/Dyer Rd.	Signal	41.5	D	42.5	D	41.5	D	42.8	D	0.00	0.30	No	No
8. SR 55 NB Ramps/Dyer Rd.	Signal	21.8	C	15.2	B	21.8	C	15.3	B	0.00	0.10	No	No
12. SR 55 SB Ramps/Edinger Ave.	Signal	37.5	D	41.9	D	37.5	D	42.1	D	0.00	0.20	No	No
14. Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	30.4	C	38.0	D	32.0	C	41.4	D	1.60	3.40	No	No
17. Red Hill Ave./Interstate 5 NB Ramps	Signal	25.5	C	21.5	C	26.2	C	21.6	C	0.70	0.10	No	No
18. Red Hill Ave./Interstate 5 SB Ramps	Signal	41.8	D	34.1	C	44.2	D	34.1	C	2.40	0.00	No	No
40. MacArthur Blvd./Interstate 405 NB Ramps	Signal	35.3	C	20.5	C	34.0	C	20.5	C	-1.30	0.00	No	No
41. MacArthur Blvd./Interstate 405 SB Ramps	Signal	25.1	C	25.5	C	25.3	C	25.5	C	0.20	0.00	No	No

Source: Appendix K A.

Notes: **Bold** = Exceeds LOS Standard; AWSC = All Way Stop Control; TWSC = Two Way Stop Control

## Opening Year (2022) Plus Project

The Opening Year (2022) traffic volumes were developed by applying a growth rate of 1.02 percent per year to the existing (2019) traffic volumes and adding traffic generated by cumulative projects. The growth rate was calculated assuming a straight-line growth rate between Existing and Year 2040 conditions in the study area, as modeled using the OCTAM traffic model. Approved and pending development projects were obtained from the Cities of Santa Ana, Irvine and Tustin. As shown in Table 5.14-7, the cumulative projects are anticipated to generate 5,095 a.m. peak hour trips, 6,110 p.m. peak hour trips, and 69,375 daily trips.

**Table 5.14-7: Summary of Cumulative Project Trips**

		Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Multifamily Housing (Mid-Rise) <sup>1</sup>		DU	5.440	0.094	0.266	0.360	0.268	0.172	0.440
Shopping Center <sup>2</sup>		TSF	37.750	0.583	0.357	0.940	1.829	1.981	3.810
Senior Adult Housing - Attached <sup>3</sup>		DU	3.700	0.070	0.130	0.200	0.143	0.117	0.260
Multifamily Housing (Low-Rise) <sup>4</sup>		DU	7.320	0.106	0.354	0.460	0.353	0.207	0.560
Fast Food Restaurant with Drive-Through Window <sup>5</sup>		TSF	470.950	20.497	19.693	40.190	16.988	15.682	32.670
Hotel <sup>6</sup>		Rooms	8.360	0.277	0.193	0.470	0.306	0.294	0.600
Quality Restaurant <sup>7</sup>		TSF	83.840	-	-	-	5.226	2.574	7.800
Industrial Park <sup>8</sup>		TSF	3.370	0.324	0.076	0.400	0.084	0.316	0.400
General Office Building <sup>9</sup>		TSF	9.740	0.998	0.162	1.160	0.184	0.966	1.150
Warehouse <sup>10</sup>		TSF	1.740	0.131	0.039	0.170	0.051	0.139	0.190
High Turnover (Sit-Down) Restaurant <sup>11</sup>		TSF	112.180	5.467	4.473	9.940	6.057	3.713	9.770
Gas/Service Station <sup>12</sup>		TSF	1265.670	34.295	34.295	68.590	42.275	42.275	84.550
Hospital <sup>13</sup>		TSF	10.720	0.605	0.285	0.890	0.310	0.660	0.970
Single Family Detached Housing <sup>14</sup>		DU	9.440	0.185	0.555	0.740	0.624	0.366	0.990
Cumulative Project Trip Generation									
Santa Ana									
S1: Madison Project Residential <sup>1</sup>	260	DU	1414	24	69	94	70	45	114
S1: Madison Project Retail <sup>2</sup>	6.50	TSF	245	4	2	6	12	13	25
S2: AMG East First Senior Apartments <sup>3</sup>	418	DU	1547	29	54	84	60	49	109
S3: AMG East First Apartments/First Pointe <sup>1</sup>	552	DU	3003	58	196	254	195	114	309
S4: Wermers Properties Mixed-Use Development Residential <sup>1</sup>	603	DU	3280	56	161	217	162	103	265
S4: Wermers Properties Mixed-Use Development Retail <sup>2</sup>	8.90	TSF	336	5	3	8	16	18	34
S5: AMCAL First Street Family Apartments <sup>4</sup>	69	DU	505	7	24	32	24	14	39
S6: Heritage Village Residential <sup>1</sup>	1221	DU	6642	114	325	440	328	210	537
S7: Legado at the MET <sup>1</sup>	278	DU	1512	26	74	100	75	48	122
S8: Legacy Multi-Family Residential at Sunflower <sup>1</sup>	233	DU	1268	22	62	84	63	40	103
S9: Jack In the Box w/ drive-through <sup>5</sup>	2.66	TSF	1255	55	52	107	45	42	87
S10: Tapestry by Hilton Hotel <sup>6</sup>	110	Rooms	920	31	21	52	34	32	66
S10: Tapestry by Hilton Restaurant <sup>11</sup>	5	TSF	561	27	22	50	30	19	49
S11: Shea ITT <sup>8</sup>	500	TSF	1685	162	38	200	42	158	200
Irvine									
I1: 272,000 Office Building on Barranca Pkwy. <sup>9</sup>	272.00	TSF	2649	271	44	316	50	263	313
I1: Existing Office Buildings <sup>9</sup>	48	TSF	468	48	8	56	9	46	55
I2: Alton Residential Project <sup>1</sup>	357	DU	1942	33	95	129	96	61	157
I2: Existing Warehouse <sup>10</sup>	200	TSF	348	26	8	34	10	28	38
I3: Gillette Ave Apartments <sup>1</sup>	336	DU	1828	31	90	121	90	58	148
I4: Main Street Apartments <sup>1</sup>	150	DU	816	14	40	54	40	26	66
I5: Rockefeller Mixed Use Residential <sup>1</sup>	285	DU	1550	27	76	103	76	49	125
I5: Rockefeller Mixed Use Retail <sup>2</sup>	11.13	TSF	420	6	4	10	20	22	42
I6: Trilogy Residential <sup>1,17</sup>	876	DU	4765	82	233	315	235	150	385
I6: Existing Office Buildings <sup>9</sup>	315	TSF	3068	314	51	365	58	304	362
I7: Von Karman Café <sup>11</sup>	5.04	TSF	565	28	23	50	31	19	49
I8: Elements Residential <sup>1</sup>	1600	DU	8704	150	426	576	429	275	704
I8: Elements Retail <sup>2</sup>	17	TSF	642	10	6	16	31	34	65

	Units		Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<u><b>Tustin</b></u>									
T1: The Village at Tustin Legacy Hospital <sup>13</sup>	69.57	TSF	746	42	20	62	22	46	67
T2: Levity at Tustin Legacy <sup>1</sup>	161	DU	876	15	43	58	43	28	71
T2: Levity at Tustin Legacy <sup>14</sup>	57	DU	538	11	32	42	36	21	56
T3: Brookfield Residential <sup>14</sup>	117	DU	1104	22	65	87	73	43	116
T3: Brookfield Residential <sup>4</sup>	129	DU	702	12	34	46	35	22	57
T3: Brookfield Residential <sup>1</sup>	154	DU	1127	16	55	71	54	32	86
T4: Flight at Tustin Legacy <sup>9</sup>	870	TSF	8474	868	141	1009	160	840	1001
T5: Vintage <sup>4</sup>	140	DU	1025	15	50	64	49	29	78
<u><b>Newport Beach</b></u>									
N1: Newport Crossings Residential <sup>15</sup>	350	DU	1904	31	95	126	95	59	154
N1: Newport Crossings Retail <sup>15</sup>	5.5	TSF	198	4	3	7	9	9	18
N1: Newport Crossings Restaurant <sup>15</sup>	2.0	TSF	224	11	9	20	12	8	20
N2: Uptown Newport Full Project (1,244 DU and 11.5 TSF of Retail and Restaurant) <sup>15</sup>			8286	44	499	542	522	204	727
<b>Total Trip Generation</b>			<b>69,375</b>	<b>1,976</b>	<b>3,120</b>	<b>5,095</b>	<b>3,287</b>	<b>2,822</b>	<b>6,110</b>

Source: Appendix K A.

Trip Generation shown in *Italics* is existing and is credited to the trip generation total.

Trip generation based on rates from Institute of Transportation Engineers' (ITE) Trip Generation (10th Edition) for:

<sup>1</sup> Land Use 221 - Multifamily Housing (Mid-Rise)

<sup>2</sup> Land Use 820 - Shopping Center

<sup>3</sup> Land Use 252 - Senior Adult Housing - Attached

<sup>4</sup> Land Use 220 - Multifamily Housing (Low-Rise)

<sup>5</sup> Land Use 934 - Fast-Food Restaurant with Drive-Through Window

<sup>6</sup> Land Use 310 - Hotel

<sup>7</sup> Land Use 931 - "Quality Restaurant"

<sup>8</sup> Land Use 130 - "Industrial Park"

<sup>9</sup> Land Use 710 - General Office Building

<sup>10</sup> Land Use 150 - Warehousing

<sup>11</sup> Land Use 932 - High Turnover (Sit-Down) Restaurant

<sup>12</sup> Land Use 944 - Gasoline/Service Station with Convenience Market

<sup>13</sup> Land Use 610 - Hospital

<sup>14</sup> Land Use 210 - Single Family Detached Housing

<sup>16</sup> Project Trips were taken from each projects respective Traffic Impact Analysis Project Trip Generation

<sup>17</sup> Per information provided by the City of Irvine, the retail space included in the project is considered ancillary and is included in the residential trip generation

In the Opening Year (2022) with the cumulative project trips listed in Table 5.14-7 and operation of the proposed Project, all study area intersections would continue to operate at satisfactory LOS, as shown on Table 5.14-8. However, the Project driveway on Red Hill Avenue is forecast to operate at LOS F for vehicles exiting the site, which is consistent with the Existing Plus Project condition. In 2022, a forecasted delay of 60.4 51.4 seconds (6.4 5.5 vehicles) is anticipated to be experienced by drivers making an eastbound right-turn out of the Project site. Through vehicles on Red Hill Avenue would not experience any delay.

Consistent with the Existing Plus Project condition, drivers leaving the site in the a.m. peak hour could choose to utilize one of the two driveways on Warner and not wait at the Red Hill Avenue driveway. The signalized driveway on Warner Avenue is forecast to operate at LOS A and the unsignalized driveway on Warner Avenue is forecast to operate at LOS C in the Opening Year (2022) plus Project condition. Both of the Warner Avenue driveways have adequate capacity to accommodate the additional traffic from the Red Hill Avenue driveway. Because this is an effect at an onsite driveway location, which could be avoided by use of other driveways, impacts would be less than significant, and no mitigation measures are required for the onsite driveway at Red Hill Avenue.

~~Table 5.14-8 provides a comparison between the Opening Year (2022) Without and With Project conditions. As shown, with the proposed Project, intersections of Red Hill Avenue/Barranca Parkway (#30) would not operate at satisfactory levels of service in the p.m. peak hour and would be impacted with operation of the Project. As a result, improvements for the intersection have been identified, which involve addition of a westbound protected right turn overlap phase and prohibit southbound U turns that have been included as Mitigation Measure TR 1. As shown on Table 5.14-9, impacts at the intersection would be~~



Table 5.14-8: Opening Year 2022 Plus Project Peak Hour Intersection Levels of Service

Intersection		Signal Control	Opening Year				Opening Year plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
1.	Grand Ave./Edinger Ave.	Signal	0.733	C	0.869	D	0.762	C	0.896	D	0.029	0.027	No	No
2.	Grand Ave./St. Andrew Pl.	Signal	0.359	A	0.522	A	0.374	A	0.539	A	0.015	0.017	No	No
3.	Grand Ave./St. Gertrude Pl.	Signal	0.420	A	0.499	A	0.435	A	0.520	A	0.015	0.021	No	No
4.	Grand Ave./Warner Ave.	Signal	0.573	A	0.752	C	0.600	B	0.798	C	0.027	0.046	No	No
5.	Grand Ave./SR 55 SB Off Ramp	Signal	0.520	A	0.549	A	0.535	A	0.565	A	0.015	0.016	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	0.752	C	0.809	D	0.781	C	0.836	D	0.029	0.027	No	No
7.	Grand Ave./Dyer Rd.	Signal	0.634	B	0.690	C	0.653	B	0.711	C	0.019	0.021	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	0.619	B	0.440	A	0.638	B	0.459	A	0.019	0.019	No	No
9.	Wright St./Warner Ave.	Signal	0.413	A	0.678	B	0.440	A	0.705	C	0.027	0.027	No	No
10.	Pullman St./Warner Ave.	Signal	0.352	A	0.461	A	0.373	A	0.470	A	0.021	0.009	No	No
11.	Pullman St./Dyer Rd.	Signal	0.525	A	0.769	C	0.545	A	0.792	C	0.020	0.023	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	0.644	B	0.607	B	0.663	B	0.626	B	0.019	0.019	No	No
13.	Newport Ave./Edinger Ave.	Signal	0.670	B	0.382	A	0.691	B	0.406	A	0.021	0.024	No	No
14.	Newport Ave./SR 55 NB Ramp Del Amo Ave.	Signal	0.489	A	0.662	B	0.508	A	0.683	B	0.019	0.021	No	No
15.	Newport Ave./Valencia Ave.	Signal	0.154	A	0.344	A	0.160	A	0.359	A	0.006	0.015	No	No
16.	Red Hill Ave./El Camino Real	Signal	0.641	B	0.555	A	0.656	B	0.574	A	0.015	0.019	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	0.643	B	0.616	B	0.663	B	0.636	B	0.020	0.020	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	0.760	C	0.690	B	0.784	C	0.711	C	0.024	0.021	No	No
19.	Red Hill Ave./Nisson Rd.	Signal	0.584	A	0.638	B	0.602	B	0.657	B	0.018	0.019	No	No
20.	Red Hill Ave./Mitchell Ave.	Signal	0.561	A	0.542	A	0.578	A	0.560	A	0.017	0.018	No	No
21.	Red Hill Ave./Walnut Ave.	Signal	0.623	B	0.722	C	0.643	B	0.744	C	0.020	0.022	No	No
22.	Red Hill Ave./Edinger Ave.	Signal	0.515	A	0.807	D	0.532	A	0.831	D	0.017	0.024	No	No
23.	Red Hill Ave./Valencia Ave.	Signal	0.513	A	0.546	A	0.543	A	0.563	A	0.030	0.017	No	No
24.	Red Hill Ave./Victory Rd.	Signal	0.371	A	0.424	A	0.382	A	0.438	A	0.011	0.014	No	No
25.	Red Hill Ave./Warner Ave.	Signal	0.520	A	0.595	A	0.609	A	0.722	C	0.089	0.127	No	No
26.	Driveway 1/Warner Ave.	Signal	-	-	-	-	0.463	A	0.625	C	-	-	No	No
27.	Driveway 2/Warner Ave.	TWSC	-	-	-	-	16.3	C	19.8	C	-	-	No	No
28.	Red Hill Ave./Driveway 3	TWSC	-	-	-	-	60.4	F	16.7	C	-	-	No	No
29.	Red Hill Ave./Carnegie Ave.	Signal	0.346	A	0.395	A	0.394	A	0.432	A	0.048	0.037	No	No
30.	Red Hill Ave./Barranca Pkwy.	Signal	0.641	B	0.908	E	0.687	B	1.007	F	0.046	0.099	No	Yes
31.	Red Hill Ave./Deere Ave.	Signal	0.447	A	0.768	C	0.483	A	0.824	D	0.036	0.056	No	No
32.	Red Hill Ave./Alton Pkwy.	Signal	0.526	A	0.884	D	0.556	A	0.936	E	0.030	0.052	No	No
33.	Red Hill Ave./McGaw Ave.	Signal	0.506	A	0.784	C	0.536	A	0.826	D	0.030	0.042	No	No
34.	Red Hill Ave./MacArthur Blvd.	Signal	0.671	B	0.825	D	0.703	C	0.863	D	0.032	0.038	No	No
35.	Halladay St. E/Alton Ave.	TWSC	10.5	B	10.0	B	10.5	B	10.0	B	0.000	0.000	No	No
36.	Halladay St. W/Alton Ave.	TWSC	10.9	B	11.8	B	10.9	B	11.8	B	0.000	0.000	No	No
37.	Daimler St./Alton Pkwy.	AWSC	10.1	B	10.8	B	10.1	B	10.9	B	0.000	0.100	No	No
38.	MacArthur Blvd./Sky Park East	Signal	0.356	A	0.544	A	0.370	A	0.568	A	0.014	0.024	No	No

Intersection		Signal Control	Opening Year				Opening Year-plus-Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C-or Delay	LOS	V/C-or Delay	LOS	V/C-or Delay	LOS	V/C-or Delay	LOS				
39.	MacArthur Blvd./Main St.	Signal	0.567	A	0.737	C	0.588	A	0.761	C	0.021	0.024	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	0.813	D	0.765	C	0.834	D	0.772	C	0.021	0.007	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	0.572	A	0.710	C	0.601	B	0.753	C	0.029	0.043	No	No
42.	Reserve Center Driveway/Warner Ave.	Signal	0.129	A	0.191	A	0.146	A	0.209	A	0.017	0.018	No	No
43.	Armstrong Ave./Warner Ave.	Signal	0.165	A	0.252	A	0.195	A	0.285	A	0.030	0.033	No	No
44.	Armstrong Ave./Barranca Pkwy.	Signal	0.519	A	0.766	C	0.547	A	0.803	D	0.028	0.037	No	No
45.	Legacy Rd./Warner Ave.	Signal	0.131	A	0.255	A	0.144	A	0.273	A	0.013	0.018	No	No
46.	Tustin Ranch Rd./Valencia Ave.	Signal	0.510	A	0.529	A	0.529	A	0.549	A	0.019	0.020	No	No
47.	Tustin Ranch Rd./Warner Ave. N	Signal	0.401	A	0.703	C	0.420	A	0.735	C	0.019	0.032	No	No
48.	Tustin Ranch Rd./Warner Ave. S	Signal	0.421	A	0.592	A	0.448	A	0.620	B	0.027	0.028	No	No
49.	Tustin Ranch Rd./Park Ave.	Signal	0.568	A	0.754	C	0.586	A	0.778	C	0.018	0.024	No	No
50.	Tustin Ranch Rd./Barranca Pkwy.	Signal	0.781	C	0.910	E	0.811	D	0.943	E	0.030	0.033	No	No
51.	Von Karman Ave./Alton Pkwy.	Signal	0.712	C	0.883	D	0.734	C	0.939	E	0.022	0.056	No	No
52.	Park Ave./Warner Ave.	Signal	0.477	A	0.736	C	0.501	A	0.762	C	0.024	0.026	No	No
53.	Millikan Ave./Barranca Pkwy.	Signal	0.473	A	0.667	B	0.491	A	0.686	B	0.018	0.019	No	No
54.	Jamboree Rd./Barranca Pkwy.	Signal	0.822	D	0.962	E	0.851	D	0.997	E	0.029	0.035	No	No
55.	Jamboree Rd./Alton Pkwy.	Signal	0.760	C	0.837	D	0.796	C	0.878	D	0.036	0.041	No	No
56.	Jamboree Rd./Main St.	Signal	0.789	C	0.831	D	0.812	D	0.860	D	0.023	0.029	No	No
57.	Corporate Park/Barranca Pkwy.	Signal	0.354	A	0.579	A	0.370	A	0.605	B	0.016	0.026	No	No

**Caltrans Analysis**

-		-	Opening Year				Opening Year-plus-Project				Delay-Change		Impact?	
Intersection		Signal Control	AM-Peak		PM-Peak		AM-Peak		PM-Peak		AM	PM	AM	PM
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS				
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	12.2	B	14.7	B	12.2	B	14.7	B	0.00	0.00	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	48.2	D	48.6	D	54.9	D	49.1	D	6.70	0.50	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	23.1	C	14.2	B	23.4	C	14.2	B	0.30	0.00	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	38.6	D	46.4	D	39.1	D	46.8	D	0.50	0.40	No	No
14.	Newport Ave./SR 55 NB Ramp-Del Amo Ave.	Signal	29.9	C	48.5	D	35.4	D	50.6	D	5.50	2.10	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	27.7	C	23.2	C	28.9	C	24.0	B	1.20	0.80	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	46.5	D	34.3	C	48.6	D	34.3	D	2.10	0.00	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	39.1	D	26.2	C	39.2	C	26.2	C	0.10	0.00	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	26.3	C	34.5	C	26.4	C	34.7	C	0.10	0.20	No	No

Intersection		Signal Control	Opening Year				Opening Year plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
1.	Grand Ave./Edinger Ave.	Signal	0.733	C	0.869	D	0.761	C	0.896	D	0.028	0.027	No	No
2.	Grand Ave./St. Andrew Pl.	Signal	0.359	A	0.522	A	0.374	A	0.539	A	0.015	0.017	No	No

Intersection		Signal Control	Opening Year				Opening Year plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
3.	Grand Ave./St. Gertrude Pl.	Signal	0.420	A	0.499	A	0.435	A	0.520	A	0.015	0.021	No	No
4.	Grand Ave./Warner Ave.	Signal	0.573	A	0.752	C	0.599	A	0.796	C	0.026	0.044	No	No
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	0.520	A	0.549	A	0.535	A	0.565	A	0.015	0.016	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	0.752	C	0.809	D	0.780	C	0.835	D	0.028	0.026	No	No
7.	Grand Ave./Dyer Rd.	Signal	0.634	B	0.690	C	0.652	B	0.711	C	0.018	0.021	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	0.619	B	0.440	A	0.637	B	0.458	A	0.018	0.018	No	No
9.	Wright St./Warner Ave.	Signal	0.413	A	0.678	B	0.438	A	0.704	C	0.025	0.026	No	No
10.	Pullman St./Warner Ave.	Signal	0.352	A	0.461	A	0.372	A	0.470	A	0.020	0.009	No	No
11.	Pullman St./Dyer Rd.	Signal	0.525	A	0.769	C	0.545	A	0.792	C	0.020	0.023	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	0.644	B	0.607	B	0.663	B	0.625	B	0.019	0.018	No	No
13.	Newport Ave./Edinger Ave.	Signal	0.670	B	0.382	A	0.691	B	0.404	A	0.021	0.022	No	No
14.	Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	0.489	A	0.662	B	0.507	A	0.683	B	0.018	0.021	No	No
15.	Newport Ave./Valencia Ave.	Signal	0.154	A	0.344	A	0.160	A	0.359	A	0.006	0.015	No	No
16.	Red Hill Ave./El Camino Real	Signal	0.641	B	0.555	A	0.656	B	0.574	A	0.015	0.019	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	0.643	B	0.616	B	0.663	B	0.636	B	0.020	0.020	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	0.760	C	0.690	B	0.784	C	0.711	C	0.024	0.021	No	No
19.	Red Hill Ave./Nissan Rd.	Signal	0.584	A	0.638	B	0.602	B	0.657	B	0.018	0.019	No	No
20.	Red Hill Ave./Mitchell Ave.	Signal	0.561	A	0.542	A	0.578	A	0.560	A	0.017	0.018	No	No
21.	Red Hill Ave./Walnut Ave.	Signal	0.623	B	0.722	C	0.643	B	0.744	C	0.020	0.022	No	No
22.	Red Hill Ave./Edinger Ave.	Signal	0.515	A	0.807	D	0.532	A	0.831	D	0.017	0.024	No	No
23.	Red Hill Ave./Valencia Ave.	Signal	0.405	A	0.468	A	0.432	A	0.491	A	0.027	0.023	No	No
24.	Red Hill Ave./Victory Rd.	Signal	0.371	A	0.424	A	0.382	A	0.438	A	0.011	0.014	No	No
25.	Red Hill Ave./Warner Ave.	Signal	0.520	A	0.595	A	0.599	A	0.729	C	0.079	0.134	No	No
26.	Driveway 1/Warner Ave.	Signal	-	-	-	-	0.499	A	0.627	B	-	-	No	No
27.	Driveway 2/Warner Ave.	TWSC	-	-	-	-	16.0	C	19.6	C	-	-	No	No
28.	Red Hill Ave./Driveway 3	TWSC	-	-	-	-	51.4	F	15.9	C	-	-	No	No
29.	Red Hill Ave./Carnegie Ave.	Signal	0.346	A	0.395	A	0.391	A	0.430	A	0.045	0.035	No	No
30.	Red Hill Ave./Barranca Pkwy.	Signal	0.641	B	0.908	E	0.686	B	0.999	E	0.045	0.091	No	No
31.	Red Hill Ave./Deere Ave.	Signal	0.447	A	0.768	C	0.474	A	0.822	D	0.027	0.054	No	No
32.	Red Hill Ave./Alton Pkwy.	Signal	0.526	A	0.884	D	0.554	A	0.934	E	0.028	0.050	No	No
33.	Red Hill Ave./McGaw Ave.	Signal	0.506	A	0.784	C	0.535	A	0.825	D	0.029	0.041	No	No
34.	Red Hill Ave./MacArthur Blvd.	Signal	0.671	B	0.825	D	0.703	C	0.862	D	0.032	0.037	No	No
35.	Halladay St. E/Alton Ave.	TWSC	10.5	B	10.0	B	10.5	B	10.0	B	0.000	0.000	No	No
36.	Halladay St. W/Alton Ave.	TWSC	10.9	B	11.8	B	10.9	B	11.8	B	0.000	0.000	No	No
37.	Daimler St./Alton Pkwy.	AWSC	10.1	B	10.8	B	10.2	B	10.9	B	0.100	0.100	No	No
38.	MacArthur Blvd./Sky Park East	Signal	0.356	A	0.544	A	0.370	A	0.567	A	0.014	0.023	No	No
39.	MacArthur Blvd./Main St.	Signal	0.567	A	0.737	C	0.588	A	0.761	C	0.021	0.024	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	0.813	D	0.765	C	0.834	D	0.772	C	0.021	0.007	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	0.572	A	0.710	C	0.600	B	0.752	C	0.028	0.042	No	No
42.	Reserve Center Driveway/Warner Ave.	Signal	0.129	A	0.191	A	0.144	A	0.207	A	0.015	0.016	No	No

Intersection	Signal Control	Opening Year				Opening Year plus Project				V/C Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
43. Armstrong Ave./Warner Ave.	Signal	0.165	A	0.252	A	0.192	A	0.281	A	0.027	0.029	No	No
44. Armstrong Ave./Barranca Pkwy.	Signal	0.519	A	0.766	C	0.546	A	0.802	D	0.027	0.036	No	No
45. Legacy Rd./Warner Ave.	Signal	0.131	A	0.255	A	0.142	A	0.272	A	0.011	0.017	No	No
46. Tustin Ranch Rd./Valencia Ave.	Signal	0.510	A	0.529	A	0.528	A	0.548	A	0.018	0.019	No	No
47. Tustin Ranch Rd./Warner Ave. N	Signal	0.401	A	0.703	C	0.419	A	0.734	C	0.018	0.031	No	No
48. Tustin Ranch Rd./Warner Ave. S	Signal	0.421	A	0.592	A	0.446	A	0.618	B	0.025	0.026	No	No
49. Tustin Ranch Rd./Park Ave.	Signal	0.568	A	0.754	C	0.586	A	0.778	C	0.018	0.024	No	No
50. Tustin Ranch Rd./Barranca Pkwy.	Signal	0.781	C	0.910	E	0.811	D	0.942	E	0.030	0.032	No	No
51. Von Karman Ave./Alton Pkwy.	Signal	0.712	C	0.883	D	0.734	C	0.939	E	0.022	0.056	No	No
52. Park Ave./Warner Ave.	Signal	0.477	A	0.736	C	0.500	A	0.762	C	0.023	0.026	No	No
53. Millikan Ave./Barranca Pkwy.	Signal	0.473	A	0.667	B	0.490	A	0.686	B	0.017	0.019	No	No
54. Jamboree Rd./Barranca Pkwy.	Signal	0.822	D	0.962	E	0.850	D	0.996	E	0.028	0.034	No	No
55. Jamboree Rd./Alton Pkwy.	Signal	0.760	C	0.837	D	0.796	C	0.878	D	0.036	0.041	No	No
56. Jamboree Rd./Main St.	Signal	0.789	C	0.831	D	0.812	D	0.860	D	0.023	0.029	No	No
57. Corporate Park/Barranca Pkwy.	Signal	0.354	A	0.579	A	0.368	A	0.605	B	0.014	0.026	No	No

**Caltrans Analysis**

Intersection	Signal Control	Opening Year				Opening Year plus Project				Delay Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS				
5. Grand Ave./SR 55 SB Off-Ramp	Signal	12.2	B	14.7	B	12.2	B	14.7	B	0.00	0.00	No	No
6. SR 55 SB Ramps/Dyer Rd.	Signal	48.2	D	48.6	D	54.6	D	49.0	D	6.40	0.40	No	No
8. SR 55 NB Ramps/Dyer Rd.	Signal	23.1	C	14.2	B	23.3	C	14.2	B	0.20	0.00	No	No
12. SR 55 SB Ramps/Edinger Ave.	Signal	38.6	D	46.4	D	39.1	D	46.6	D	0.50	0.20	No	No
14. Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	29.9	C	48.5	D	35.4	D	50.7	D	5.50	2.20	No	No
17. Red Hill Ave./Interstate 5 NB Ramps	Signal	27.7	C	23.2	C	28.9	C	23.9	C	1.20	0.70	No	No
18. Red Hill Ave./Interstate 5 SB Ramps	Signal	46.5	D	34.3	C	48.6	D	34.3	C	2.10	0.00	No	No
40. MacArthur Blvd./Interstate 405 NB Ramps	Signal	39.1	D	26.2	C	39.2	D	26.2	C	0.10	0.00	No	No
41. MacArthur Blvd./Interstate 405 SB Ramps	Signal	26.3	C	34.5	C	26.4	C	34.7	C	0.10	0.20	No	No

Source: Appendix K A.

Notes: **Bold** = Exceeds LOS Standard; AWSC = All Way Stop Control; TWSC = Two Way Stop Control

reduced to a less than significant impact with implementation of the improvement. However, improvements at the intersections of Red Hill Avenue/Barranca Parkway (#30) cannot be guaranteed because they require approval and/or implementation by the City of Tustin. Because implementation of the mitigation measure cannot be guaranteed and may not be implemented by 2022, implementation of the Project would result in a significant and unavoidable impact at this intersection.

**Table 5.14-9: Mitigated Opening Year 2022 Plus Project Peak Hour Intersection Levels of Service**

Intersection	Opening Year		Opening Year Plus Project		Opening Year Plus Project (Mitigated)	
	PM Peak		PM Peak		PM Peak	
	V/C	LOS	V/C	LOS	V/C	LOS
30: Red Hill Ave./Barranca Pkwy.	0.908	E	1.007	F	0.907	E

Source: Appendix K.

### Year 2040 Plus Project

Year 2040 plus Project traffic volumes were determined by adding the net new Project trips to the Year 2040 Without Project traffic volumes and accounting for the seven planned intersection improvements that would be implemented by 2040.

Consistent with the Existing Plus Project and Opening Year 2022 conditions As shown on Table 5.14-10, the Project driveway on Red Hill Avenue is forecast to operate at LOS ~~F~~ E for vehicles exiting the site in the Year 2040 condition. The forecast delay of ~~49.2~~ 43.5 seconds (~~5.3~~ 4.6 vehicles) is anticipated to be experienced by drivers making an eastbound right-turn out of the Project site. Through vehicles on Red Hill Avenue would not be impacted. Drivers leaving the site in the a.m. peak hour could choose to utilize one of the two driveways on Warner Avenue and not wait at the Red Hill Avenue driveway. The signalized driveway on Warner Avenue is forecast to operate at LOS ~~A~~ B and the unsignalized driveway on Warner Avenue is forecast to operate at LOS ~~B~~ C in the Year 2040 plus Project condition. Both of the Warner Avenue driveways have adequate capacity to accommodate the additional traffic from the Red Hill Avenue driveway. Because this is an effect at an onsite driveway location, which could be avoided by use of other driveways, impacts at this location would be less than significant.

However, as detailed in Table 5.14-10, the Project would result in a significant cumulative impact at the following ~~five~~ three intersections:

- Grand Avenue/Warner Avenue (#4) in the p.m. peak hour
- ~~Red Hill Avenue/Warner Avenue (#25) in the pm peak hour~~
- Red Hill Avenue/Barranca Parkway (#30) in the p.m. peak hour
- Red Hill Avenue/Alton Parkway (#32) in the p.m. peak hour
- ~~Tustin Ranch Road/Warner Avenue North (#47) in the p.m. peak hour~~

Improvements for impacted intersections have been identified and include the following:

- Grand Avenue/Warner Avenue (#4) (Santa Ana): Add a westbound protected right-turn overlap phase and prohibit northbound U-turns.
- ~~Red Hill Avenue/Warner Avenue (#25) (Santa Ana/Tustin): Add a southbound protected right turn overlap phase and prohibit eastbound U-turns.~~
- Red Hill Avenue/Barranca Parkway (#30) (Santa Ana/Tustin/Irvine): Add a westbound protected right-turn overlap phase and prohibit southbound U-turns.
- Red Hill Avenue/Alton Parkway (#32) (Santa Ana/Irvine): Add a westbound protected right-turn overlap phase and prohibit southbound U-turns.
- ~~Tustin Ranch Road/Warner Avenue North (#47) (Tustin): Restripe the 3rd northbound through lane as a shared through right lane and remove the northbound right turn overlap.~~

Table 5.14-10: Year 2040 Plus Project Peak Hour Intersection Levels of Service

Intersection		Signal Control	Year 2040				Year 2040 plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
1.	Grand Ave./Edinger Ave.	Signal	0.859	D	1.007	F	0.866	D	1.009	F	0.007	0.002	No	No
2.	Grand Ave./St. Andrew Pl.	Signal	0.398	A	0.595	A	0.401	A	0.598	A	0.003	0.003	No	No
3.	Grand Ave./St. Gertrude Pl.	Signal	0.486	A	0.583	A	0.490	A	0.590	A	0.004	0.007	No	No
4.	Grand Ave./Warner Ave.	Signal	0.759	C	1.018	F	0.775	C	1.051	F	0.016	0.033	No	Yes
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	0.511	A	0.504	A	0.511	A	0.504	A	0.000	0.000	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	0.825	D	0.832	D	0.832	D	0.835	D	0.007	0.003	No	No
7.	Grand Ave./Dyer Rd.	Signal	0.639	B	0.735	C	0.640	B	0.737	C	0.001	0.002	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	0.679	B	0.472	A	0.680	B	0.479	A	0.001	0.007	No	No
9.	Wright St./Warner Ave.	Signal	0.550	A	0.861	D	0.554	A	0.869	D	0.004	0.008	No	No
10.	Pullman St./Warner Ave.	Signal	0.499	A	0.591	A	0.510	A	0.595	A	0.011	0.004	No	No
11.	Pullman St./Dyer Rd.	Signal	0.582	A	0.807	D	0.585	A	0.807	D	0.003	0.000	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	0.767	C	0.699	B	0.768	C	0.700	C	0.001	0.001	No	No
13.	Newport Ave./Edinger Ave.	Signal	0.660	B	0.683	B	0.661	B	0.684	B	0.001	0.001	No	No
14.	Newport Ave./SR 55 NB Ramp Del Amo Ave.	Signal	0.532	A	0.649	B	0.536	A	0.649	B	0.004	0.000	No	No
15.	Newport Ave./Valencia Ave.	Signal	0.696	B	0.708	C	0.699	B	0.712	C	0.003	0.004	No	No
16.	Red Hill Ave./El Camino Real	Signal	0.786	C	0.624	B	0.787	C	0.626	B	0.001	0.002	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	0.714	C	0.647	B	0.715	C	0.648	B	0.001	0.001	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	0.886	D	0.744	C	0.886	D	0.744	C	0.000	0.000	No	No
19.	Red Hill Ave./Nissan Rd.	Signal	0.664	B	0.733	C	0.664	B	0.733	C	0.000	0.000	No	No
20.	Red Hill Ave./Mitchell Ave.	Signal	0.687	B	0.712	C	0.687	B	0.705	C	0.000	-0.007	No	No
21.	Red Hill Ave./Walnut Ave.	Signal	0.750	C	0.823	D	0.750	C	0.823	D	0.000	0.000	No	No
22.	Red Hill Ave./Edinger Ave.	Signal	0.646	B	0.900	E	0.646	B	0.900	E	0.000	0.000	No	No
23.	Red Hill Ave./Valencia Ave.	Signal	0.816	D	0.772	C	0.810	D	0.773	C	-0.006	0.001	No	No
24.	Red Hill Ave./Victory Rd.	Signal	0.398	A	0.498	A	0.398	A	0.498	A	0.000	0.000	No	No
25.	Red Hill Ave./Warner Ave.	Signal	0.627	B	0.794	C	0.706	C	0.908	E	0.079	0.114	No	Yes
26.	Driveway 1/Warner Ave.	Signal	-	-	-	-	0.428	A	0.592	A	-	-	No	No
27.	Driveway 2/Warner Ave.	TWSC	-	-	-	-	13.9	B	15.1	C	-	-	No	No
28.	Red Hill Ave./Driveway 3	TWSC	-	-	-	-	49.2	E	17.1	C	-	-	No	No
29.	Red Hill Ave./Carnegie Ave.	Signal	0.449	A	0.519	A	0.485	A	0.544	A	0.036	0.025	No	No
30.	Red Hill Ave./Barranca Pkwy.	Signal	0.750	C	0.959	E	0.767	C	1.032	F	0.017	0.073	No	Yes
31.	Red Hill Ave./Deere Ave.	Signal	0.476	A	0.904	E	0.491	A	0.936	E	0.015	0.032	No	No
32.	Red Hill Ave./Alton Pkwy.	Signal	0.628	B	1.011	F	0.640	B	1.037	F	0.012	0.026	No	Yes
33.	Red Hill Ave./McGaw Ave.	Signal	0.537	A	0.825	D	0.550	A	0.839	D	0.013	0.014	No	No
34.	Red Hill Ave./MacArthur Blvd.	Signal	0.790	C	0.892	D	0.800	D	0.900	D	0.010	0.008	No	No
35.	Halladay St. E/Alton Ave.	TWSC	9.9	A	107.7	F	9.9	A	107.7	F	0.000	0.000	No	No
36.	Halladay St. W/Alton Ave.	TWSC	18.0	C	15.9	C	18.0	C	22.8	C	0.000	6.900	No	No
37.	Daimler St./Alton Pkwy.	AWSC	14.8	B	41.2	E	15.1	C	42.5	E	0.300	1.300	No	No
38.	MacArthur Blvd./Sky Park East	Signal	0.392	A	0.599	A	0.395	A	0.605	B	0.003	0.006	No	No

Intersection		Signal Control	Year 2040				Year 2040-plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C-or Delay	LOS	V/C-or Delay	LOS	V/C-or Delay	LOS	V/C-or Delay	LOS				
39.	MacArthur Blvd./Main St.	Signal	0.614	B	0.788	C	0.618	B	0.789	C	0.004	0.001	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	0.799	C	0.766	C	0.802	D	0.769	C	0.003	0.003	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	0.595	A	0.761	C	0.598	A	0.761	C	0.003	0.000	No	No
42.	Reserve Center Driveway/Warner Ave.	Signal	0.305	A	0.429	A	0.323	A	0.441	A	0.018	0.012	No	No
43.	Armstrong Ave./Warner Ave.	Signal	0.314	A	0.417	A	0.321	A	0.442	A	0.007	0.025	No	No
44.	Armstrong Ave./Barranca Pkwy.	Signal	0.618	B	0.843	D	0.631	B	0.848	D	0.013	0.005	No	No
45.	Legacy Rd./Warner Ave.	Signal	0.233	A	0.358	A	0.245	A	0.374	A	0.012	0.016	No	No
46.	Tustin Ranch Rd./Valencia Ave.	Signal	0.695	B	0.856	D	0.696	B	0.860	D	0.001	0.004	No	No
47.	Tustin Ranch Rd./Warner Ave. N	Signal	0.575	A	1.006	F	0.582	A	1.016	F	0.007	0.010	No	Yes
48.	Tustin Ranch Rd./Warner Ave. S	Signal	0.821	D	0.734	C	0.821	D	0.743	C	0.000	0.009	No	No
49.	Tustin Ranch Rd./Park Ave.	Signal	1.050	F	1.135	F	1.050	F	1.136	F	0.000	0.001	No	No
50.	Tustin Ranch Rd./Barranca Pkwy.	Signal	0.822	D	1.002	F	0.823	D	1.007	F	0.001	0.005	No	No
51.	Von Karman Ave./Alton Pkwy.	Signal	0.806	D	0.980	E	0.809	D	0.981	E	0.003	0.001	No	No
52.	Park Ave./Warner Ave.	Signal	0.726	C	0.907	E	0.736	C	0.911	E	0.010	0.004	No	No
53.	Millikan Ave./Barranca Pkwy.	Signal	0.566	A	0.778	C	0.571	A	0.787	C	0.005	0.009	No	No
54.	Jamboree Rd./Barranca Pkwy.	Signal	0.887	D	1.031	F	0.892	D	1.038	F	0.005	0.007	No	No
55.	Jamboree Rd./Alton Pkwy.	Signal	0.825	D	0.935	E	0.826	D	0.936	E	0.001	0.001	No	No
56.	Jamboree Rd./Main St.	Signal	0.828	D	0.877	D	0.828	D	0.878	D	0.000	0.001	No	No
57.	Corporate Park/Barranca Pkwy.	Signal	0.450	A	0.674	B	0.457	A	0.684	B	0.007	0.010	No	No

**Caltrans Analysis**

-	-	-	Year 2040				Year 2040-plus-Project				Delay Change		Impact?	
Intersection		Signal Control	AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay <sup>3</sup>	LOS <sup>2</sup>	Delay <sup>3</sup>	LOS <sup>2</sup>	Delay <sup>3</sup>	LOS <sup>2</sup>	Delay <sup>3</sup>	LOS <sup>2</sup>				
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	12.1	B	14.9	B	12.9	B	14.9	B	0.80	0.00	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	40.1	D	55.8	E	48.4	D	56.3	E	8.30	0.50	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	24.6	C	13.5	B	27.1	C	13.6	B	2.50	0.10	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	41.2	D	47.2	D	41.3	D	54.7	D	0.10	7.50	No	No
14.	Newport Ave./SR 55 NB Ramp-Del Amo Ave.	Signal	33.2	C	31.7	C	35.8	D	32.1	C	2.60	0.40	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	27.3	C	22.9	C	28.3	C	23.4	C	1.00	0.50	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	47.5	D	43.5	D	47.5	D	49.8	D	0.00	6.30	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	25.5	C	15.7	B	25.7	C	15.7	B	0.20	0.00	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	26.8	C	31.0	C	26.9	C	31.1	C	0.10	0.10	No	No

Intersection		Signal Control	Year 2040				Year 2040 plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
1.	Grand Ave./Edinger Ave.	Signal	0.859	D	1.007	F	0.866	D	1.008	F	0.007	0.001	No	No
2.	Grand Ave./St. Andrew Pl.	Signal	0.398	A	0.595	A	0.400	A	0.597	A	0.002	0.002	No	No

Intersection		Signal Control	Year 2040				Year 2040 plus Project				V/C Change		Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
3.	Grand Ave./St. Gertrude Pl.	Signal	0.486	A	0.583	A	0.489	A	0.590	A	0.003	0.007	No	No
4.	Grand Ave./Warner Ave.	Signal	0.759	C	1.018	F	0.768	C	1.047	F	0.009	0.029	No	Yes
5.	Grand Ave./SR 55 SB Off-Ramp	Signal	0.511	A	0.504	A	0.511	A	0.504	A	0.000	0.000	No	No
6.	SR 55 SB Ramps/Dyer Rd.	Signal	0.825	D	0.832	D	0.831	D	0.834	D	0.006	0.002	No	No
7.	Grand Ave./Dyer Rd.	Signal	0.639	B	0.735	C	0.640	B	0.736	C	0.001	0.001	No	No
8.	SR 55 NB Ramps/Dyer Rd.	Signal	0.679	B	0.472	A	0.680	B	0.478	A	0.001	0.006	No	No
9.	Wright St./Warner Ave.	Signal	0.550	A	0.861	D	0.553	A	0.868	D	0.003	0.007	No	No
10.	Pullman St./Warner Ave.	Signal	0.499	A	0.591	A	0.510	A	0.594	A	0.011	0.003	No	No
11.	Pullman St./Dyer Rd.	Signal	0.582	A	0.807	D	0.584	A	0.807	D	0.002	0.000	No	No
12.	SR 55 SB Ramps/Edinger Ave.	Signal	0.767	C	0.699	B	0.767	C	0.700	C	0.000	0.001	No	No
13.	Newport Ave./Edinger Ave.	Signal	0.660	B	0.683	B	0.661	B	0.684	B	0.001	0.001	No	No
14.	Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	0.532	A	0.649	B	0.535	A	0.649	B	0.003	0.000	No	No
15.	Newport Ave./Valencia Ave.	Signal	0.696	B	0.708	C	0.698	B	0.712	C	0.002	0.004	No	No
16.	Red Hill Ave./El Camino Real	Signal	0.786	C	0.624	B	0.787	C	0.626	B	0.001	0.002	No	No
17.	Red Hill Ave./Interstate 5 NB Ramps	Signal	0.714	C	0.647	B	0.715	C	0.648	B	0.001	0.001	No	No
18.	Red Hill Ave./Interstate 5 SB Ramps	Signal	0.886	D	0.744	C	0.886	D	0.744	C	0.000	0.000	No	No
19.	Red Hill Ave./Nissan Rd.	Signal	0.664	B	0.733	C	0.664	B	0.733	C	0.000	0.000	No	No
20.	Red Hill Ave./Mitchell Ave.	Signal	0.687	B	0.712	C	0.687	B	0.705	C	0.000	-0.007	No	No
21.	Red Hill Ave./Walnut Ave.	Signal	0.750	C	0.823	D	0.750	C	0.823	D	0.000	0.000	No	No
22.	Red Hill Ave./Edinger Ave.	Signal	0.646	B	0.900	E	0.646	B	0.900	E	0.000	0.000	No	No
23.	Red Hill Ave./Valencia Ave.	Signal	0.609	B	0.671	B	0.611	B	0.671	B	0.002	0.000	No	No
24.	Red Hill Ave./Victory Rd.	Signal	0.398	A	0.498	A	0.398	A	0.498	A	0.000	0.000	No	No
25.	Red Hill Ave./Warner Ave.	Signal	0.627	B	0.794	C	0.697	B	0.899	D	0.070	0.105	No	No
26.	Driveway 1/Warner Ave.	Signal	-	-	-	-	0.697	B	0.899	D	-	-	No	No
27.	Driveway 2/Warner Ave.	TWSC	-	-	-	-	23.3	C	32.7	D	-	-	No	No
28.	Red Hill Ave./Driveway 3	TWSC	-	-	-	-	43.5	E	16.4	C	-	-	No	No
29.	Red Hill Ave./Carnegie Ave.	Signal	0.449	A	0.519	A	0.482	A	0.541	A	0.033	0.022	No	No
30.	Red Hill Ave./Barranca Pkwy.	Signal	0.750	C	0.959	E	0.766	C	1.024	F	0.016	0.065	No	Yes
31.	Red Hill Ave./Deere Ave.	Signal	0.476	A	0.904	E	0.490	A	0.935	E	0.014	0.031	No	No
32.	Red Hill Ave./Alton Pkwy.	Signal	0.628	B	1.011	F	0.638	B	1.035	F	0.010	0.024	No	Yes
33.	Red Hill Ave./McGaw Ave.	Signal	0.537	A	0.825	D	0.549	A	0.838	D	0.012	0.013	No	No
34.	Red Hill Ave./MacArthur Blvd.	Signal	0.790	C	0.892	D	0.799	C	0.899	D	0.009	0.007	No	No
35.	Halladay St. E/Alton Ave.	TWSC	9.9	A	107.7	F	9.9	A	107.7	F	0.000	0.000	No	No
36.	Halladay St. W/Alton Ave.	TWSC	18.0	C	15.9	C	18.0	C	22.8	C	0.000	6.900	No	No
37.	Daimler St./Alton Pkwy.	AWSC	14.8	B	41.2	E	15.1	C	42.5	E	0.300	1.300	No	No
38.	MacArthur Blvd./Sky Park East	Signal	0.392	A	0.599	A	0.395	A	0.604	B	0.003	0.005	No	No
39.	MacArthur Blvd./Main St.	Signal	0.614	B	0.788	C	0.617	B	0.789	C	0.003	0.001	No	No
40.	MacArthur Blvd./Interstate 405 NB Ramps	Signal	0.799	C	0.766	C	0.801	D	0.769	C	0.002	0.003	No	No
41.	MacArthur Blvd./Interstate 405 SB Ramps	Signal	0.595	A	0.761	C	0.598	A	0.763	C	0.003	0.002	No	No
42.	Reserve Center Driveway/Warner Ave.	Signal	0.305	A	0.429	A	0.321	A	0.439	A	0.016	0.010	No	No



Intersection	Signal Control	Year 2040				Year 2040 plus Project				V/C Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS				
43. Armstrong Ave./Warner Ave.	Signal	0.314	A	0.417	A	0.319	A	0.438	A	0.005	0.021	No	No
44. Armstrong Ave./Barranca Pkwy.	Signal	0.618	B	0.843	D	0.630	B	0.848	D	0.012	0.005	No	No
45. Legacy Rd./Warner Ave.	Signal	0.233	A	0.358	A	0.243	A	0.372	A	0.010	0.014	No	No
46. Tustin Ranch Rd./Valencia Ave.	Signal	0.695	B	0.856	D	0.696	B	0.859	D	0.001	0.003	No	No
47. Tustin Ranch Rd./Warner Ave. N	Signal	0.575	A	1.006	F	0.581	A	1.015	F	0.006	0.009	No	No
48. Tustin Ranch Rd./Warner Ave. S	Signal	0.821	D	0.734	C	0.821	D	0.742	C	0.000	0.008	No	No
49. Tustin Ranch Rd./Park Ave.	Signal	1.050	F	1.135	F	1.050	F	1.136	F	0.000	0.001	No	No
50. Tustin Ranch Rd./Barranca Pkwy.	Signal	0.822	D	1.002	F	0.823	D	1.006	F	0.001	0.004	No	No
51. Von Karman Ave./Alton Pkwy.	Signal	0.806	D	0.980	E	0.809	D	0.981	E	0.003	0.001	No	No
52. Park Ave./Warner Ave.	Signal	0.726	C	0.907	E	0.734	C	0.911	E	0.008	0.004	No	No
53. Millikan Ave./Barranca Pkwy.	Signal	0.566	A	0.778	C	0.570	A	0.787	C	0.004	0.009	No	No
54. Jamboree Rd./Barranca Pkwy.	Signal	0.887	D	1.031	F	0.891	D	1.037	F	0.004	0.006	No	No
55. Jamboree Rd./Alton Pkwy.	Signal	0.825	D	0.935	E	0.826	D	0.936	E	0.001	0.001	No	No
56. Jamboree Rd./Main St.	Signal	0.828	D	0.877	D	0.828	D	0.878	D	0.000	0.001	No	No
57. Corporate Park/Barranca Pkwy.	Signal	0.450	A	0.674	B	0.455	A	0.683	B	0.005	0.009	No	No

## Caltrans Analysis

Intersection	Signal Control	Year 2040				Year 2040 plus Project				Delay Change		Impact?	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
		Delay <sup>3</sup>	LOS <sup>2</sup>	Delay <sup>3</sup>	LOS <sup>2</sup>	Delay <sup>3</sup>	LOS <sup>2</sup>	Delay <sup>3</sup>	LOS <sup>2</sup>				
5. Grand Ave./SR 55 SB Off-Ramp	Signal	12.1	B	14.9	B	12.9	B	14.9	B	0.80	0.00	No	No
6. SR 55 SB Ramps/Dyer Rd.	Signal	40.1	D	55.8	E	48.3	D	56.2	E	8.20	0.40	No	No
8. SR 55 NB Ramps/Dyer Rd.	Signal	24.6	C	13.5	B	27.1	C	13.6	B	2.50	0.10	No	No
12. SR 55 SB Ramps/Edinger Ave.	Signal	41.2	D	47.2	D	41.3	D	54.6	D	0.10	7.40	No	No
14. Newport Ave./SR-55 NB Ramp-Del Amo Ave.	Signal	33.2	C	31.7	C	35.7	D	32.1	C	2.50	0.40	No	No
17. Red Hill Ave./Interstate 5 NB Ramps	Signal	27.3	C	22.9	C	28.3	C	23.4	C	1.00	0.50	No	No
18. Red Hill Ave./Interstate 5 SB Ramps	Signal	47.5	D	43.5	D	47.5	D	49.8	D	0.00	6.30	No	No
40. MacArthur Blvd./Interstate 405 NB Ramps	Signal	25.5	C	15.7	B	25.7	C	15.7	B	0.20	0.00	No	No
41. MacArthur Blvd./Interstate 405 SB Ramps	Signal	26.8	C	31.0	C	26.9	C	31.1	C	0.10	0.10	No	No

Source: Appendix K A.

Notes: **Bold** = Exceeds LOS Standard; AWSC = All Way Stop Control; TWSC = Two Way Stop Control

As shown in Table 5.14-11, with implementation of the identified improvements, all impacts would be reduced to a less than significant level. However, improvements at the intersections of ~~Red Hill Avenue/Warner Avenue (#25)~~, Red Hill Avenue/ Barranca Parkway (#30), ~~and Red Hill Avenue/Alton Parkway (#32)~~, ~~and Tustin Ranch Road/Warner Avenue North (#47)~~ cannot be guaranteed because they require approval and/or implementation by the City of Tustin or the City of Irvine. In addition, the improvement at the Grand Avenue/Warner Avenue (#4) is required as a result of a cumulative impact, as the intersection operates with unsatisfactory LOS in the baseline condition. The Project would be responsible for a fair share of the improvement; however, there is no currently planned improvement at the location, and it is unknown if the Grand Avenue/Warner Avenue improvement would be implemented by 2040. Therefore, implementation of the Project would result in a significant and unavoidable impact under the Year 2040 Plus Project condition at these ~~five~~ three intersections.

**Table 5.14-11: Year 2040 Peak Hour Levels of Service with Mitigation**

Intersection		Year 2040 Plus Project				2040 Plus Project (Mitigated)			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
4.	Grand Ave./Warner Ave.	<del>0.775</del> 0.768	C	<del>1.051</del> 1.047	F	<del>0.77</del> 0.768	C	<del>0.993</del> 0.991	E
<del>25.</del>	<del>Red Hill Ave./ Warner Ave.</del>	<del>0.706</del>	<del>E</del>	<del>0.908</del>	<del>E</del>	<del>0.706</del>	<del>E</del>	<del>0.893</del>	<del>D</del>
30.	Red Hill Ave./Barranca Pkwy.	<del>0.767</del> 0.766	C	<del>1.032</del> 1.024	F	<del>0.767</del> 0.766	C	<del>0.931</del> 0.924	E
32.	Red Hill Ave./Alton Pkwy.	<del>0.64</del> 0.638	B	<del>1.037</del> 1.035	F	<del>0.64</del> 0.638	B	<del>0.979</del> 0.977	E
<del>47.</del>	<del>Tustin Ranch Rd./Warner Ave. N</del>	<del>0.582</del>	<del>A</del>	<del>1.016</del>	<del>F</del>	<del>0.597</del>	<del>A</del>	<del>0.787</del>	<del>E</del>

Source: Appendix K A.

Notes: **Bold** = Exceeds LOS Standard

## Transit, Bicycle, and Pedestrian Facilities

As described previously, the Project site is currently served by OCTA Bus Routes 71 (Red Hill) and 72 (Warner), as well as Metrolink Stationlink Route 472 (Red Hill). Bus routes 71 and 72 provide service seven days a week. Route 472 provides service Monday thru Friday. Other Bus Routes servicing areas within the Project area are OCTA bus routes 55, 59, 70, 76, 86, Intracounty OC Express Route 213/A, Metrolink Stationlink Route 463, and the IShuttle 400A, 401B, and 405F. The existing bus services would allow project site residents and employees to convenient access to transit. The proposed Project would not alter or conflict with existing bus stops and schedules, and impacts related to OCTA transit services would not occur.

There are several roadways in the Project vicinity that currently have bicycle lanes, which include: Red Hill Avenue between Barranca Parkway and Reynolds Avenue, Warner Avenue east of Red Hill Avenue, Tustin Ranch Road, Von Karman Avenue, Jamboree Road between Barranca Parkway and Main Street, Edinger Avenue between Red Hill Avenue and Newport Avenue, on the south side of Barranca Parkway west of Jamboree Road, Alton Parkway between Red Hill Avenue and Jamboree Road, and on Main Street. Additionally, sidewalks currently exist adjacent to the site along both Red Hill Avenue and Warner Avenue.

The Project would not involve any off-site improvements that would remove the existing bicycle lanes or result in any identified impacts to bicycle routes. The existing bicycle routes would provide bicycle transportation opportunities for residents and employees of the Project site. The Project would not conflict with any bicycle facilities. Similarly, the Project site is bound by sidewalks along Red Hill Avenue and Warner Avenue. The proposed Project would retain the existing sidewalks, which would facilitate pedestrian use and walking to nearby locations. Therefore, the proposed Project would also not conflict with pedestrian facilities. Overall, Project impacts to transit, bicycle, and pedestrian facilities would be less than significant.

## IMPACT TR-2: THE PROJECT WOULD NOT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B).

**Less than Significant Impact.** The Senate Bill 743 was signed by the Governor in 2013 and directed the Governor's Office of Planning and Research (OPR) to identify alternative metrics for evaluating transportation impacts under CEQA. Recently adopted changes to the CEQA Guidelines include a new section (15064.3) that specifies that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects. The revised CEQA guidelines take effect July 1, 2020.

The City of Santa Ana has prepared a guidance document for analysis of VMT and assessment of transportation impacts under SB743. The City's document provides screening thresholds to assess whether further VMT analysis is required based on project location, size, or consistency with the SCAG Regional Transportation Plan/Sustainable Communities Strategy. According to the City's screening thresholds, and general guidance from OPR, and CEQA Guidelines Section 15064.3(b)(1), a project that is located within a Transit Priority Area or a High-Quality Transit Area is presumed to have a less than significant impact to VMT.

As described previously, the Project site is served by OCTA routes 71 (Warner Avenue), 72 (Red Hill Avenue), and 472 (Red Hill Avenue). Each of these routes operates approximately every 30 minutes during peak hours in each direction, ~~which results in one stop every 6 minutes during the a.m. and p.m. peak hours.~~ Additionally, SCAG GIS data identifies that the Project site is located within a 2040 High Quality Transit Area, as shown in Figure 5.14-2. However, the number of buses serving the Project vicinity during the AM and PM peak hours do not meet the City's screening thresholds. Therefore, a VMT analysis is required, and was conducted as part of the TIA, included as Appendix A to the Final EIR.

As described previously, a direct Project impact would occur if the Project generates a VMT/SP above 15 percent below the Countywide Average. As shown on Table 5.14-12, the Project related VMT/SP is 5.14 and the Countywide Average VMT/SP is 14.71. Thus, the VMT/SP of the Project is 35 percent of the Countywide Average VMT/SP; and the Project would not generate VMT/SP above 15 percent below the Countywide Average. Thus, direct Project impacts related to VMT would be less than significant.

**Table 5.14-12: Project VMT Per Service Population Comparison**

	<u>Daily Total VMT</u>	<u>Service<sup>1</sup> Population</u>	<u>VMT/Service Population</u>
<u>Proposed Project</u>	<u>24,240</u>	<u>4,718</u>	<u>5.14</u>
<u>Orange County</u>	<u>69,182,015</u>	<u>4,704,503</u>	<u>14.71</u>
<b><u>Project VMT/SP Percentage of Countywide VMT/SP</u></b>			<b><u>35%</u></b>

Source: Appendix A

<sup>1</sup>Per the OCTAM model.

In addition, as described previously the screening criteria for VMT cumulative impacts, include project consistency with the RTP/SCS or results in an increase in VMT within the City. The City's VMT guidance requires that only VMT within the City be used for this analysis and that the population be kept constant so that the project only influences land use allocation by location and not the growth in population.

Table 5.14-13 shows the VMT calculations for the City and Project where the service population does not increase with the Project (i.e. service population is constant). Since the service population is kept constant, the screening is based on total VMT. As shown on Table 4.14-13, the Project results in a net decrease in VMT if the service population is kept constant.

**Table 5.14-13: Cumulative VMT Screening**

	<u>With Project</u>	<u>No Project</u>	<u>Difference</u>
<b>OCTAM Region</b>	<u>5,275,629</u>	<u>5,282,677</u>	<u>-7,048</u>
<b>Within City of Santa Ana</b>	<u>655,291</u>	<u>657,132</u>	<u>-1,841</u>

Source: Appendix A

Also, the City's VMT impact criteria states that a cumulative impact would occur if the Project results in a negative effect on VMT/SP at the citywide level. Table 5.14-14 shows the VMT/SP calculations for the City under without Project and with Project conditions. As shown, the Project's VMT/SP is approximately 22 percent lower than the cumulative VMT/SP for the City. In addition, the Project results in a slight reduction in the VMT/SP for the City. Therefore, the Project would not result in a negative effect on VMT/SP at the citywide level, and cumulative impacts would be less than significant.

**Table 5.14-14: Year 2040 VMT per Service Population**

	<u>Daily Total VMT</u>	<u>Total Service<sup>1</sup> Population</u>	<u>VMT/Service Population</u>	<u>Reduction from Baseline</u>
<b>City of Santa Ana (Without Project)</b>	<u>5,282,677</u>	<u>536,175</u>	<u>9.85</u>	<u>--</u>
<b>Proposed Project</b>	<u>36,131</u>	<u>4,718</u>	<u>7.66</u>	<u>22.27%</u>
<b>City of Santa Ana (With Project)</b>	<u>5,322,051</u>	<u>540,893</u>	<u>9.84</u>	<u>0.13%</u>

Source: Appendix A

<sup>1</sup>Per the OCTAM model.

~~Because the Project site is adjacent to existing transit service with an interval of approximately 6 minutes during the peak commute hours and is located within a SCAG identified 2040 High Quality Transit Area, the Project would result in a less than a significant impact related to VMT.~~

**IMPACT TR-3: THE PROJECT WOULD NOT SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE (E.G., SHARPT CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT).**

**Less than Significant Impact.** The Project includes development of mixed uses that include residential, retail/restaurant commercial, and open space recreation. The Project includes community type uses and does not include any incompatible uses, such as farm equipment. The proposed Project would be accessed from one driveway on Red Hill Avenue and two driveways on Warner Avenue that provide direct access to parking areas.

The Project would also not increase any hazards related to a design feature. All of the proposed improvements would be required to be installed in conformance with City design standards. The City's construction permitting process includes review Project site plans to ensure that no potentially hazardous transportation design features would be introduced by the Project. For example, sight distance at each Project driveway would be reviewed for conformance with City of Santa Ana sight distance standards at the time of permitting approvals for grading, landscape, onsite circulation construction, and street improvement plans. As a result, impacts related to vehicular circulation design features would be less than significant.

**IMPACT TR-4: THE PROJECT WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS.**

**Less than Significant Impact.**

## Construction

The proposed construction activities, including equipment and supply staging and storage, would occur within and adjacent to the Project area and would not restrict access of emergency vehicles to the Project site or adjacent areas. The roadway improvements and installation of driveways that would be implemented during construction of the proposed Project could require the temporary closure of travel lanes, but full roadway closure and traffic detours are not expected to be necessary. However, construction activities may temporarily restrict vehicular traffic that could increase hazards. Therefore, the construction activities would be required to implement measures to facilitate the passage of persons and vehicles through/around any required temporary road restrictions, and ensure the safety of passage in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9) and the City of Santa Ana Fire Code included as Municipal Code Chapter 14, which would be ensured through the City's permitting process. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a less than significant level.

## Operation

As described previously, the Project includes one driveway on Red Hill Avenue and two driveways on Warner Avenue that provide direct access to parking areas. As described previously, these driveways would provide adequate and safe circulation to and from the Project site and would provide a several routes for emergency responders to access different portions of the Project site and surrounding areas.

Additionally, during operation of the Project, building tenants would be required to maintain adequate emergency access for emergency vehicles as required and verified by the City and the Orange County Fire Authority (OCFA) through operational permitting and inspections. Because the Project is required to comply with all applicable City codes, as verified by the City and OCFA potential impacts related to inadequate emergency access would be less than significant.

### 5.14.7 CUMULATIVE IMPACTS

The cumulative traffic study area for the proposed Project includes the 57 intersections that are evaluated above. This includes portions of the Cities of Santa Ana, Tustin, and Irvine. The traffic study area was selected based upon, local access to the Project site and study area, the Project's trip generation, likely Project distribution patterns, a review of existing operations, and coordination with the Cities of Santa Ana, Tustin, and Irvine traffic engineering staffs. The related projects within the cumulative study area for traffic are listed on Table 5.14-7 and shown on Figure 5-1. The proposed Project would add new vehicle trips to the cumulative geographic area. Because the Project's anticipated opening year is 2022, the traffic analysis detailed above analyzed both Year 2022 and Year 2040 traffic conditions, which took into account the cumulative projects and regional growth. As detailed previously, the proposed Project would result in impacts in the cumulative 2040 condition. Mitigation measures have been identified, which would reduce impacts to a less than significant level; however, either implementation of the improvements requires approval or implementation from another jurisdiction, which is out of the control of the City of Santa Ana, or no planned improvement exists, and the timing of the improvement is unknown. Therefore, the proposed Project would result in a cumulatively considerable impact related to traffic, and cumulative traffic impacts would be significant and unavoidable.

As described previously in the VMT discussion, the City's VMT impact criteria states that a cumulative impact would occur if the Project results in a negative effect on VMT/SP at the citywide level. As shown on Table 5.14-14, the Project's VMT/SP is approximately 22 percent lower than the cumulative VMT/SP for the City. In addition, the Project results in a slight reduction in the VMT/SP for the City. Therefore, the Project would not result in a negative effect on VMT/SP at the citywide level, and cumulative impacts would be less than significant.

**Figure 5.14-2: High Quality Transit Area Location**

### 5.14.8 EXISTING STANDARD CONDITIONS AND PLANS, PROGRAMS, OR POLICIES

- Orange County Congestion Management Program
- SCAG 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy
- City of Santa Ana General Plan Circulation Element
- City of Santa Ana Municipal Code

### 5.14.2 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, Impact TR-1 would be **potentially significant**:

Upon implementation of regulatory requirements, Impacts TR-2 ~~through and TR-4~~ TR-3 would be less than significant.

### 5.14.9 MITIGATION MEASURES

**Mitigation Measure TR-1: Grand Avenue/Warner Avenue (#4) (Santa Ana):** Prior to granting certificate of occupancy for the last unit, the Project Applicant shall have an executed agreement with the City of Santa Ana to The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring require payment of a fair share contribution to the improvement to add an eastbound protected right-turn overlap phase and prohibit northbound U-turns at the intersection of Grand Avenue/Warner Avenue.

~~**Mitigation Measure TR-2: Red Hill Avenue/Warner Avenue (#25) (Santa Ana/Tustin):** The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of the full cost or implementation of an additional westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the City of Tustin.~~

~~**Mitigation Measure TR-32: Red Hill Avenue/Barranca Parkway (#30) (Santa Ana/Tustin/Irvine):** Prior to granting certificate of occupancy for the last unit, the Project Applicant shall provide the City of Santa Ana proof of an executed agreement with the Cities of Tustin and Irvine The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of the full cost or implementation of an additional westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the Cities of Tustin and Irvine.~~

~~**Mitigation Measure TR-43: Red Hill Avenue/Alton Parkway (#32) (Santa Ana/Irvine):** Prior to granting certificate of occupancy for the last unit, the Project Applicant shall provide the City of Santa Ana proof of an executed agreement with the City of Irvine The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of a fair share contribution to the improvement to add the full cost or implementation of a westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the City of Irvine.~~

~~**Mitigation Measure TR-5: Tustin Ranch Road/Warner Avenue North (#47) (Tustin):** The Development Agreement that is required for implementation of the proposed Project shall include a clause requiring payment of a fair share contribution to restripe the 3rd northbound through lane as a shared through right~~

~~lane and remove the northbound right turn overlap. The installation of this improvement is subject to the approval of the City of Tustin.~~

### 5.14.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

For Impact TR-1, Mitigation Measures TR-1 through ~~TR-5~~ TR-3 are included. However, improvements at ~~four~~ two of the intersections cannot be guaranteed by the City of Santa Ana because they require approval and/or implementation by the City of Tustin or the City of Irvine. In addition, the improvement at the ~~fifth~~ Grand Avenue/Warner Avenue intersection is not currently planned, and it is unknown if it would be implemented by 2040. Therefore, implementation of the Project would result in a significant and unavoidable impact.

Impacts related Impacts TR-2 ~~through and TR-4~~ TR-3 would be less than significant.

## REFERENCES

Caltrans Traffic Impact Study Guidelines, December 2002. Accessed:  
[https://nacto.org/docs/usdg/guide\\_preparation\\_traffic\\_impact\\_studies\\_caltrans.pdf](https://nacto.org/docs/usdg/guide_preparation_traffic_impact_studies_caltrans.pdf)

The Bowery Traffic Impact Analysis (TIA ~~2019~~2020), prepared by EPD Solutions, Inc., ~~2019~~2020.



# Chapter 4. Mitigation Monitoring and Reporting Program

## 4.1 Introduction

The California Environmental Quality Act (CEQA) requires a lead or public agency that approves or carries out a project for which an Environmental Impact Report has been certified which identifies one or more significant adverse environmental effects and where findings with respect to changes or alterations in the project have been made, to adopt a "...reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA, Public Resources Code Sections 21081, 21081.6).

A Mitigation Monitoring and Reporting Program (MMRP) is required to ensure that adopted mitigation measures are successfully implemented for the Bowery Mixed-Use Project (Project). The City of Santa Ana is the Lead Agency for the Project and is responsible for implementation of the MMRP. This report describes the MMRP for the Project and identifies the parties that will be responsible for monitoring implementation of the individual mitigation measures in the MMRP.

## 4.2 Mitigation Monitoring and Reporting Program

The MMRP for the Project will be active through all phases of the Project, including design, construction, and operation. The attached table identifies the mitigation program required to be implemented by the City for the Bowery Mixed-Use Project. The table identifies the Standard Conditions; Plan, Program, Policies (PPPs); and mitigation measures required by the City to mitigate or avoid significant adverse impacts associated with the implementation of the Project, the timing of implementation, and the responsible party or parties for monitoring compliance.

The MMRP also includes a column that will be used by the compliance monitor (individual responsible for monitoring compliance) to document when implementation of the measure is completed. As individual Plan, Program, Policies; and mitigation measures are completed, the compliance monitor will sign and date the MMRP, indicating that the required actions have been completed.

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**TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM  
THE BOWERY MIXED-USE PROJECT EIR**

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<b>AIR QUALITY</b>			
<p><b>Plan, Program, or Policy PPP AQ-1: SCAQMD Rule 403.</b> The following measures shall be incorporated into construction plans and specifications as implementation of SCAQMD Rule 403:</p> <ul style="list-style-type: none"> <li>○ All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.</li> <li>○ The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.</li> <li>○ The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less.</li> </ul>	In Construction Plans and Specifications. Prior to Demolition and Construction Permits	City of Santa Ana Building Safety Division	
<p><b>Plan, Program, or Policy PPP AQ-2: SCAQMD Rule 1113.</b> The following measure shall be incorporated into construction plans and specifications as implementation of SCAQMD Rule 1113. The Project shall only use “Low-Volatile Organic Compounds (VOC)” paints (no more than 50 gram/liter of VOC) consistent with SCAQMD Rule 1113.</p>	In Construction Plans and Specifications. Prior to Construction Permits	City of Santa Ana Building Safety Division	
<p><b>Plan, Program, or Policy PPP AQ-3: SCAQMD Rule 445.</b> The following measure shall be incorporated into construction plans and specifications as implementation of SCAQMD Rule 445. Wood burning stoves and fireplaces shall not be included or used in the new development.</p>	In Construction Plans and Specifications. Prior to Construction Permits	City of Santa Ana Building Safety Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<b>GEOLOGY AND SOILS</b>			
<b>Plan, Program, or Policy PPP GEO-1: CBC Compliance.</b> The Project is required to comply with the California Building Standards Code (CBC) as included in the City's Municipal Code as Chapter 8, Article 2, Division 1, to preclude significant adverse effects associated with seismic and soils hazards. As part of CBC compliance, CBC related and geologist and/or civil engineer specifications for the proposed Project shall be incorporated into grading plans and building specifications as a condition of construction permit approval.	In Construction Plans and Specifications. Prior to Construction Permits	City of Santa Ana Building Safety Division	
<b>HAZARDS AND HAZARDOUS MATERIALS</b>			
<b>Plan, Program, or Policy PPP HAZ-1: SCAQMD Rule 1403.</b> Prior to issuance of demolition permits, the Project applicant shall submit verification to the City Building and Safety Division that an asbestos survey has been conducted at all existing buildings located on the Project site. If asbestos is found, the Project applicant shall follow all procedural requirements and regulations of South Coast Air Quality Management District Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.	In Construction Plans and Specifications. Prior to Demolition Permits	City of Santa Ana Building Safety Division	
<b>Plan, Program, or Policy PPP HAZ-1: Lead.</b> Prior to issuance of demolition permits, the Project applicant shall submit verification to the City Building and Safety Division that a lead-based paint survey has been conducted at all existing buildings located on the Project site. If lead-based paint is found, the Project applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. Cal-OSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.	In Construction Plans and Specifications. Prior to Demolition Permits	City of Santa Ana Building Safety Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<p><b>Mitigation Measure HAZ-1:</b> Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified hazardous materials consultant and shall detail procedures and protocols for excavation and disposal of onsite hazardous materials, including:</p> <ul style="list-style-type: none"> <li>• A certified hazardous waste hauler shall remove all potentially hazardous soils. Excavation of contaminated soils shall be removed. In addition, sampling of soil shall be conducted during excavation to ensure that all contaminated soils are removed, and that residential Environmental Screening Levels (ESLs) for residential uses are not exceeded. Excavated materials shall be transported per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials.</li> <li>• Any subsurface materials exposed during construction activities that appear suspect of contamination, either from visual staining or suspect odors, shall require immediate cessation of excavation activities. Soils suspected of contamination shall be tested for potential contamination. If contamination is found to be present per the California Department of Toxic Substances Control (DTSC) or Regional Water Quality Control Board (RWQCB) ESLs for residential uses, it shall be transported and disposed of per California Hazardous Waste Regulations to an appropriately permitted landfill.</li> <li>• A Health and Safety Plan (HSP) shall be prepared for each contractor that addresses potential safety and health hazards and includes the requirements and procedures for employee protection. The HSP shall also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.</li> <li>• All SMP measures shall be printed on the construction documents, contracts, and project plans prior to issuance of grading permits.</li> </ul>	In Construction Plans and Specifications. Prior to Construction Permits	City of Santa Ana Building Safety Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<b>HYDROLOGY AND WATER QUALITY</b>			
<b>Plan, Program, or Policy WQ-1: NPDES/SWPPP.</b> Prior to issuance of any grading or demolition permits, the applicant shall provide the City Building and Safety Division evidence of compliance with the NPDES (National Pollutant Discharge Elimination System) requirement to obtain a construction permit from the State Water Resource Control Board (SWRCB). The permit requirement applies to grading and construction sites of one acre or larger. The Project applicant/proponent shall comply by submitting a Notice of Intent (NOI) and by developing and implementing a Stormwater Pollution Prevention Plan (SWPPP) and a monitoring program and reporting plan for the construction site.	In Construction Plans and Specifications. Prior to Demolition, Grading, and Construction Permits	City of Santa Ana Building Safety Division	
<b>PPP WQ-2: WQMP.</b> Prior to the approval of the Grading Plan and issuance of Grading Permits a completed Water Quality Management Plan (WQMP) shall be submitted to and approved by the City Building and Safety Division. The WQMP shall identify all Post-Construction, Site Design, Source Control, and Treatment Control Best Management Practices (BMPs) that will be incorporated into the development project in order to minimize the adverse effects on receiving waters.	In Construction Plans and Specifications. Prior to Grading and Construction Permits	City of Santa Ana Building Safety Division	
<b>LAND USE AND PLANNING</b>			
<b>PPP LU-1:</b> Prior to issuance of certificates of occupancy, the Project Applicant shall demonstrate compliance to the City of Santa Ana with the Federal Aviation Administration Federal Aviation Regulations Part 77 Notification Area for John Wayne Airport requirement that all prospective residents of the Project site shall be notified of airport related noise. Notification shall be included in lease/rental agreements and shall state the following:  “Notice of Airport in Vicinity. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations related to noise. Individual sensitivities to noise annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are	Prior to issuance of Certificates of Occupancy.	City of Santa Ana Planning Division and Building and Safety Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
associated with the property and determine whether they are acceptable to you.”			
<b>TRANSPORTATION</b>			
<b>Mitigation Measure TR-1: Grand Avenue/Warner Avenue (#4) (Santa Ana):</b> Prior to granting certificate of occupancy for the last unit, the Project Applicant shall have an executed agreement with the City of Santa Ana to require payment of a fair share contribution to the improvement to add an eastbound protected right-turn overlap phase and prohibit northbound U-turns at the intersection of Grand Avenue/Warner Avenue.	Prior to certificate of occupancy for the last unit	City of Santa Ana Planning Division, Public Works, and Building Safety Division	
<b>Mitigation Measure TR-2: Red Hill Avenue/Barranca Parkway (#30) (Santa Ana/Tustin/Irvine):</b> Prior to granting certificate of occupancy for the last unit, the Project Applicant shall provide the City of Santa Ana proof of an executed agreement with the Cities of Tustin and Irvine requiring payment of the full cost or implementation of an additional westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the Cities of Tustin and Irvine.	Prior to certificate of occupancy for the last unit	City of Santa Ana Planning Division, Public Works, and Building Safety Division	
<b>Mitigation Measure TR-3: Red Hill Avenue/Alton Parkway (#32) (Santa Ana/Irvine):</b> Prior to granting certificate of occupancy for the last unit, the Project Applicant shall provide the City of Santa Ana proof of an executed agreement with the City of Irvine requiring payment of a fair share contribution to the improvement to add a westbound protected right-turn overlap phase and to prohibit southbound U-turns. The installation of this improvement is subject to the approval of the City of Irvine.	Prior to certificate of occupancy for the last unit	City of Santa Ana Planning Division, Public Works, and Building Safety Division	
<b>TRIBAL CULTURAL RESOURCES</b>			
<b>Mitigation Measure TCR-1: Native American Monitoring.</b> Prior to the issuance of any permits for initial site clearing (such as pavement removal, grubbing, tree removals) or issuance of permits allowing ground-disturbing activities that cause excavation to depths greater than artificial fill (including as boring, grading, excavation, drilling, potholing or auguring, and trenching), the City of Santa Ana shall ensure that the project applicant/developer retain	In Construction Plans and Specifications. Prior to Demolition, Grading, and Construction Permits	City of Santa Ana Planning Division and Building Safety Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<p>qualified Native American Monitor(s). The monitor(s) shall be approved by the tribal representatives of the Gabrieleno Band of Mission Indians - Kizh Nation or any other requesting Tribe or Nation and be present on-site during initial site clearing and construction that involves ground disturbing activities that cause excavation to depths greater than artificial fill identified herein. The monitor shall conduct a Native American Indian Sensitivity Training for construction personnel. The training session includes a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered. The Native American monitor(s) shall complete monitoring logs on a daily basis, providing descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when grading and excavation activities of native soil (i.e., previously undisturbed) are completed, or when the tribal representatives and monitor have indicated that the site has a low potential for tribal cultural resources, whichever occurs first.</p> <p>In the event that tribal cultural resources are inadvertently discovered during ground-disturbing activities, work must be halted within 50 feet of the find until it can also be evaluated by a qualified archaeologist in cooperation with a Native American monitor to determine if the potential resource meet the CEQA definition of historical (State CEQA Guidelines 15064.5(a)) and/or unique resource (Public Resources Code 21083.2(g)). Construction activities could continue in other areas. If the find is considered an "archeological resource" the archaeologist, in cooperation with a Native American monitor shall pursue either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4. If unique a tribal cultural resource cannot be preserved in place or left in an undisturbed state, recovery, salvage and treatment shall be required at the Project applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation in an established accredited professional repository.</p>			