

DOWNTOWN COMMERCIAL CORE SPECIFIC PLAN FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT



JUNE 2018

TUSTIN, CA

**FINAL PROGRAM ENVIRONMENTAL IMPACT
REPORT
DOWNTOWN COMMERCIAL CORE SPECIFIC PLAN
TUSTIN, CALIFORNIA
STATE CLEARINGHOUSE NO. 2016081004**

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
µg/m ³	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
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
CDA	Chino Desalter Authority
CDPH	California Department of Public Health
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 ₄	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 ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRD	Cultural Resources District
CRHR	California Register of Historical Resources
CTP	Clean Truck Program

CUP	Conditional Use Permit
CUWMPA	California Urban Water Management Planning Act
DA	Development Area
dB	decibel
dBA	A-weighted decibels
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EOCWD	East Orange County Water District
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
HCA	Orange County Health Care Agency
HCP	Habitat Conservation Plan
HDT	Heavy Duty Trucks
HFCs	hydroflouorocarbons
Hot Spots Act	Air Toxics Hot Spots Information and Assessment Act of 1987
HP	horsepower
HPLV	High Pressure Low Volume
HQTA	high quality transit areas
HVAC	heating, ventilating, and air conditioning
ICU	intersection capacity utilization
I	Interstate
I-5	Interstate 5
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
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric tons
MT CO _{2e}	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NALs	numeric action levels

NCCP	Natural Community Conservation Plan
NESHAP	national emissions standards for HAPs
NH ₃	ammonia
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic and Safety Administration
NOP	Notice of Preparation
NO ₂	nitrogen oxide
NO _x	nitrogen oxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	U.A. Department of Agriculture Natural Resources Conservation Service
O ₃	ozone
OCTA	Orange County Transportation Authority
OCSD	Orange County Sanitation District
Pb	lead
PDF	project design feature
PFCs	perfluorocarbons
PM _{2.5}	particulate matter less than 2.5 micrometers in aerodynamic diameter
PM ₁₀	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)
SB 375	California Senate Bill 375, Ch. 728, (2008)
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 ₆	sulfur hexafluoride
SIP	state implementation plan
SO ₂	sulfur dioxide
SO ₃	sulfur trioxide
SO ₄	sulfates
SoCalGas	Southern California Gas Company
SO _x	sulfur oxides
SP	Specific Plan
SR	State Route
SR-55	Costa Mesa Freeway
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
TCC	Tustin City Code
TIA	Traffic Impact Analysis
tpy	tons per year
TTCP	traditional tribal cultural places
TUA	traditional use area
TUSD	Tustin Unified School District
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
Williamson Act	California Land Conservation Act of 1965

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ERRATA: Summary of Revisions to the Draft EIR

This section reflects a summary of errata sections after circulation of the Draft EIR and certification of the Final EIR. The revisions to the Draft EIR are based upon: (1) clarifications required to prepare a response to a specific comment; and/or (2) typographical errors. The provision of amendments to Draft EIR 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 and reference the applicable sections and page numbers. Minor text changes, such as typographical errors, were made to the text of the Final EIR, as necessary, and are not documented in this summary.

Revisions in Response to Written Comments and City Changes to Text

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

Chapter 1.0, Executive Summary

Pages 1-12 and 1-13; Table 1-2, *Summary of Impacts, Mitigation Measures, and Level of Significance* is revised as follows:

Mitigation Measure CUL-1: Prior to issuance of a grading permit for grading of 2 feet or more in depth below the natural or existing grade, the applicant/developer shall provide written evidence to the City Planning Division that a qualified archaeologist has been retained by the applicant/developer to respond on an as-needed basis to address unanticipated archaeological discoveries and any archaeological requirements (e.g., conditions of approval) that are applicable to the project. The applicant/developer is encouraged to conduct a field meeting prior to the start of construction activity with all construction supervisors to train staff to identify potential archaeological resources. In the event that archaeological materials are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.

If discovered archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that confirmed resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery, reburial/relocation, deposit at a local museum that accepts such resources or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

If discovered materials are found not to be significant archaeological resources but may be considered a Tribal Cultural Resource or objects with cultural value to a California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.

Section 5.2, Air Quality

Pages 5.2-21 and 5.2-22, Section 5.2.10, *Mitigation Measures*, is revised as follows:

Mitigation Measure AQ-7: Energy Usage Calculations. Prior to the issuance of building permits for new development projects ~~requiring with~~ design review, project applicants/developers shall submit plans certifying energy usage calculations to the City of Tustin Building Divisions ~~showing~~ that the proposed development is designed to achieve 5 percent efficiency beyond the 2016 California Building Code Title 24 requirements to the satisfaction of the City of Tustin Building Division. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable):

- Increase in insulation such that heat transfer and thermal bridging is minimized;
- Limit air leakage through the structure and/or within the heating and cooling distributions systems;
- Use of energy-efficient space heating and cooling equipment;
- Installation of dual-paned or other energy efficient windows;
- Use of interior and exterior energy efficient lighting that exceeds the 2016 California Title 24 Energy Efficiency performance standards;
- Installation of automatic devices to turn off lights when they are not needed;
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;
- Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;
- Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; and
- Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.

Mitigation Measure AQ-9: Localized Emissions. Prior to issuance of a grading permit for new development projects that are one acre or larger, ~~pursuant to the Specific Plan~~, the applicant/developer shall provide modeling of the regional and the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development. If the modeling shows that emission would exceed the SCAQMD’s significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD’s significance thresholds for those emissions.

Section 5.3, Cultural Resources

Page 5.3-12, Section 5.3.10, *Mitigation Measures*, is revised as follows:

Mitigation Measure CUL-1: Prior to issuance of a grading permit for grading of 2 feet or more in depth below the natural or existing grade, the applicant/developer shall provide written evidence to the City Planning Division that a qualified archaeologist has been retained by the applicant/developer to respond on an as-needed basis to address unanticipated archaeological discoveries and any archaeological requirements (e.g., conditions of approval) that are applicable to the project. The applicant/developer is encouraged to conduct a field meeting prior to the start of construction activity with all construction supervisors to train staff to identify potential archaeological resources. In the event that archaeological materials are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.

If discovered archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that confirmed resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery, reburial/relocation, deposit at a local museum that accepts such resources or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

If discovered materials are found not to be significant archaeological resources but may be considered a Tribal Cultural Resource or objects with cultural value to a California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.

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1. Executive Summary

This Draft Environmental Impact Report (Draft EIR) has been prepared to identify, analyze, and mitigate the significant environmental effects of development allowed in the proposed Downtown Commercial Core Specific Plan (DCCSP). The project, as articulated in Section 3, *Project Description*, involves development of residences, non-residential uses, and other improvements in the proposed Specific Plan. The Specific Plan also includes development standards and design criteria and guidelines to provide for unified and coordinated development within the Specific Plan area. This EIR has been prepared in conformance with State and City of Tustin environmental policy guidelines for implementation of the California Environmental Quality Act (CEQA).

This Draft EIR has been prepared pursuant to the requirements of CEQA. The City of Tustin, as the Lead Agency, has reviewed and revised as necessary all submitted drafts, technical studies, and reports to reflect its own independent judgment, including reliance on applicable City technical personnel from other departments and review of all technical subconsultant reports. Data for this Draft EIR was obtained from on-site field observations, discussions with affected agencies, analysis of adopted plans and policies, review of available studies, reports, data and similar literature, and specialized environmental assessments.

The EIR is being circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. During the 45-day review period, the Draft EIR will be available for public review at the City's website (<http://www.tustinca.org/depts/cd/planningupdate.asp>) and the following location:

City of Tustin Planning Dept.
300 Centennial Way
Tustin, CA 92780

Written comments related to environmental issues in the Draft EIR should be addressed to:

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A Notice of Availability of the Draft EIR was published concurrently with distribution of this document.

1.1 TYPE AND PURPOSE OF THIS DRAFT EIR

This Draft EIR fulfills the requirements for a Program EIR. The CEQA Guidelines (Section 15168[h]) encourage the use of Program EIRs, citing five advantages:

- Provide a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR;
- Focus on cumulative impacts that might be slighted in a case-by-case analysis;
- Avoid continual reconsideration of recurring policy issues;

- Consider broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them;
- Reduce paperwork by encouraging the reuse of data (through tiering).

Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are typically more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the State CEQA Guidelines, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Once a Program EIR has been prepared, subsequent activities within the project area must be evaluated to determine whether an additional CEQA document needs to be prepared. However, if the Program EIR is found to adequately address subsequent project effects, additional environmental analysis is not required (Guidelines Section 15168[c]). When a Program EIR is prepared for an anticipated subsequent activity, the lead agency must incorporate feasible mitigation measures and alternatives to address any identified environmental impacts. If a subsequent activity would have effects not previously considered within the scope of the Program EIR, the Lead Agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or an EIR to address those concerns. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis.

1.2 PROJECT LOCATION

City of Tustin

Tustin is located in central Orange County, California, 12 miles inland from the Pacific Ocean, and is considered part of the greater Los Angeles metropolitan area. Tustin is located approximately two miles north of Orange County's John Wayne Airport and is transected by Interstate 5 (I-5) and State Route 55 (SR-55). The City of Tustin and the adjacent jurisdictions characterize the urbanized core of Orange County.

Specific Plan Area

The 220-acre Specific Plan area is generally located northeast of the I-5 at SR-55 interchange; and is centered around the intersection of Main Street and El Camino Real. The Specific Plan area is generally bound by I-5 to the south and SR-55 to the west. First Street generally defines the northern edge and includes parcels along the north side of First Street. Newport Avenue and parcels along the east side of Newport Avenue generally define the eastern boundary.

1.3 PROJECT DESCRIPTION SUMMARY

The proposed Specific Plan establishes the long-term vision and objectives for land use development and public improvements within Tustin's downtown. This vision is to introduce mixed uses that expands walkability through pedestrian-oriented first floor development; establish residential mixed use and multi-family development; transforming streets through pedestrian-oriented improvements; draw more patrons to Old Town by embracing its unique historic character; and maintain a commercial focus along the majority of Newport Avenue. The Specific Plan area is divided into six Development Areas (DAs), which generally reflect differences in the character of the built environment. The Specific Plan establishes permitted uses, development standards, and design criteria regulating site planning, building design, parking, architectural treatment, landscaping, and circulation improvements for each of the DAs.

The proposed Specific Plan also establishes a residential housing bank with a maximum of 887 new dwelling units (multifamily and mixed use) that would be allowed pursuant to a discretionary permit, as required by the City's municipal code. The Specific Plan has allocated the number of residential units for each DA, and allows up to 25 percent of the residential units to be transferred from one DA to another DA. The maximum number of new dwelling units within the Specific Plan would not exceed 887 units.

Table 1-1: Residential Housing Bank

Development Area (DA)	Initial Allotment of Dwelling Units	Maximum Number of Units That May Be Transferred from donating DA(s) into Receiving DA
DA-1	45	11
DA-2	92	23
DA-3	200	50
DA-4	150	38
DA-5	0	0
DA-6	400	100
Total	887	222

In addition to the residential, the proposed Specific Plan would provide for approximately 300,000 square feet of non-residential (commercial/office) space to be developed within the Specific Plan area. This would generally occur as infill development and redevelopment of existing non-residential parcels. Buildout of the proposed Specific Plan is anticipated to occur by 2035.

1.4 PROJECT OBJECTIVES

The project objectives and underlying purpose of the proposed project are derived from the DCCSP Goals and Vision Statements, as follows:

1. Bolster an economically vibrant and active downtown environment through introduction of mixed uses.
2. Draw more patrons and expand walkability through enhanced pedestrian-oriented commercial first floor development.
3. Introduce a sufficient level of high-quality, integrated residential mixed use, and focused multifamily development to invigorate Old Town Tustin.
4. Transform streets and create neighborhood connectivity through pedestrian-oriented improvements.
5. Differentiate Old Town Tustin by embracing its unique historic downtown character.
6. Maintain a commercial focus for the project area.
7. Create additional integrated public spaces to serve existing and future residents and visitors, and to provide opportunities for community events, interaction, and strengthening the area's sense of community.

1.5 SUMMARY OF ALTERNATIVES

Section 6.0, *Alternatives*, of this EIR analyzes a range of reasonable alternatives to the proposed Specific Plan. The alternatives that are analyzed in detail in Section 6.0 are summarized below.

Alternative 1: No Project/ Buildout of Existing Zoning Alternative. Under this alternative, the proposed Specific Plan would not be developed. In accordance with the CEQA Guidelines, the No Project/ Buildout of Existing Zoning Alternative will be the continuation of the existing plan, policy or operation into the future when the project is the revision of an existing land use or regulatory plan, policy or ongoing operation. Section 15126.6(e)(3)(A) of the CEQA Guidelines states that, “typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.”

This alternative evaluates the environmental effects of buildout of the Specific Plan area according to the existing General Plan and zoning designations. Because the Specific Plan area is an urban area that is generally built out, most new development would occur as adaptive reuse of existing buildings, development on existing vacant sites, and infill or re-development of existing uses at the intensity allowed by the existing zoning. The addition of residential uses and mixed residential uses within the Specific Plan area would not occur, as proposed by the project. However, the Vintage Planned Community—a 140 multi-family dwelling unit community, which was recently approved by the City and is currently under construction—would be developed. In addition, as described in Chapter 3.0, *Project Description*, the 300,000 square feet of non-residential development that is assumed by the Specific Plan consists of buildout of the existing non-residential parcels in the Specific Plan area as designated by the existing General Plan Land Use Map and Zoning Map. Because the land use and zoning designations of the non-residential parcels would not change as a result of the proposed Specific Plan, the No Project/ Buildout of Existing Zoning Alternative assumes development of 300,000 square feet of non-residential space as allowed by existing General Plan and Zoning.

Accordingly, Alternative 1: No Project/Buildout of Existing Zoning Alternative provides a comparison between the environmental impacts of the proposed Specific Plan in contrast to the result from not approving, or denying, the proposed Specific Plan. Thus, this alternative is intended to meet the requirements of CEQA Guidelines Section 15126.6(e) for evaluation of a no project alternative.

Alternative 2: Reduced Intensity Alternative. Under this alternative, a 25 percent reduction in the development of the proposed uses would occur. The proposed Specific Plan would allow for development of up to 887 dwelling units and 300,000 square feet of non-residential development through the year 2035. Under this alternative, a maximum of 665 dwelling units and 225,000 square feet of non-residential development. This alternative would allow for up to a 25 percent shift of housing units between DAs, as provided by the project, and would include all of the circulation and streetscape improvements that are proposed by the project.

Alternative 3: Limited Increase in Development Alternative. Under this alternative, a 50 percent reduction in the development of the proposed uses would occur. The proposed Specific Plan would allow for development of up to 887 dwelling units and 300,000 square feet of non-residential development through the year 2035. Under this alternative, a maximum of 444 dwelling units and 150,000 square feet of non-residential development. This alternative would allow for up to a 25 percent shift of housing units between DAs, as provided by the project, and would include all of the circulation and streetscape improvements that are proposed by the project.

1.6 SUMMARY OF IMPACTS

Table 1-2 summarizes the conclusions of the environmental analysis contained in this EIR. The level of significance of impacts after the proposed mitigation measures are applied are identified as significant and unavoidable, less than significant, and no impact. Relevant standard conditions of approval and mitigation measures are identified for all potentially significant impacts.

Table 1-2: Summary of Impacts, Mitigation Measures, and Level of Significance

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
5.1 Aesthetics				
Impact AE-1: The project would not substantially degrade the existing visual character or quality of the site and its surroundings.		Less than significant.	None required.	Less than significant.
Impact AE-2: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.		Less than significant.	None required.	Less than significant.
Cumulative		Less than significant.	None required.	Less than significant.
5.2 Air Quality				
Impact AQ-1: The project would conflict with or obstruct implementation of the applicable air quality plan.	PPP – AQ-1: Development projects shall comply with the following South Coast Air Quality District Rules: <ul style="list-style-type: none"> • Rule 401: Visible Emissions • Rule 402: Nuisance • Rule 403: Fugitive Dust • Rule 481: Spray Coating • Rule 1113: Architectural Coatings • Rule 1143: Paint Thinners and Solvents 	Significant.	Mitigation Measure AQ-1: Tier 3. The construction plans and specifications shall state that project construction that utilizes construction equipment greater than 150 horsepower (>150 HP) shall comply with EPA/CARB Tier 3 emissions standards during all construction phases and shall ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications. Mitigation Measure AQ-2: Low VOC. The construction plans and specifications shall state that project construction shall utilize “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113. Super-Compliant	Significant and Unavoidable.
Impact AQ-2: The project would violate an air quality standard or contribute substantially to an existing or projected air quality violation.		Significant.		Significant and Unavoidable.
Impact AQ-3: The project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.		Significant.		Significant and Unavoidable.

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>low VOC paints shall be no more than 10g/L of VOC. Alternatively, the applicant/developer may utilize valid construction techniques that do not require the use of architectural coatings.</p> <p>Mitigation Measure AQ-3: <u>Electricity</u>. The construction plans and specifications shall state that contractors shall use the electricity infrastructure surrounding the construction site, if available, rather than electrical generators powered by internal combustion engines.</p> <p>Mitigation Measure AQ-4: <u>Alternative Technology</u>. The construction plans and specifications shall state that contractors shall use alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment.</p> <p>Mitigation Measure AQ-5: <u>Equipment Maintenance</u>. Construction plans and specifications shall state that construction equipment be maintained in good operating condition to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer’s specification. Maintenance records shall be available at the construction site for City verification.</p> <p>Mitigation Measure AQ-6: <u>Construction Vehicle Management Plan</u>. For projects requiring construction vehicles, construction plans and specifications shall state that the applicant/developer and/or building operators shall prepare and maintain a construction vehicle management plan, to</p>	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>be made available upon request to the City of Tustin Building Division, denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include, as a minimum: idling time requirements; requiring hour meters on equipment; documenting the serial number, horsepower, age, emissions ratings, and fuel of all onsite equipment. The plan shall state that California state law requires equipment fleets to limit idling to no more than 5 minutes, and that low emission vehicles will be used. If low emission mobile construction equipment is not used, construction contractor shall provide evidence in the construction vehicle management plan that their use was investigated and found to be infeasible. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District as well as the City of Tustin.</p> <p>Mitigation Measure AQ-7: <u>Energy Usage Calculations.</u> Prior to the issuance of building permits for new development projects requiring design review, project applicants/developers shall submit plans certifying that the proposed development is designed to achieve 5 percent efficiency beyond the 2016 California Building Code Title 24 requirements to the satisfaction of the City of Tustin Building Division. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable):</p> <ul style="list-style-type: none"> • Increase in insulation such that heat 	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>transfer and thermal bridging is minimized;</p> <ul style="list-style-type: none"> • Limit air leakage through the structure and/or within the heating and cooling distribution system; • Use of energy-efficient space heating and cooling equipment; • Installation of electrical hook-ups at loading dock areas; • Installation of dual-paned or other energy efficient windows; • Use of interior and exterior energy efficient lighting that exceeds the 2016 California Title 24 Energy Efficiency performance standards; • Installation of automatic devices to turn off lights where they are not needed; • Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings; • Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors; • Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; and • Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products. <p>Mitigation Measure AQ-8: <u>Enhanced Water Conservation.</u> Prior to the issuance of building permits for new development projects requiring design review, project</p>	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>applicants/developers shall certify that the project is designed to reduce water usage by a minimum of 30 percent when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Projects shall also implement the following:</p> <ul style="list-style-type: none"> • Landscaping palette emphasizing drought tolerant plants; • Use of water-efficient irrigation techniques; and • U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads. <p>The above measures reduce water consumption, but it is understood that the list is not all-inclusive and other features that reduce water consumption also are acceptable.</p>	
<p>Impact AQ-4: The project would expose sensitive receptors to substantial pollutant concentrations.</p>		<p>Significant.</p>	<p>Mitigation Measure AQ-9: Localized Emissions. Prior to issuance of a grading permit for new development projects that are one acre or larger, the applicant/developer shall provide modeling of the regional and the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development. If the modeling shows that emissions would exceed the SCAQMD's significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD's</p>	<p>Less than significant.</p>

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>significance thresholds for those emissions.</p> <p>Mitigation Measure AQ-10: Toxic Air Contaminants: Development proposals for new residential and other sensitive land use projects (e.g., nursing homes, day care centers) in the Specific Plan area within 500 feet of major sources of toxic air contaminants ((e.g., Interstate 5, and roadways with traffic volumes over 100,000 vehicles per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Tustin Planning Division prior to design review approval. The HRA shall be prepared in accordance with policies and procedures of the SCAQMD. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM₁₀ concentrations exceed 2.5 µg/m³, PM_{2.5} concentrations exceed 2.5 µg/m³, or the appropriate noncancer hazard index exceeds 1.0, the project applicant/developer shall be required to submit an HRA that demonstrates and certifies that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:</p> <ul style="list-style-type: none"> • Air intakes located away from high volume roadways and/or truck loading zones; and • Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency 	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			rating value (MERV) filters (e.g., MERV 12 or better). • Buffering sensitive uses away from emission sources.	
Cumulative		Significant.	Mitigation Measures AQ-1 through AQ-10, listed above.	Significant and Unavoidable.
5.3 Cultural Resources				
Impact CUL-1: The project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	PPP CUL-1: The City of Tustin Cultural Resources District Residential/Commercial Design Guidelines shall apply to all projects within the Specific Plan area. PPP CUL-2: The Certificate of Appropriateness process applies to all projects, when appropriate, within the Specific Plan, as outlined in Tustin City Code, Article 9, Chapter 2, Part 5, Section 9252.	Less Than Significant.	None required.	Less than significant.
Impact CUL-2: The project would cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.		Significant.	Mitigation Measure CUL-1: Prior to issuance of a grading permit for grading of 2 feet or more in depth below the natural or existing grade, the applicant/developer shall provide written evidence to the City Planning Division that a qualified archaeologist has been retained by the applicant/developer to respond on an as-needed basis to address unanticipated archaeological discoveries and any archaeological requirements (e.g., conditions of approval) that are applicable to the project. The applicant/developer is encouraged to conduct a field meeting prior to the start of construction activity with all construction supervisors to train staff to identify potential archaeological resources. In the event that archaeological materials are encountered during ground-	Less than significant.

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.</p> <p>If discovered archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that confirmed resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery, reburial/relocation, deposit at a local museum that accepts such resources or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.</p> <p><u>If discovered materials are found not to be significant archaeological resources but may be considered a Tribal Cultural Resource or objects with cultural value to a</u></p>	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<u>California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.</u>	
Cumulative	See PPP CUL-1 and PPP CUL-2 text above.	Significant.	Implement Mitigation Measures CUL-1	Less than significant.
5.4 Greenhouse Gas Emissions				
Impact GHG-1: The project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	See PPP AQ-1 text above.	Significant.	Mitigation Measure AQ-7: See mitigation measure text above. Mitigation Measure AQ-8: See mitigation measure text above.	Significant and Unavoidable.
Impact GHG-2: The project would conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	See PPP AQ-1 text above.	Significant		Significant and Unavoidable.
Cumulative		Significant		Significant and Unavoidable.
5.5 Land Use and Planning				
Impact LU-1: The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.		No impact.	None required.	No impact.
Cumulative		No impact.	None required.	No impact.
5.6 Noise				
Impact N-1: The project would not	PPP NOI-1: Development projects	Less Than Significant.	None required.	Less than significant.

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>expose persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p>	<p>are required to meet or exceed the 65 dBA CNEL exterior noise level standard, as defined by Table N-3 of the City of Tustin General Plan Noise Element, and the 45 dBA CNEL interior noise level standard of the City of Tustin General Plan Noise Element, and by Title 24, Part 2, of the California Building Code.</p> <p>PPP NOI-2: Construction plans shall include a note that construction activities shall only occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays; with no activity allowed on Sundays and Federal holidays unless, permitted outside of those limitations in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted, pursuant to Article 4, Chapter 6, Section 4617 of the Tustin City Code.</p>			

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>Impact N-2: The project would expose persons to or generate excessive groundborne vibration or groundborne noise levels.</p>		<p>Significant.</p>	<p>Mitigation Measure NOI-1: Prior to approval of a demolition permit, grading plans, and/or issuance of building permits for construction activities within 25 feet of existing residential structures or occupied noise sensitive uses that require the use of large bulldozers, large loaded trucks, jackhammers, pile drivers, and/or caisson drills, the City of Tustin Building Division shall ensure that construction plans and specifications state that the use of such vibratory equipment shall be prohibited within 25 feet of existing residential structures or occupied noise sensitive uses. Instead, small rubber-tired bulldozers shall be used within this area during demolition and/or grading operations to reduce vibration effects. If the use of large bulldozers, large loaded trucks, jackhammers, pile drivers, and/or caisson drills is necessary within 25 feet of existing residential structures or occupied noise sensitive uses, a site-specific analysis shall be prepared and submitted to the City of Tustin demonstrating that construction activity would not result in vibration at sensitive receptors that is more than the Caltrans thresholds for annoyance (0.04 in/sec PPV at receiver locations) and damage (per the Transportation and Construction Vibration Guidance Manual, September 2013, Tables 19 & 20 by building type).</p>	<p>Less than significant.</p>
<p>Impact N-3: The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity or above levels existing without the project.</p>		<p>Less than significant.</p>	<p>None required.</p>	<p>Less than significant.</p>

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>Impact N-4: The project would cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.</p>	<p>PPP NOI-1, listed previously.</p>	<p>Significant.</p>	<p>Mitigation Measure NOI-2: Prior to approval of grading plans the City of Tustin Building Division shall ensure that plans include the following measures to reduce construction related noise:</p> <ul style="list-style-type: none"> • Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards, and all stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive use nearest the construction activity. • The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receiver nearest to the construction activity. • The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment by TCC Article 4, Chapter 6, Section 4617. The contractor shall design delivery routes to minimize the exposure of sensitive land uses to delivery truck noise. • If construction activity within 27 feet of occupied noise sensitive uses is proposed, the construction contractor shall ensure that construction noise levels at nearby sensitive land uses do not exceed 85 dBA Leq, and that construction-related noise level increases are less than 12 dBA Leq above the existing ambient noise levels, by one or more of the following methods: <ol style="list-style-type: none"> 1. Install temporary construction noise barriers within the line of site of 	<p>Less than significant.</p>

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>occupied sensitive uses for the duration of construction activities that could generate noise exceeding 85 dBA Leq. The noise control barrier(s) must provide a solid face from top to bottom and shall:</p> <ol style="list-style-type: none"> a. Provide a minimum transmission loss of 20 dBA and be constructed with an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts; b. Be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired; and c. Be removed and the site appropriately restored upon the conclusion of the construction activity. <p>2. Install sound dampening mats or blankets to the engine compartments of heavy mobile equipment (e.g. graders, dozers, heavy trucks). The dampening materials must be capable of a minimum 5-dBA noise reduction, must be installed prior to the use of heavy mobile construction equipment, and must remain installed for the duration of the equipment use.</p>	

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Cumulative		Less than significant.	None required.	Less than significant
5.7 Population and Housing				
Impact P-1: The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).		Less than significant.	None required.	Less than significant.
Cumulative		Less than significant.	None required.	Less than significant.
5.8 Recreation				
Impact REC-1: Implementation of the specific plan would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Impact REC-2: Implementation of the specific plan would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	PPP REC-1: Prior to the approval of the final map for subdivisions under the Specific Plan, applicants shall comply with the City of Tustin Subdivision Code (Article 9, Chapter 3, Part 3, Section 9331 of the Tustin City Code). Developers may dedicate land or pay a fee in lieu or a combination of both. The value of the amount of such fee shall be based upon the fair market value of the amount of land which would otherwise be required for dedication. Dedication of land may be required by the City for a condominium, stock cooperative, or community apartment project which exceeds 50 dwelling units.	Significant.	Mitigation Measure REC-1: For residential projects not subject to City of Tustin Subdivision Code (Article 9, Chapter 3, Part 3, Section 9331 of the Tustin City Code), applicants shall pay a parkland development fee to the City of Tustin prior to the issuance of building permits. The value of the amount of such fee shall be based upon the fair market value of the amount of land which would otherwise be required for dedication.	Less than significant.
Cumulative		Significant.	Mitigation Measure REC-1, listed previously.	Less than significant.
5.9 Transportation and Circulation				
Impact TR-1: The project would conflict with an applicable plan, ordinance or policy establishing measures of		Significant.	Mitigation Measure TR-1: The City of Tustin will cooperate with Caltrans when Caltrans moves forward with its planned improvements to the intersection of	Unless and until Caltrans implements the traffic signal intersection of

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.</p> <p>Impact TR-2: The project would conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.</p>			<p>Newport Avenue at the I-5 northbound on-ramp. Caltrans' improvements include installation of a traffic signal per the recommendations in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015.</p> <p>Mitigation Measure TR-2: The City of Tustin shall monitor the intersection operation at Newport Avenue and El Camino Real as development applications are received and shall provide the following improvements, or equivalent, once the intersection LOS becomes deficient: Restripe the eastbound through lane to a shared through/right-turn lane so the eastbound approach would consist of one left-turn lane, one shared through/right-turn lane, and one right-turn lane.</p>	<p>Newport Avenue at the I-5 northbound on-ramp impacts would remain: Significant and Unavoidable.</p>
<p>Impact TR-3: The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.</p>		No impact.	None required.	No impact.
<p>Cumulative</p>		Significant.	Mitigation Measures TR-1 and TR-2, listed previously.	Significant and Unavoidable.
<p>5.10 Tribal Cultural Resources</p>				
<p>Impact TCR-1: The project would cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public</p>		Significant.	Mitigation Measure CUL-1, listed previously.	Less than significant.

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Resources Code section 5020.1(k).				
Impact TCR-2: The project would cause a substantial adverse change in the significance of a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, that considers the significance of the resource to a California Native American tribe.		Significant.	Mitigation Measure CUL-1, listed previously.	Less than significant.
Cumulative		Significant.	Mitigation Measure CUL-1, listed previously.	Less than significant.
5.11 Utilities and Service Systems				
Impact WW-1: The project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.		Less than significant.	None required.	Less than significant.
Impact WW-2: The project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.		Less than significant.	None required.	Less than significant.
Impact WW-3: The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.		Less than significant.	None required.	Less than significant.
Impact W-1: The project would not require or result in the construction of new water facilities, or expansion of existing facilities, the construction of		Less than significant.	None required.	Less than significant.

Impact	Applicable Standard Conditions or Plan, Program, Policy	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
which could cause significant environmental effects.				
Impact W-2: There are sufficient water supplies available to serve the project from existing entitlements and resources, and no new or expanded entitlements are needed.		Less than significant.	None required.	Less than significant.
Cumulative		Less than significant.	None required.	Less than significant.
5.12 Energy				
Impact E-1: The project would not use large amounts of energy or fuel, or consume energy or fuel in a wasteful manner.		Less than significant.	None required.	Less than significant.
Cumulative		Less than significant.	None required.	Less than significant.

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2. Introduction

This Draft Program Environmental Impact Report (Draft EIR) has been prepared by the Lead Agency in conformance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.). This EIR has been prepared to identify, analyze, and mitigate the significant environmental effects of development allowed in the proposed Specific Plan. The project, as articulated in Section 3, *Project Description*, involves development of residences, non-residential uses, and other improvements in the proposed Specific Plan area in conformance with the General Plan land use and zoning designations of the area, as amended. The Specific Plan also includes development standards and design criteria to provide for unified and coordinated development as the Specific Plan builds out.

Pursuant to CEQA Section 21067, the lead agency means “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.” The City of Tustin has the principal responsibility for approval of the proposed Downtown Commercial Core Specific Plan (DCCSP) and related General Plan and zoning approvals. For this reason, the City of Tustin is the CEQA Lead Agency for this project.

CEQA requires each EIR to reflect the independent judgment of the Lead Agency, including but not limited to the thresholds of significance used to analyze project impacts, analyses and conclusions regarding the level of significance of impacts both before and after mitigation, and the mitigation measures to be implemented to avoid or reduce project-related impacts. In preparing this EIR, the City of Tustin has employed CEQA and environmental technical specialists. The analyses and conclusions set forth in this EIR reflect the independent judgment of the City as Lead Agency.

2.1 PURPOSE OF AN EIR

CEQA requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. Pursuant to the provisions of CEQA Guidelines Section 15121 (a), this EIR is intended as an informational document to inform public agency decision makers and the general public of the significant environmental effects of the proposed Specific Plan, identify possible ways to avoid or minimize those significant effects, and describe reasonable alternatives to the project that might avoid or lessen significant environmental effects. Thus, this EIR is intended to aid the review and decision-making process.

State CEQA Guidelines provide the following information regarding the purpose of an EIR:

- **Project Information and Environmental Effects.** An EIR is an informational document that will inform public agency decision-makers and the public generally of the significant environmental effect(s) of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency (CEQA Guidelines Section 15121(a)).
- **Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to enable decision makers to make an intelligent decision that takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for

perfection but for adequacy, completeness, and a good faith effort at full disclosure (CEQA Guidelines Section 15151).

As a public disclosure document, the purpose of an EIR is not to recommend either approval or denial of a project, but to provide information regarding the physical environmental changes that would result from an action being considered by a public agency to aid in the agency's decision-making process.

2.2 EIR PROCESS

Notice of Preparation/Initial Study

Pursuant to the requirements of CEQA, the City of Tustin, as Lead Agency, prepared a Notice of Preparation (NOP)/Initial Study for the proposed Specific Plan Project, and was distributed on August 1, 2016 for a 30-day public review and comment period that ended on August 31, 2016. The NOP/Initial Study requested members of the public and public agencies to provide input on the types of environmental analyses that should be included in the EIR being prepared. Comments received on the NOP/Initial Study are included in Appendix A and summarized in Table 2-1, which also includes a reference to the EIR section(s) in which issues are addressed.

Table 2-1: Summary of NOP/Initial Study Comment Letters

Comment Letter and Comment	Relevant EIR Section
California Office of Planning and Research, August 1, 2016	
The letter is a notice that provides a copy of the Notice of Preparation (NOP) and a list of agencies that were distributed copies for review and comment. The letter also states that the NOP public review period begins on August 1, 2016 and ends on August 31, 2016.	1.0 Introduction
Rancho Santiago Community College District, August 1, 2016	
The letter states that the District has facilities in the city but not within the project area and had no comments; and would like to be notified of additional project activities.	1.0 Introduction
California Native American Heritage Commission, August 4, 2016	
This letter provides statutory requirements related to Native American resources and Tribal Consultation. In addition, the letter provides recommendations for the assessment of cultural resources.	5.3 Cultural Resources; 5.10 Tribal Cultural Resources
South Coast Air Quality Management District, August 4, 2016	
The letter references the SCAQMD's CEQA Air Quality Handbook, and recommends using the methodologies therein to evaluate impacts of the Specific Plan, including use of the CalEEMod model, recommended regional significance thresholds, and localized significance thresholds or dispersion modeling. In addition, the letter comments that an evaluation related to locating sensitive receptors near freeways is needed. Copies of the analysis including technical documents showing emissions calculations, assumptions and modeling files are requested. A mobile health risk assessment is recommended, as is use of the California Air Resources Board (CARB) land use compatibility guidance. Impacts associated with implementing mitigation measures are also recommended.	5.2 Air Quality
Orange County Fire Authority, August 11, 2016	
The letter states that the Orange County Fire Authority provides services to the project area and had no comments.	5.13 Mandatory Findings
Tony Coco, August 14, 2016	
These comments relate to operational noise and land use compatibility, and also suggest routing heavy trucks around the study area to diminish noise and pollution factors.	5.2 Air Quality 5.5 Land Use Planning 5.6 Noise

Comment Letter and Comment	Relevant EIR Section
	5.9 Transportation and Circulation
California Department of Transportation, August 23, 2016	
This letter requests that the Traffic Impact Analysis (TIA) use the Caltrans Guide for the Preparation of Traffic Studies and the Highway Capacity Manual (HCM) 2010 methodology. The comment also states that Caltrans fosters improved mobility and reduced dependence on single-occupant vehicles. In addition, the letter states that an encroachment permit is needed for any work within the State Highway rights of way, and requests that the department be kept informed of the project.	5.9 Transportation and Circulation
City of Irvine, August 23, 2016	
This letter states that the traffic impact analysis for the proposed project should include the intersections along Newport Avenue between Irvine Boulevard and the I-5 Freeway on and off-ramps, and the intersection of Red Hill Avenue and Irvine Boulevard. In addition, the letter requests opportunity to review the Draft EIR.	5.9 Transportation and Circulation
Orange County Public Works, August 31, 2016	
This letter states that the project has the potential to impact Orange County Flood Control District facilities due to increased stormwater runoff and that the City of Tustin is responsible for reviewing and approving hydrology analyses for future developments. The letter also inquires about impacts to an off-road bikeway along Newport Avenue, and suggests four traffic intersections for further analysis in the traffic impact analysis.	5.9 Transportation and Circulation 5.11 Utilities and Service Systems Initial Study (DEIR Appendix A)
Southern California Gas Company, September 8, 2016	
This letter states that the Southern California Gas Company has facilities in the project area, which could be extended to serve the project without any significant impact on the environment, pursuant to the existing laws and regulations.	1.0 Introduction Initial Study (DEIR Appendix A)

Public Scoping Meeting

Pursuant to Section 15082 (c) (1) of State CEQA Guidelines, the City of Tustin hosted a public scoping meeting for members of the public and public agencies to provide input as to the scope and content of the environmental information and analysis to be included in the EIR for the proposed Specific Plan. The scoping meeting was held on August 16, 2016 at 3:00 p.m. in the City of Tustin Library, located at 345 E. Main Street. A summary of the issues that members of the public raised at the scoping meeting is presented below.

- Water availability
- Parking
- Pedestrian access
- Recreation and Parks

Scope of this EIR

Impacts Found Not to Be Significant. Based upon the Initial Study, the City of Tustin determined that an EIR should be prepared for the proposed Specific Plan. The scope of the EIR was determined based upon the Initial Study, and comments received in response to the NOP/Initial Study, as previously listed. Pursuant to Sections 15126.2 and 15126.4 of the State CEQA Guidelines, this EIR will identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

In addition, CEQA Guidelines Section 15126.2(a) states that “[a]n EIR shall identify and focus on the significant effects on the environment”, and CEQA Guidelines Section 15063(a) allows the use of an Initial Study to document project effects that are less than significant. Furthermore, CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible effects of a project were determined not to be significant, and were therefore not discussed in detail in the EIR.

The NOP/Initial Study (included as Appendix A) prepared for the proposed Specific Plan project determined that the environmental issues listed below would have no impact or have a less than significant impact. With exception of aesthetics impacts a) and c), they have not been further analyzed in the EIR. Refer to Appendix A of this EIR for a detailed explanation of the basis of these conclusions.

Table 2-2 lists the environmental issues per Appendix G of State CEQA Guidelines that were found to result in no impacts or less than significant impacts from implementation of the proposed Specific Plan.

Table 2-2: Impacts Found Not to Be Significant

Environmental Issue	Initial Study Determination
Aesthetics. Would the project:	
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway?	No Impact
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	Less than Significant Impact*
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant Impact *
Agriculture and Forest Resources. Would the project:	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	No Impact
d) Result in loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	No Impact
Air Quality. Would the project:	
e) Create objectionable odors affecting a substantial number of people?	No Impact
Biological Resources. Would the project:	
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact

Environmental Issue	Initial Study Determination
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact
Cultural Resources. Would the project:	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	Less than Significant Impact
Geology and Soils. Would the project:	
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	Less than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	Less than Significant Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less than Significant Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	Less than Significant Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
Hazards and Hazardous Materials. Would the project:	
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than Significant Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	No Impact
Hydrology and Water Quality. Would the project:	
a) Violate any water quality standards or waste discharge requirements?	Less than Significant Impact

Environmental Issue	Initial Study Determination
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	Less than Significant Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Less than Significant Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	No Impact
f) Otherwise substantially degrade water quality?	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Less than Significant Impact
j) Inundation by seiche, tsunami, or mudflow?	No Impact
Land Use and Planning. Would the project:	
a) Physically divide an established community?	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	No Impact
Mineral Resources. Would the project:	
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact
Mineral Resources. Would the project:	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	No Impact
Noise	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	No Impact
Population and Housing. Would the project:	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	No Impact
Public Services. Would the project:	

Environmental Issue	Initial Study Determination
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	
Fire Protection?	Less than Significant Impact
Police Protection?	Less than Significant Impact
Schools	Less than Significant Impact
Parks?	Less than Significant Impact
Other Public Facilities?	Less than Significant Impact
Recreation. Would the project:	
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant Impact*
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less than Significant Impact*
Transportation and Traffic. Would the project:	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
e) Result in inadequate emergency access?	Less than Significant Impact
Utilities and Service Systems. Would the project:	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Less than Significant Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	Less than Significant Impact

*These impact areas were carried forward after the NOP was circulated for public review, and were evaluated in EIR Section 5.1, *Aesthetics* and Section 5.8, *Recreation*.

Impacts Found to Be Potentially Significant. Thirteen environmental factors have been identified as potentially significant impacts if the proposed Specific Plan is implemented. Each of the following factors are described and evaluated in Section 5.0:

- Aesthetics
- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise
- Population and Housing
- Recreation
- Transportation and Circulation
- Tribal Cultural Resources
- Utilities and Service Systems
- Energy Resources
- Mandatory Findings of Significance

Public Review of the Draft EIR

The City of Tustin filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that this EIR has been completed and is available for review. A Notice of

Availability of the EIR was published concurrently with distribution of this document. The EIR is being circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. During the 45-day review period, the Draft EIR will be available for public review at the City's website (<http://www.tustinca.org/depts/cd/planningupdate.asp>) and the following location:

City of Tustin Planning Dept.
300 Centennial Way
Tustin, CA 92780

Written comments related to environmental issues in the Draft EIR should be addressed to:

Dana L. Ogdon, AICP, Assistant Director of Community Development
City of Tustin Community Development
300 Centennial Way
Tustin, CA 92780
Email: dogdon@tustinca.org

Final EIR

Upon completion of the 45-day review period, written responses to all comments related to the environmental issues in the Draft EIR will be prepared and incorporated into a Final EIR. The written responses to comments will be made available at least 10 days prior to the public hearing at which the certification of the Final EIR will be considered. These comments, and their responses, will be included in the Final EIR for consideration by the City, as well as other responsible agencies per CEQA. The Final EIR may also contain corrections and additions to the Draft EIR, and other information relevant to the environmental issues associated with the project. The Final EIR will be available for public review prior to its certification by the City. Notice of the availability of the Final EIR will be sent to all who responded to the NOP.

2.3 ORGANIZATION OF THIS DRAFT EIR

The Draft EIR is organized into the following Chapters. To help the reader locate information of interest, a brief summary of the contents of each chapter of this Draft EIR is provided.

- **Chapter 1 Executive Summary:** This section provides a brief summary of the Specific Plan area, the proposed project, and alternatives. The section also provides a summary of environmental impacts and mitigation measures that lists each identified environmental impact, applicable project design features, proposed mitigation measure(s) (if any), and the level of significance after implementation of each mitigation measure. The level of significance after implementation of the proposed mitigation measure(s) will be less than significant, or significant and unavoidable.
- **Chapter 2 Introduction:** This section provides an overview of the purpose and use of the EIR, the scope of this EIR, a summary of the legal authority for this EIR, a summary of the environmental review process, and the general format of the document.
- **Chapter 3 Project Description:** This section provides a detailed description of the proposed Specific Plan project, its objectives, and a list of project-related discretionary actions.
- **Chapter 4 Environmental Setting:** This section provides a discussion of the setting (existing conditions) of the Specific Plan area.

- **Chapter 5 Environmental Impact Analysis:** This section includes a summary of adopted regulations that the project would be required to comply with, which would reduce potential adverse impacts; the environmental impact evaluations, including potential cumulative impacts that could result from the proposed Specific Plan; any related project design features; standard conditions and plans, policies, and programs that could reduce potential impacts; and the mitigation measures that would reduce or eliminate the adverse impacts identified. Impacts that cannot be mitigated to less than significant are identified as significant and unavoidable.
- **Chapter 6 Alternatives:** This section describes and analyzes a reasonable range of alternatives to the proposed Specific Plan project. The CEQA-mandated No Project Alternative is included along with alternatives that would reduce one or more significant effects of the proposed Specific Plan.
- **Chapter 7 EIR Preparers and Persons Contacted:** This section lists authors of the Draft EIR and City staff that assisted with the preparation of this document.

2.4 INCORPORATION BY REFERENCE

In accordance with Section 15150 of the CEQA Guidelines and to reduce the size of the report, the following documents are hereby incorporated by reference into this EIR and are available for public review on the City's website (<http://www.tustinca.org>) and at the City of Tustin Community Development Department, 300 Centennial Way, Tustin, CA 92780. A brief summary of the scope and content of these documents is provided below.

City of Tustin General Plan: The most recent update to the City's General Plan was the amendment to the Housing Element, which was adopted in 2013. The General Plan serves as the blueprint for future growth and development. As a blueprint for the future, the plan contains policies and programs designed to provide decision makers with a basis for all land use related decisions. The General Plan incorporates all required elements as follows: Land Use, Housing, Conservation/Open Space/Recreation, Noise, Circulation, Public Safety and a locally mandated element, Growth Management.

Tustin City Code: The Tustin City Code implements federal and state planning, zoning, development, subdivision, and environmental laws; and guides the orderly development of the City in a manner that promotes and protects the public health, safety, comfort, convenience, prosperity, and welfare of its inhabitants. The Zoning Code is included as Title 9, Chapter 2 of the Tustin City Code, and guides the land uses, in compliance with General Plan goals, objectives, and policies. The Zoning Code and Tustin City Code are utilized and cited throughout this document as regulations governing development and land use activities within the City.

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3. Project Description

3.1 INTRODUCTION

The proposed Tustin Downtown Commercial Core Specific Plan (“DCCSP” or “Specific Plan”) is a City-initiated planning and regulatory framework document that has been prepared to provide a clear vision for development within the 220-acre Downtown Commercial Core (DCC) area. The proposed DCCSP has been developed with the overarching intent to preserve and enhance the area as a vital, pedestrian-friendly, and attractive commercial core and mixed-use enclave. The DCCSP would guide future development of the downtown area to generate a walkable environment that would preserve the historic charm of Old Town and spur transformation of surrounding areas into an attractive, lively, and economically healthy commercial and mixed-use core where people can live, work, shop, dine, and relax in a unique pedestrian friendly atmosphere.

Opportunities exist within the area covered by the Specific Plan to allow significant potential for infill development and adaptive reuse of existing under-utilized structures to better serve the downtown area and generate new investment. The DCCSP provides development regulations, design criteria, and strategies to implement the objectives listed below.

3.2 STATEMENT OF PROJECT OBJECTIVES

The following identifies the Lead Agency’s project objectives, including the underlying purpose of the project, pursuant to State CEQA Guidelines Section 15124(b), which requires an EIR to include a “statement of objectives sought by the proposed project.” As noted in CEQA Guidelines Section 15124(b), a “clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings.”

Project Objectives

The project objectives and underlying purpose of the proposed project are derived from the DCCSP Goals and Vision Statements, as follows:

1. Bolster an economically vibrant and active downtown environment through introduction of mixed uses.
2. Draw more patrons and expand walkability through enhanced pedestrian-oriented commercial first floor development.
3. Introduce a sufficient level of high-quality, integrated residential mixed use, and focused multifamily development to invigorate Old Town Tustin.
4. Transform streets and create neighborhood connectivity through pedestrian-oriented improvements.
5. Differentiate Old Town Tustin by embracing its unique historic downtown character.
6. Maintain a commercial focus for the project area.
7. Create additional integrated public spaces to serve existing and future residents and visitors, and to provide opportunities for community events, interaction, and strengthening the area’s sense of community.

3.3 PROJECT LOCATION AND PLAN AREA CHARACTERISTICS

City of Tustin

Tustin is located in central Orange County, California, 12 miles inland from the Pacific Ocean, and is considered part of the greater Los Angeles metropolitan area. Tustin is located approximately two miles north of Orange County's John Wayne Airport and is transected by Interstate 5 (I-5) and State Route 55 (SR-55). The City of Tustin and the adjacent jurisdictions characterize the urbanized core of Orange County.

Specific Plan Area

The Specific Plan area is within the City of Tustin, Orange County, California. See Figure 3-1, *Regional Vicinity Map*. The 220-acre Specific Plan area is generally located northeast of the I-5 at the SR-55 interchange; and is centered around the intersection of Main Street and El Camino Real. The Planning Area is generally bound by I-5 to the south and SR-55 to the west. First Street generally defines the northern edge of the Planning Area, and includes parcels along the north side of First Street. Newport Avenue and parcels along the east side of Newport Avenue generally define the eastern boundary. The Specific Plan area excludes two residential neighborhoods located along Prebble Drive/E. Second Street and Ambrose Lane/Platt Way, as shown in Figure 3-2, *Specific Plan Area Boundary Map*.

In addition, as shown on Figure 3-2, the Specific Plan area consists of six Development Areas (DA's), with DA-6 split into three subareas (6A, 6B, 6C). The Development Areas are based upon the character and land uses of the existing built environment, and the planned uses within the DCCSP.

Existing General Plan Land Use Designations

The majority of the Specific Plan area is currently designated with the land uses PCCB (Planned Community Commercial/Business) and OTC (Old Town Commercial), as adopted in the 2013 Tustin General Plan. The remainder of the Specific Plan area includes the land use designations MHP (Mobile Home Park), PO (Professional Office), CC (Community Commercial), I (Industrial), and PI (Public and Institutional). The existing land uses are shown in Figure 3-3, *Existing Land Use Plan*, and a description of the existing land use categories is provided in Table 3-1, *Existing Land Use Categories*.

Table 3-1: Existing Land Use Categories

Categories	Land Use Designation Summary Description
CC (Community Commercial)	Includes retail, professional office, and service-oriented business activities serving a community-wide area and population.
I (Industrial)	A mix of industrial and office uses such as wholesale businesses, light manufacturing, storage, distribution and sales, research and development uses.
MHP (Mobile Home Park)	Mobile Home Park development that allows up to 10 dwelling units per acre with an average of 2.24 persons per dwelling unit.
OTC (Old Town Commercial)	Includes retail, professional office, and service-oriented business activities serving Old Town and surrounding areas. (May also include high density residential).

Categories	Land Use Designation Summary Description
PCCB (Planned Community Commercial/Business)	Community commercial, professional office, and industrial land uses.
PI (Public and Institutional)	Public and private uses such as schools, churches, City Hall, flood control channels, reservoirs, communication, utility substations, and recreation/open spaces including such uses as parks, golf courses, and designated open space.
PO (Professional Office)	Primarily single tenant or multi-tenant offices that include legal and medical services, financial institutions, corporate and government offices, and other supporting uses.

Existing Zoning Designations

The Specific Plan area currently has the following zoning designations: SP10 (First Street Specific Plan), PI (Public and Institutional), C2 (Central Commercial), C1 (Retail Commercial), CG (General Commercial), PC COM (Planned Community Commercial), PM (Planned Industrial), MHP (Mobile Home Park), PC RES (Planned Community Residential), and PR (Professional). Figure 3-4, *Existing Zoning Map*, depicts the existing zoning designations.

Existing Overlay Districts

First Street Specific Plan

The First Street Specific Plan (SP10) area is located within the Specific Plan area. The primary intent of the First Street Specific Plan is to continue commercial retail, service, and office uses, including some commercial mixed-use projects. Implementation of the project would include a rescission of the First Street Specific Plan, and replacement of its regulations with those of the proposed Specific Plan.

Cultural Resources District

Residential Guidelines. The Cultural Resources District (CRD) Residential Design Guidelines apply to new residential projects or modifications to existing historical residential homes in the CRD. There are some designated cultural resources located outside the CRD but within the Specific Plan boundaries for which these design guidelines would be applicable. The CRD boundary and its relationship to the Specific Plan area boundary is shown in Figure 3-5, *Cultural Resources District Boundary*.

Commercial Design Guidelines. Similar to the CRD Residential Design Guidelines, the CRD Commercial Design Guidelines apply to new commercial projects or modifications to existing historical commercial buildings. There are some designated cultural resources located outside the CRD but within the Specific Plan boundaries for which these design guidelines would be applicable.

Parking Overlay District

The City of Tustin has established parking code requirements for off-street parking, as well as a Parking Overlay District that allows the City to offer modification of certain off-street parking requirements under certain circumstances. The existing parking overlay district boundaries, and their relationship to the Specific Plan boundaries, are shown in Figure 3-6: *Parking Overlay District*.

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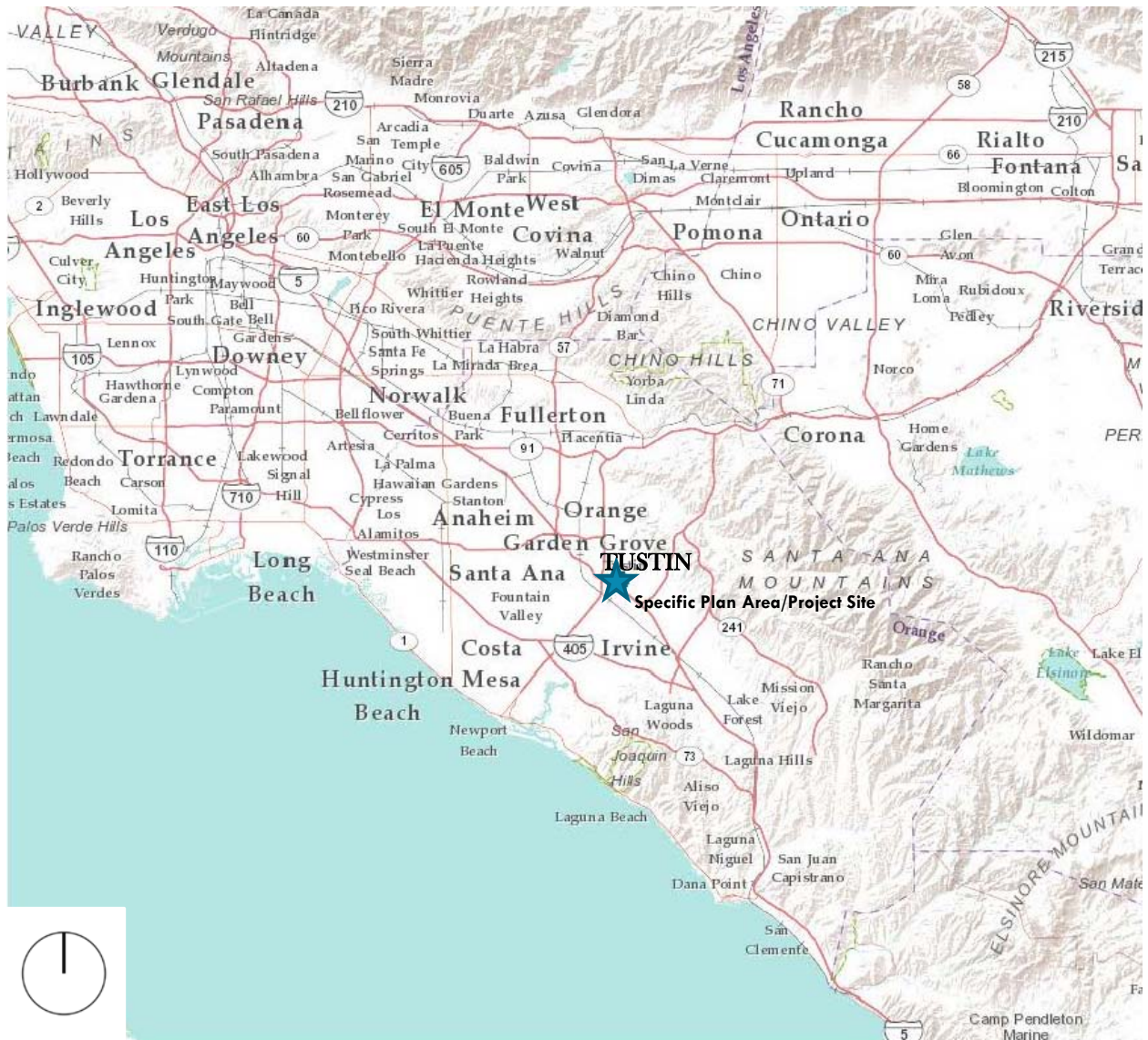


Figure 3-1: Regional Vicinity Map

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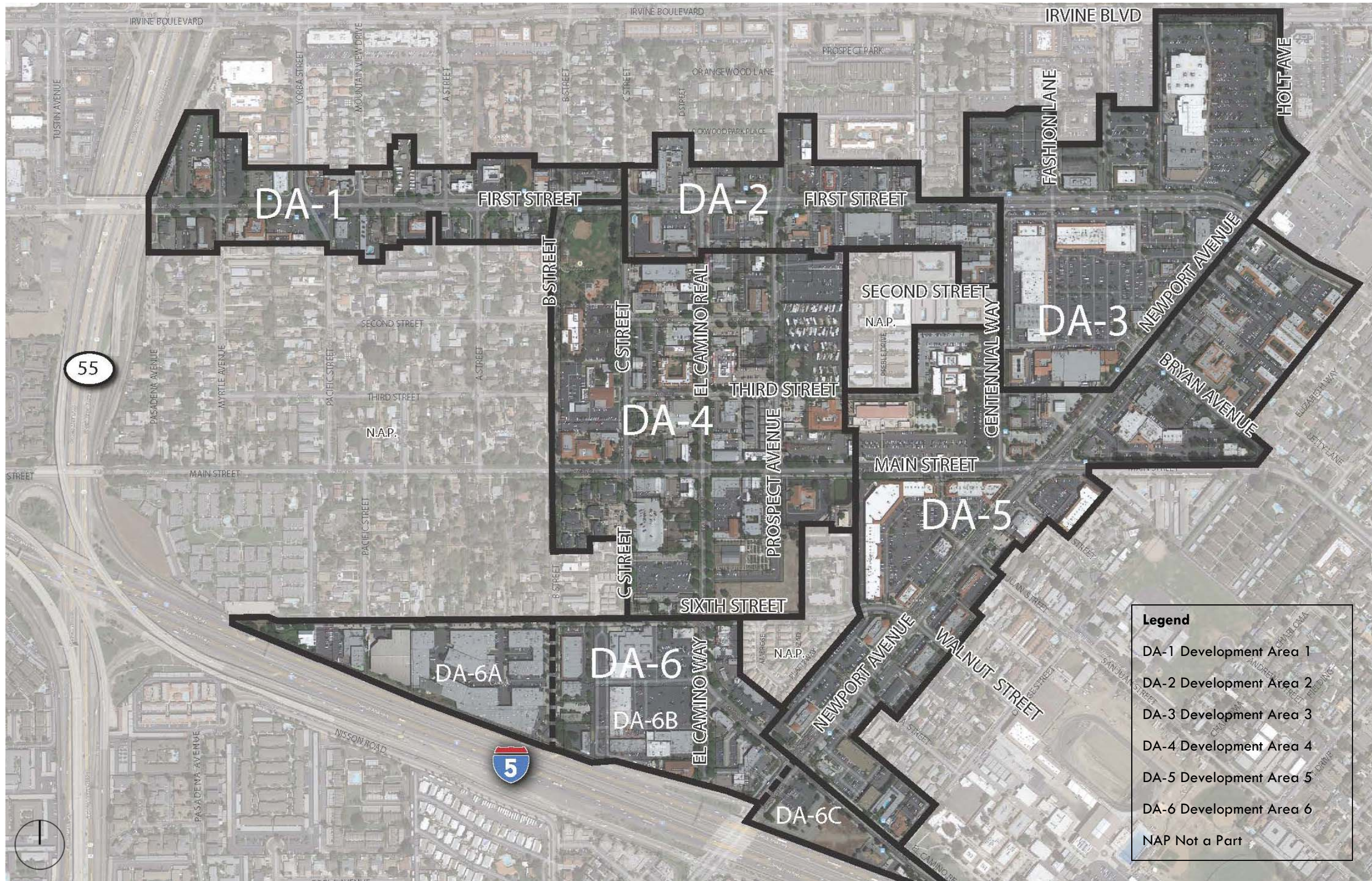


Figure 3-2: Specific Plan Area Boundary Map

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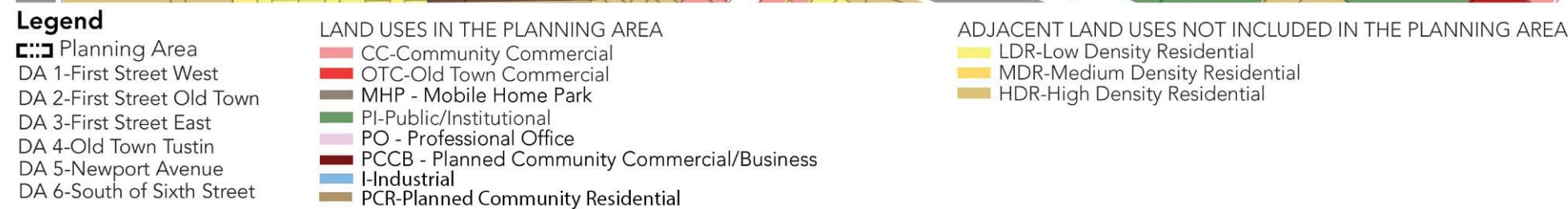
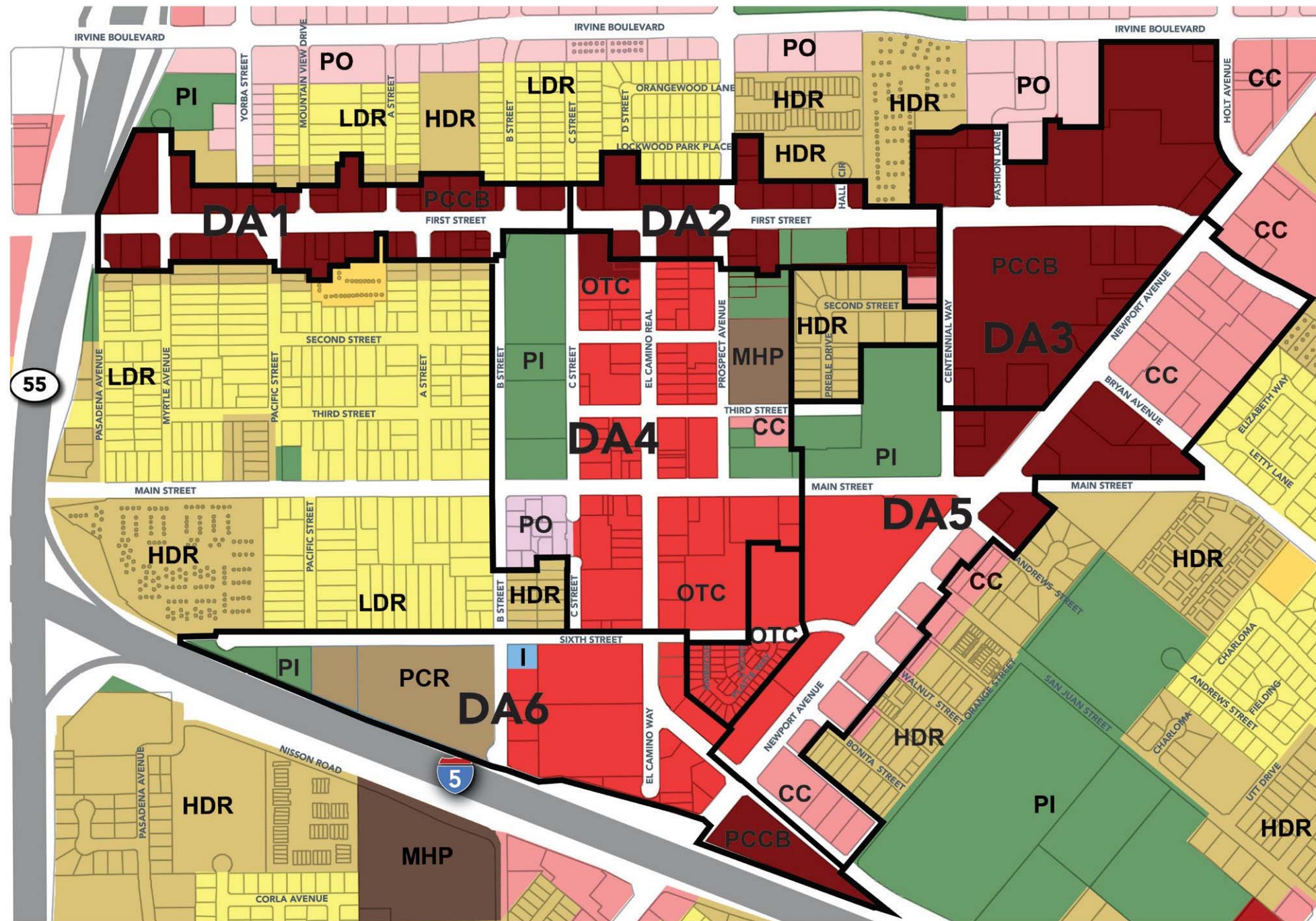


Figure 3-3: Existing Land Use Plan

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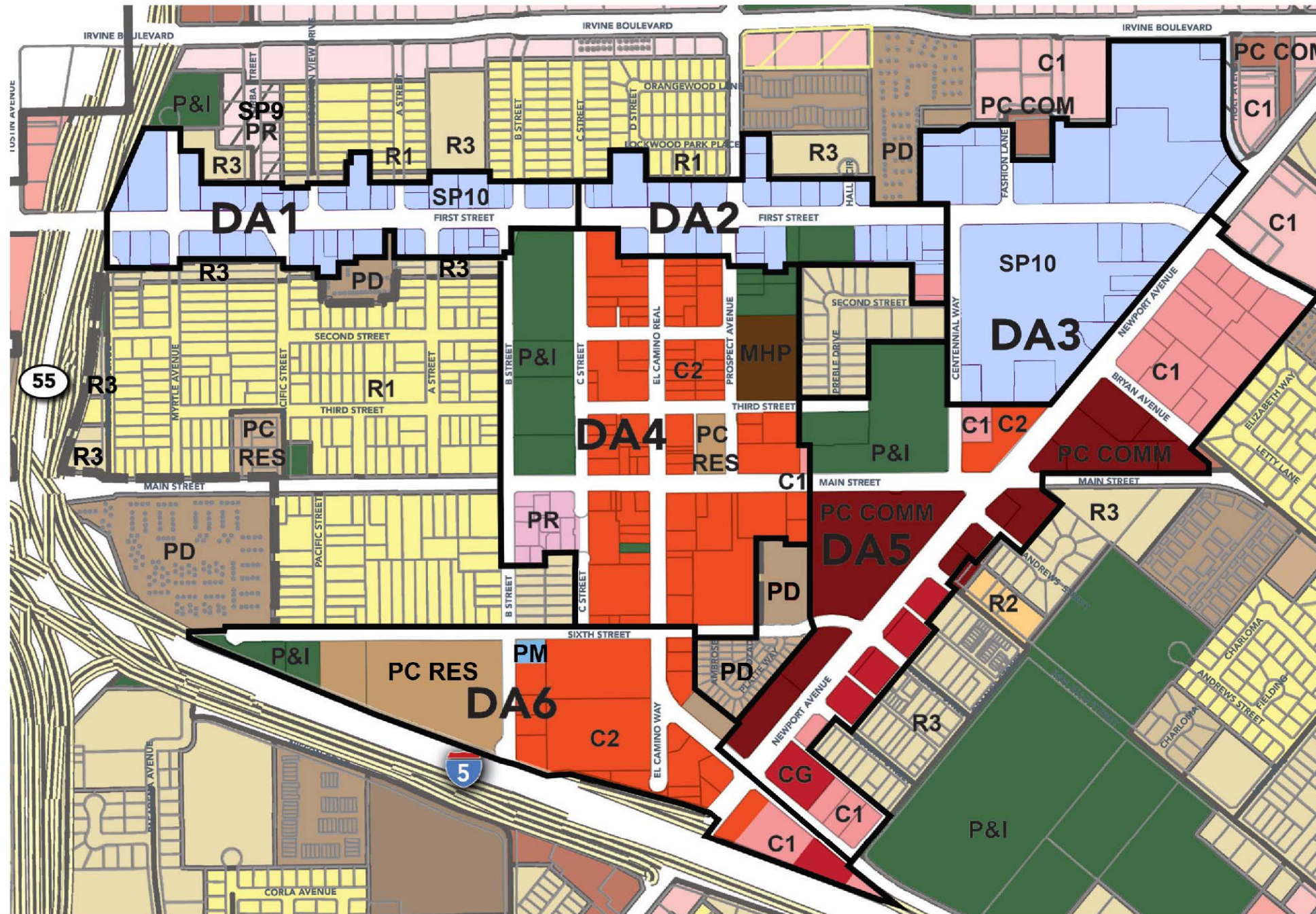


Figure 3-4: Existing Zoning Map

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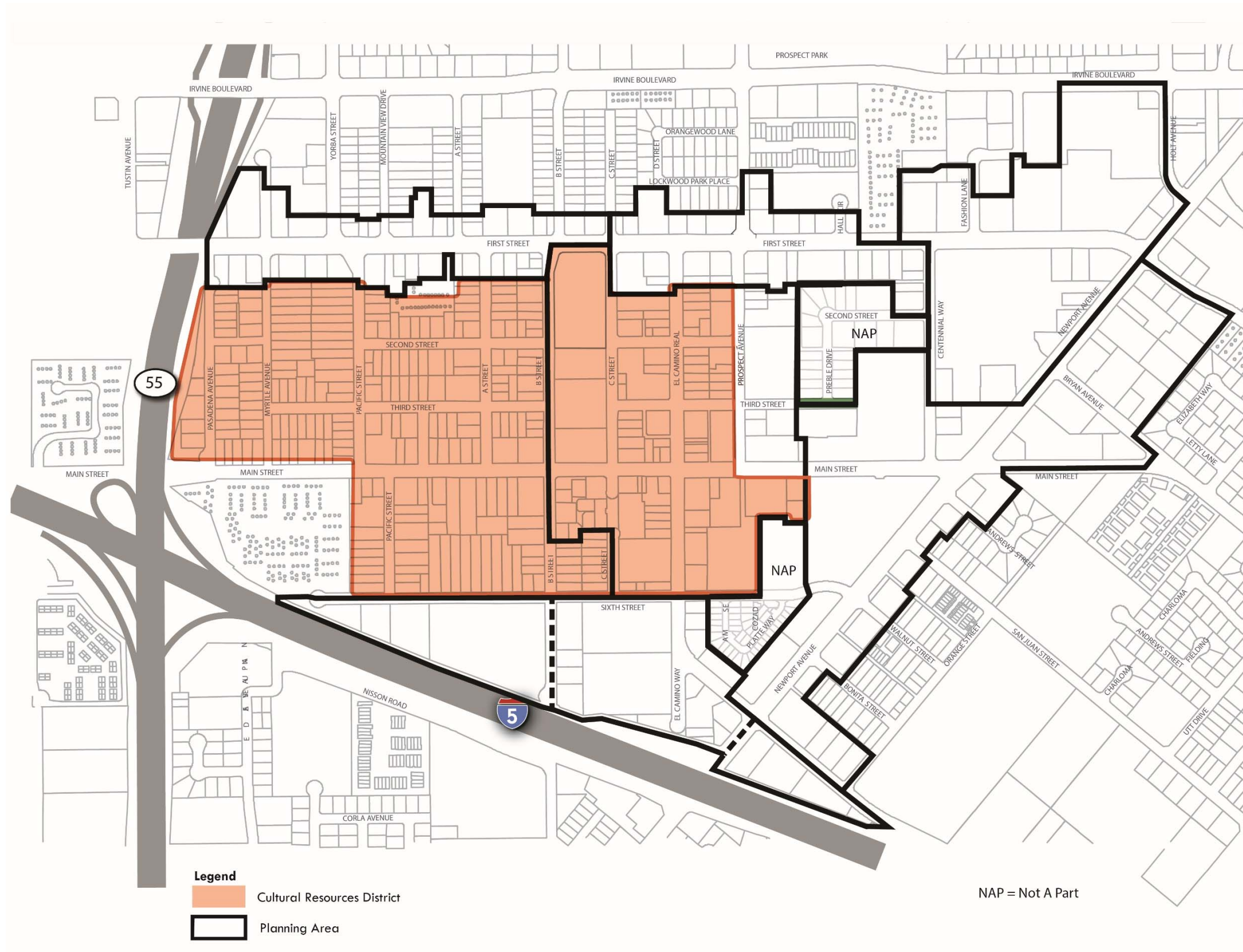


Figure 3-5: Cultural Resources District Boundary

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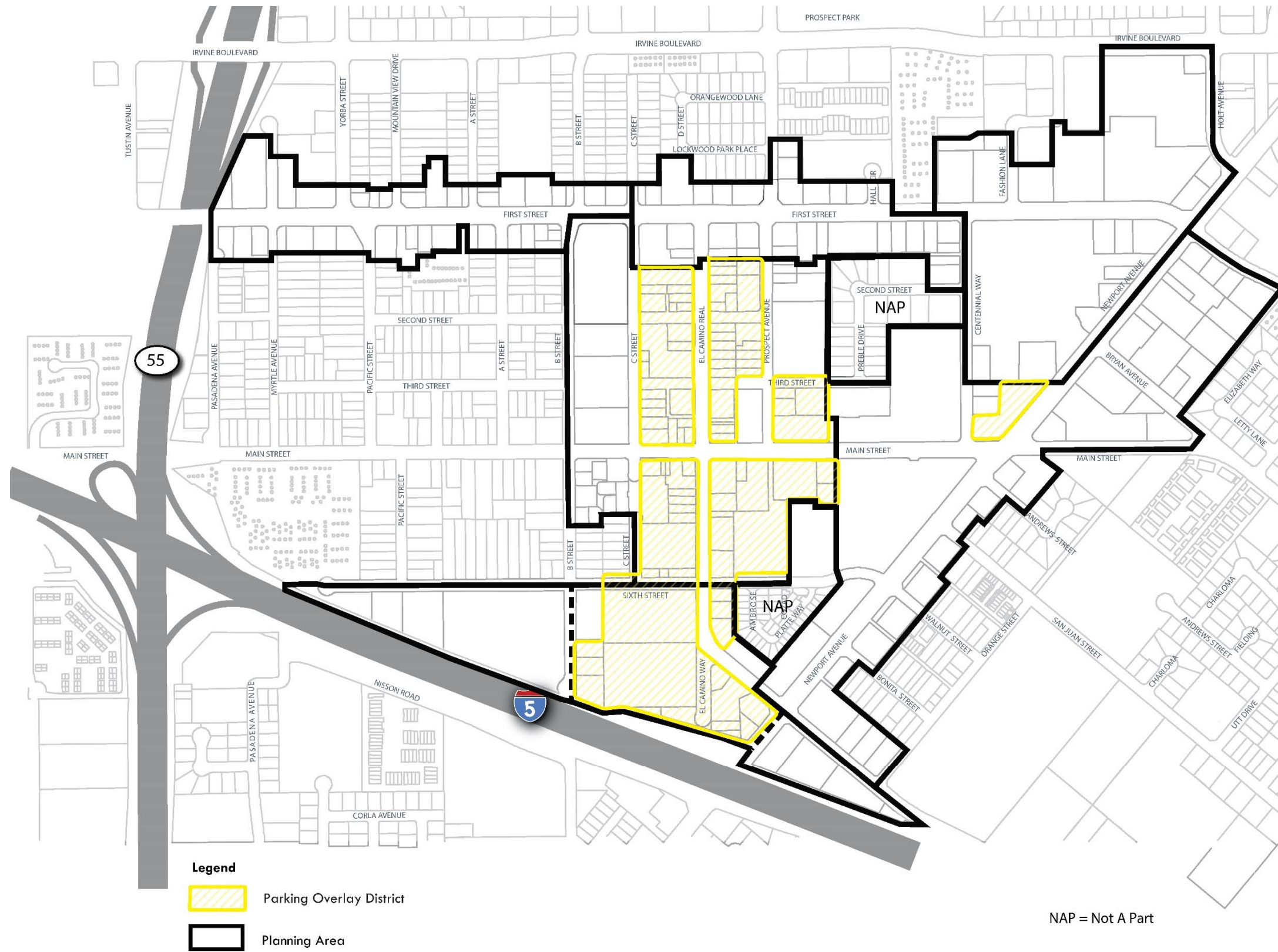


Figure 3-6: Parking Overlay District

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3.4 PROJECT CHARACTERISTICS

“Project,” as defined by the California Environmental Quality Act (CEQA) Guidelines Section 15378(a), means “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)...enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700.” The CEQA Guidelines further explain that a project refers to the activity that is being approved and that may be subject to several discretionary approvals by governmental agencies (Section 15378[c]).

3.4.1 Project Description

The proposed Specific Plan establishes the long-term vision and objectives for land use development and public improvements within Tustin’s downtown. This vision is to introduce mixed uses that expands walkability through pedestrian-oriented first floor development; establish residential mixed use and multi-family development; transform streets through pedestrian-oriented improvements; draw more patrons to Old Town by embracing its unique historic character; and maintain a commercial focus along the majority of Newport Avenue. The Specific Plan establishes permitted uses, development standards and design criteria regulating and guiding site planning, building design, parking, architectural treatment, landscaping, and circulation improvements for each DA.

Implementation of the proposed Specific Plan would require the following discretionary approvals:

- **General Plan Land Use Amendment** to re-designate land uses within the Specific Plan area from the seven existing land use designations (discussed in Table 3-1, above) to “DCCSP - Downtown Commercial Core Specific Plan,” including text amendments and map updates.
- **Zoning Change** to modify the zoning in the Specific Plan area from the ten different zoning designations currently in effect (discussed in Section 4.0, *Environmental Setting*) to a new zoning designation of “DCCSP - Downtown Commercial Core Specific Plan (SP-12),” including text amendments and map updates¹.
- **General Plan Circulation Element Amendment** to be consistent with the proposed circulation changes resulting from conceptual planned improvements to Main Street, First Street, Second Street and Third Street.
- **Rescission of First Street Specific Plan**
- **Rescission of Planned Community** for Tustin Village, Tustin Plaza, 13682 Newport Avenue, Blockbuster Music Plaza and Ambrose Lane Area B.

Land Use Plan

The Land Use Plan introduces integrated residential mixed use through a discretionary entitlement, and delineates a range of land use designations promoting shopping, dining, entertainment, employment, and living in a mixed use, pedestrian-friendly setting focused around the historic Old Town. As shown in Figure 3-2, *Specific Plan Area Boundary Map*, the Specific Plan is divided into six Development Areas (DA’s), which generally reflect differences in the character of the built environment. DA-6 is further divided into subareas A, B, and C.

¹ Two Planned Communities within the Planning Area (Prospect Village live/work project and the Vintage multi-family residential project) would also be redesignated to “DCCSP - Downtown Commercial Core Specific Plan” but their uses and development standards shall continue to be as governed by their original approval ordinances.

Residential Uses

The proposed Specific Plan introduces residential (multifamily and mixed use) as an economic engine to invigorate the businesses within the Specific Plan area by increasing the area's population base and demand for goods and services. Multifamily residential use within the Specific Plan is not permitted by right but requires approval of a discretionary entitlement. The Specific Plan establishes a residential housing bank with a maximum of 887 new dwelling units that may be developed within the Specific Plan area. Residential projects, whether vertical or horizontal mixed use or multifamily development, require an initial step to reserve units from the housing bank. This initial step is the approval of a Residential Allocation Reservation (RAR). Residential projects would then also require City Design Review approval, as well as any other necessary entitlements such as subdivision maps or conditional use permits. The 887 units are allocated by DA, as provided in Table 3-2, *Residential Housing Bank*.

Table 3-2 also provides the total number of dwelling units that may be transferred into each DA, through approval of a RAR, which shall not exceed 25 percent of the original DA unit allocation. Transferred units shall be deducted from the donating DA(s) so that the maximum number of new dwelling units within the Specific Plan would not exceed 887 units. Existing residences are present within the Specific Plan boundaries; however, they are not included in Table 3-2, and may be rebuilt, remodeled, or increased in size as provided for in the Tustin City Code (TCC). The Vintage Planned Community is an approved, but unbuilt, 140-unit residential project within the boundaries of the Specific Plan, which is included in the Residential Housing Bank's maximum number of dwelling units.

Table 3-2: Residential Housing Bank

Development Area (DA)	Initial Allotment of Dwelling Units	Maximum Number of Units That May Be Transferred into Receiving DA and Deducted from Donating DA(s)
DA-1	45	11
DA-2	92	23
DA-3	200	50
DA-4	150	38
DA-5	0	0
DA-6	400	100
Total	887	222

In addition to the residential uses, the proposed Specific Plan is anticipated to result in approximately 300,000 square feet of non-residential (commercial/office) space to be developed/redeveloped on vacant and underutilized parcels, within the land use categories described below by build out year (2035). The nonresidential square footage is within the existing General Plan's buildout assumptions for the Specific Plan area.

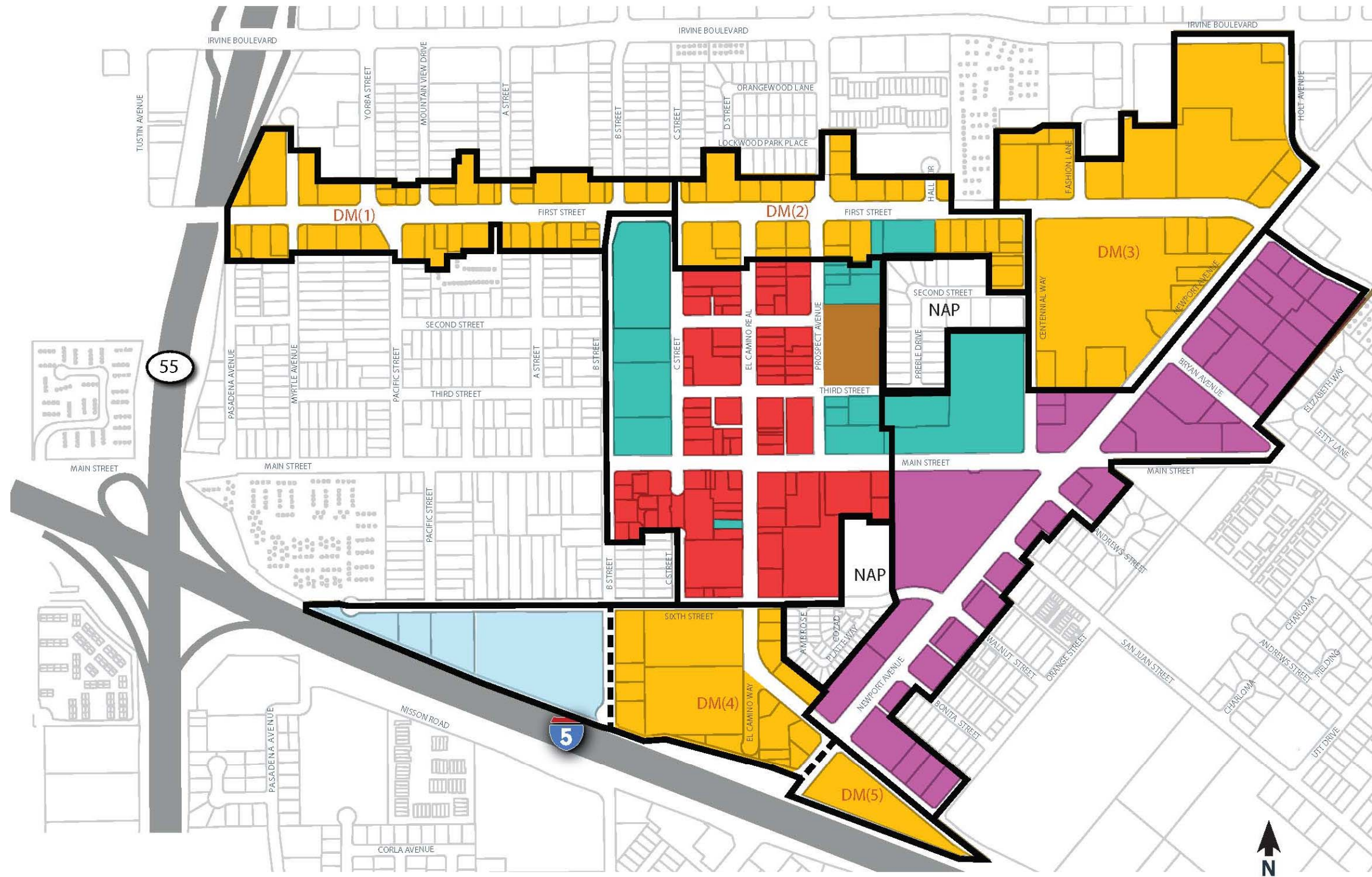
Proposed Land Use Designations

The proposed Specific Plan would re-designate the Specific Plan area into six new land use categories, as shown in Table 3-3, *Land Use Categories* and Figure 3-6, *Proposed Land Use Plan*. The proposed Specific Plan allows for similar uses and intensities as previously-allowed commercial and office intensity, and introduces the option to include residential intensity.

Table 3-3: Land Use Categories

Title	Description
Downtown Mixed Use (DM)	The DM land use designation applies to the parcels located on both sides of First Street from the 55 Freeway on the west to Newport Avenue on the east, generally on both sides of El Camino Real south of Sixth Street, and on the southwest side of El Camino Real east of Newport Avenue. The DM designation is divided into five subcategories (DM(1)-DM(5)) based on characteristics including location, proximity to adjacent uses/zones such as residential, and parcel size, which impact allowable uses. The DM designation includes the greatest flexibility of uses, providing for retail, service, office, food service, medical, hospitality, and auto service uses. Residential use is allowed in an integrated mixed use format (either vertical or horizontal), subject to the approval of a discretionary RAR.
Old Town (OT)	The OT land use designation applies to the blocks located primarily between C Street on the west and Prospect Avenue on the east, from below the First Street frontage on the north to Sixth Street on the south. The OT designation provides for retail, service, office, food service, medical, and hospitality uses. Automotive uses are not allowed within Old Town. Mixed use residential buildings are allowed only if a discretionary RAR is approved, with commercial uses on the ground floor and residential uses above when in a vertical setting. Integrated horizontal mixed use is also allowed.
Downtown Commercial (DC)	The DC land use designation applies to Newport Avenue from First Street on the north to El Camino Real on the south (except for Larwin Square, which abuts First Street and west of Newport Avenue which is designated DM). The DC land use designation provides for retail, service, office, food service, medical, hospitality, and auto service uses. Residential uses are not allowed within the DC land use designation. The primary intent for Newport Avenue is to remain a commercial thoroughfare.
Civic/Institutional (CI)	The CI land use designation provides for a range of civic, public, and institutional uses, and is applied to Peppertree Park, the Tustin Area Senior Center, the Tustin Unified School District administration offices, Tustin Presbyterian Church, and Tustin Community Preschool, which are located on the west side of C Street between First Street and Main Street. The designation applies to the City of Tustin Main Street Water Facility, Tustin Branch Library, and Tustin Civic Center, which are located on Main Street between Prospect Avenue and Centennial Way. This designation also applies to the United States Post Office facility that fronts on First Street with parking lot access from Prospect Avenue and the Tustin Hacienda Silverado Memory Care facility located on Third Street east of Prospect Avenue. Finally, a small parcel located on the west side of El Camino Real between Main and Sixth Streets is designated CI.
Multi-Family (MF)	The MF land use designation applies to the parcels located on the south side of Sixth Street west of B Street. The MF designation provides for multifamily residential use with approval of a discretionary entitlement, which entails the initial step to reserve units from the housing bank. Residential projects also require design review as well as any other necessary entitlements such as subdivision maps. Commercial uses are not allowed within the Multi-family land use designation (except for home occupations per the TCC). Parcels with a MF designation are permitted one unit by right with administrative design review, provided the unit is deducted from the residential unit bank.

Title	Description
Mobile Home (MH)	The MH land use designation applies to a portion of the east side of Prospect Avenue north of Third Street. The MH designation provides for mobile homes within a mobile home park which is the existing use.



Legend

- Downtown Mixed Use (DM) including subareas DM(1) to DM(5)
- Downtown Commercial (DC)
- Mobile Home (MH)
- Multi-Family (MF)
- Old Town (OT)
- Civic/Institutional (CI)

Figure 3-7: Proposed Land Use Plan

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Development Areas

The Specific Plan establishes six DA's used to identify and describe the distinct urban design vision for the various portions of the DCCSP area. The six DA's, including the three subareas (DA-6A, DA-6B, and DA-6C), are utilized to describe the urban design vision for the DCCSP presented below and illustrated in Figure 3-8, *Urban Design Plan*.

Development Areas 1 and 2: DA's 1 and 2 consist of the northwestern portion of the Planning Area and include the First Street roadway corridor. The boundaries of DA-1 stretch along First Street from the 55 Freeway to C Street and DA-2 extends along First Street from C Street to Centennial Way. DA's 1 and 2 provide an entrance into Old Town, fostering a smooth transition with DA-4. The DCCSP vision for DA-1 and DA-2 is to provide an eclectic mix of retail, services, offices, restaurants, medical services, and hospitality. Auto services are prohibited in DA-1 but allowed in DA-2.

Residential mixed use approved through a discretionary permit are allowed in a vertical format on upper floors of two and three-story buildings, with commercial use provided on the ground floor. Because most parcels within the western portion of First Street are small, the Specific Plan establishes a maximum building or tenant size of 10,000 square feet in DA-1 to encourage pedestrian orientation.

The proposed Specific Plan also includes a more pedestrian street transformation with improvements planned to First Street that would reduce the number of traffic lanes and lane widths, add street parking, a bike lane, and expanded pedestrian sidewalk, detailed in the Circulation Section below.

Development Area 3: DA-3 is located along the eastern portion of First Street approximately between Centennial Way to Newport Avenue. DA-3 includes large parcels, which could be used for mixed-use, shopping emphasis, gathering, and entertainment uses. The urban design vision for DA-3 adjacent to Newport Avenue includes commercial buildings with active ground floor uses or mixed use buildings with commercial uses on the ground floor with residential uses above. Vertical and/or horizontal residential mixed use is allowed up to four stories high.

Development Area 4: DA-4 consists of the Old Town commercial district, located between B Street on the west extending east of Prospect Avenue, from south of the First Street frontage to Sixth Street. Old Town formed the heart of founder Columbus Tustin's original city. Many historic buildings remain, concentrated primarily at the intersection of Main Street and El Camino Real. DA-4 is part of the Cultural Resources District and properties within this district, as well as identified historic resources in other parts of the City, are subject to the Cultural Resources District Commercial Design Guidelines and Residential Design Guidelines. DA-4 contains vacant parcels that provide opportunity for revitalization with expanded range of businesses in new commercial and mixed use development, with a maximum height of three stories. DA-4 allows new development consistent with the historic pedestrian-oriented pattern of the Old Town area to encourage and provide extended walkability. As with DA-1, the Specific Plan establishes a maximum building or tenant size of 10,000 square feet in DA-4 to encourage pedestrian orientation.

The proposed Specific Plan includes improvements to Main Street (spanning DA-4 and DA-5) that involve: reducing the number of traffic lanes and lane widths, adding parking, a bike lane, an expanded pedestrian sidewalk, and installing an entry arch spanning the street. The vision also includes creating parklets on El Camino Real to encourage gathering.

Development Area 5: DA-5 includes clusters of large parcels along the east and west side of Newport Avenue from First Street to El Camino Real. DA-5 also includes Main Street from Newport Avenue to east of Prospect Avenue. The proposed Specific Plan also includes improvements to Main Street (spanning DA-4 and DA-5) that involve: reducing the number of traffic lanes and lane widths, adding parking, a bike lane, an expanded pedestrian sidewalk, and installing an entry arch spanning the street. A maximum building height of four stories is proposed. The Specific Plan vision for DA-5 is to provide enhanced pedestrian amenities such as outdoor dining, gathering areas, and walkways while maintaining its commercial focus. In addition, a small parklet would be provided at the northern entrance to Tustin Plaza.

Development Area 6A: DA-6A encompasses the blocks on the south side of Sixth Street from I-5 to B Street. This DA includes an approved 140-unit residential development, called Vintage, a self-storage facility, the Tustin Boys and Girls Club, and a small church building. The urban design within this DA is to be sensitive to the existing single-family residences on the north side of Sixth Street within the Cultural Resources District by implementing historic architectural styles, articulated building mass, designing buildings adjacent to Sixth Street to two stories adjacent to public streets, and allowing up to four stories maximum for interior parcels away from the street, as well as adjacent to the I-5 freeway. The vision for this DA is to transition to entirely residential development.

Development Area 6B: The boundaries of DA-6B include B Street on the west, Sixth Street on the north, both frontages of El Camino Real, I-5 on the south, and Newport Avenue on the southeast. This DA provides an entrance into Old Town, fostering a smooth transition with DA-4. DA-6B is intended to serve as a mixed-use residential, shopping, gathering, and entertainment destination.

The urban design vision for DA-6B includes active ground floor buildings up to four stories high adjacent to Newport Avenue and El Camino Real and up to three stories on Sixth Street; and higher density near freeway and interior parcels (up to five stories) In addition, development of the parcels clustered on the west side of El Camino Real would emphasis providing large public gathering area(s). Open space within the mixed-use development on the west side of El Camino Real would be provided by private open space (e.g. balconies) and common open space, such as roof-top gardens and courtyard areas.

Development Area 6C: DA-6C is bordered on the northeast by El Camino Real, on the northwest by Newport Avenue, and on the south by I-5. This DA is envisioned for mixed use (likely horizontal, with commercial clustered in the northwestern portion of the DA to keep the commercial focus along Newport Avenue and residential in the remainder. Buildings along Newport Avenue and immediately adjacent to El Camino Real would be four stories or less, and up to five story buildings would be allowed adjacent to I-5.

Circulation and Parking

The Specific Plan includes conceptual circulation plans and improvements for vehicles, pedestrians, bicyclists, and transit users. It also provides strategies for meeting the parking needs within the Planning Area by incorporating standards that allow for the modification of parking standards under certain circumstances. The existing alternative parking standards from the Parking Overlay District have been incorporated into the Specific Plan and apply throughout the Specific Plan area.

Roadways: The Specific Plan area is served by a network of existing roadways, which includes several streets planned for improvement under the DCCSP to create “complete streets” in which the roadway design gives pedestrians and bicyclists greater emphasis.

The proposed Specific Plan contains planned modifications to First and Main Streets, which are included in the Master Plan of Arterial Highways (MPAH) administered by the Orange County Transportation Authority (OCTA) to:

- Reclassify First Street from just east of State Route 55 to Newport Avenue, from a primary (four-lane, divided) arterial to a divided collector (two-lane, divided) arterial; and
- Reclassify Main Street from the westernmost city limits to Newport Avenue, from a primary (four-lane, divided) arterial to a divided collector (two-lane, divided) arterial.

Figure 3-9, *Circulation Plan*, illustrates the existing roadway system and highlights the planned improvements to Main Street located in the center portion of the Specific Plan area, First Street in the northern portion, and Second and Third Streets within Old Town, as described below.

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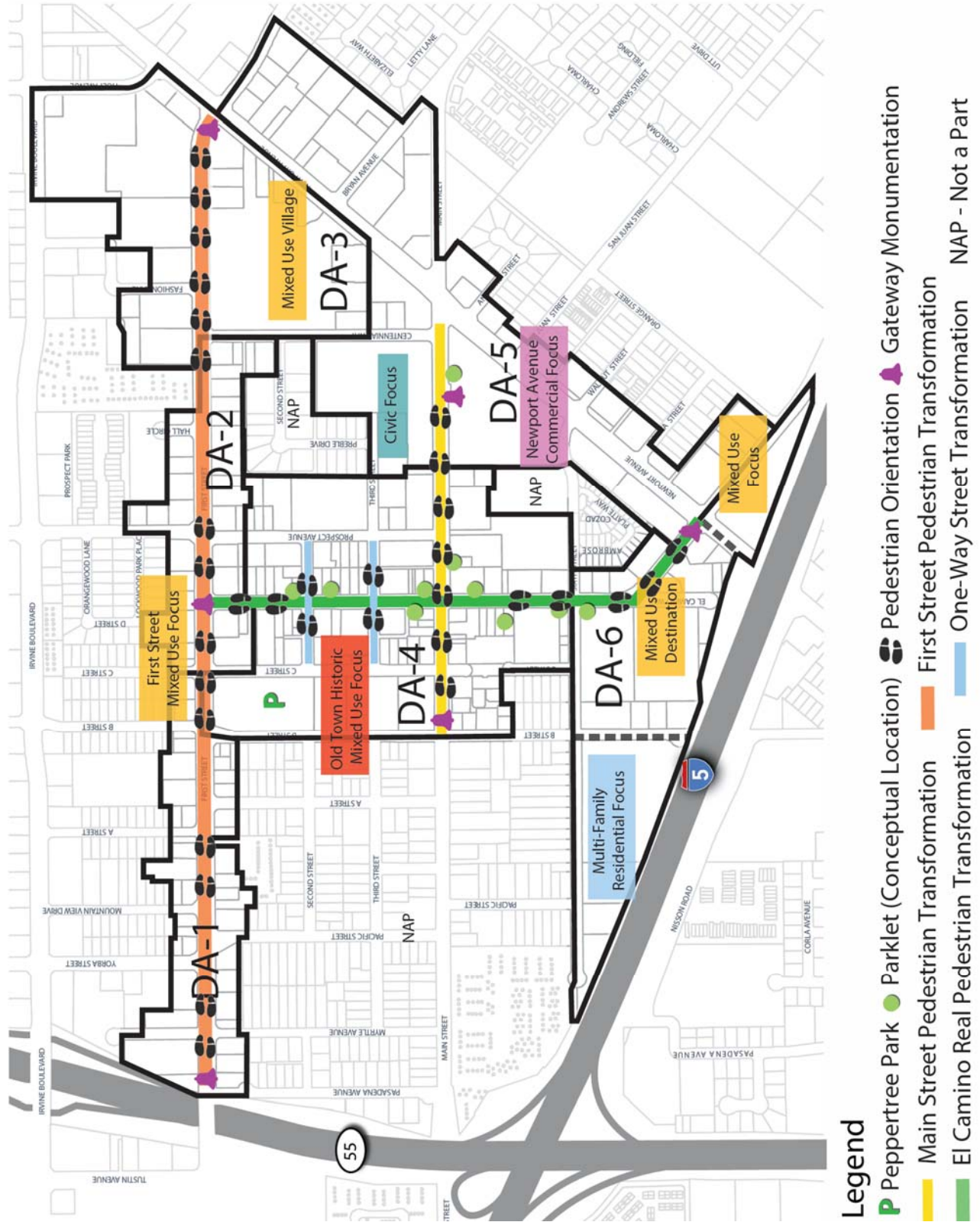


Figure 3-8: Urban Design Plan

Legend

- P** Peppertree Park
- Parklet (Conceptual Location)
- ⊞** Pedestrian Orientation
- 📍** Gateway Monumentation
- Main Street Pedestrian Transformation
- First Street Pedestrian Transformation
- El Camino Real Pedestrian Transformation
- One-Way Street Transformation
- NAP - Not a Part

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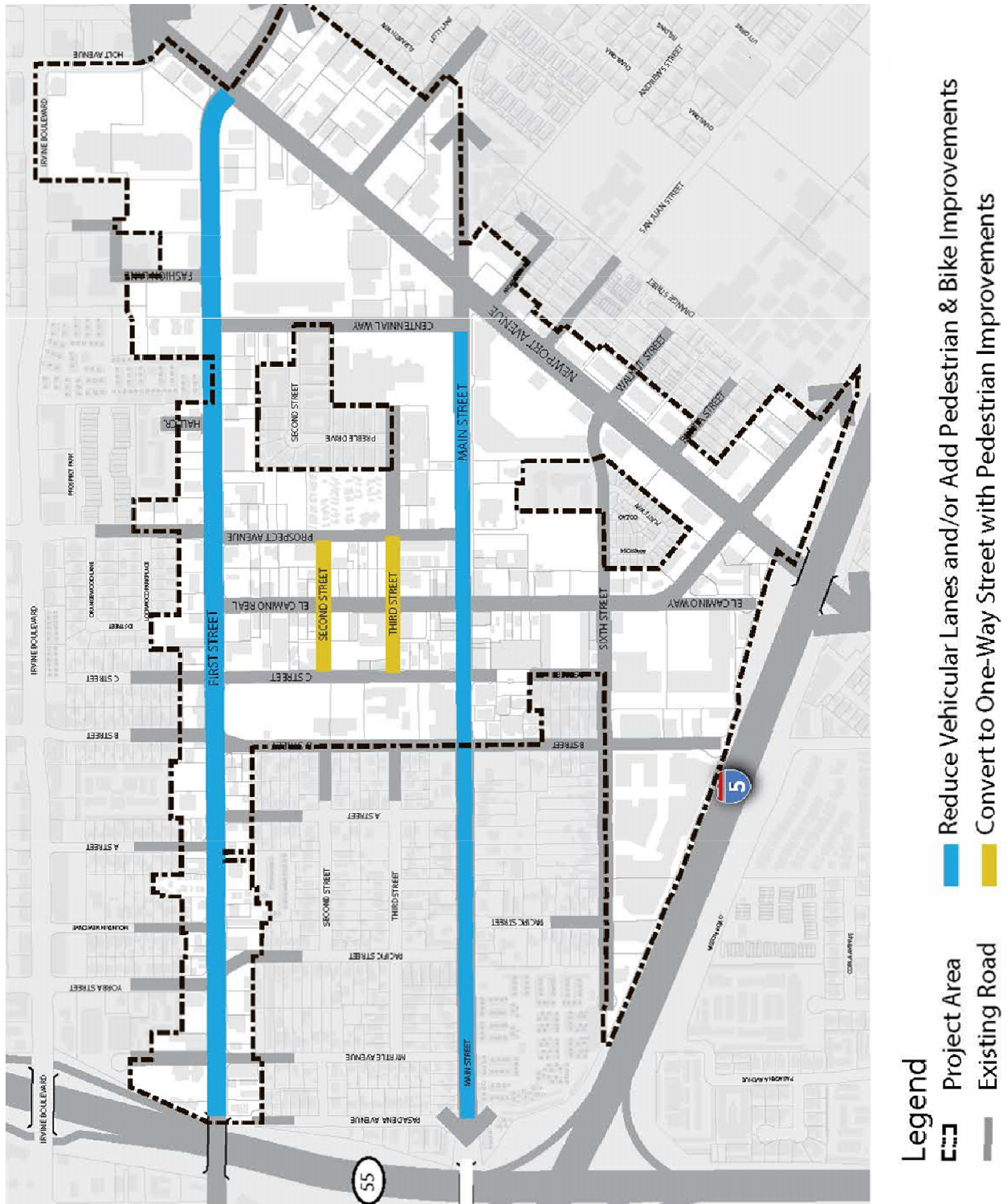


Figure 3-9: Circulation Plan

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Main Street

The proposed conceptual improvements to Main Street are shown in Figure 3-10 *Main Street Conceptual Improvements*, and would:

- Reduce the street from a four-lane roadway (two lanes in each direction) to a two-lane roadway (one lane in each direction) with 14-foot eastbound lane and 11-foot westbound lane between Prospect Avenue and Centennial Way.
- Install landscaped center median.
- Install on-street diagonal parking on the south side of the street, adjacent to a shopping center and within walking distance of Old Town and commercial uses.
- Install new on-street 3-foot buffered bicycle lane (Class 2) on the north side of the street, accessible from the existing off-street bicycle lane (Class 1) along the west side of Newport Avenue.
- Expand pedestrian sidewalk to provide an integrated bicycle lane and enhanced with decorative pavement on the south side of the street.
- Install bicycle lane on the south side of Main Street, as an integrated off-road bicycle lane (Class 1).
- Align the Tustin Branch Library driveway on the north side of Main Street with the Tustin Plaza driveway on the south, eliminating the existing conflicting vehicle turning movements and facilitating pedestrian crossings. The aligned driveways would provide bulb outs that narrow the roadway and a crosswalk with decorative pavement would be installed between the library and Civic Center on the north, and Tustin Plaza on the south side of the street.
- Install an entry arch spanning Main Street near the intersection with Centennial Way to identify Old Town.

First Street

The proposed conceptual improvements to First Street, are shown in Figure 3-11, *First Street Conceptual Improvements* and would:

- Reduce the number of traffic lanes from four (two in each direction) to two (one in each direction) and narrow the lane widths to 11 feet.
- Expand the existing sidewalk and an on-street bicycle lane (Class 2) and
- Install diagonal parking on both the north and south sides of the street,
- Connect to the off- street Class 1 bicycle lane on Newport Avenue.
- Install a 16-foot landscaped median.

Second and Third Streets

Second and Third Streets are proposed to be changed from two-way to one-way streets, as shown in Figures 3-11, *Second and Third Street Conceptual Traffic Movements*, 3-12, *Second Street Conceptual Traffic Movements* and 3-13, *Third Street Conceptual Traffic Movements*. In addition, it is conceptually planned that the on-street parking would be changed from parallel parking on both sides to diagonal parking on one side, and landscaped bulb outs would be installed in the expanded sidewalks.

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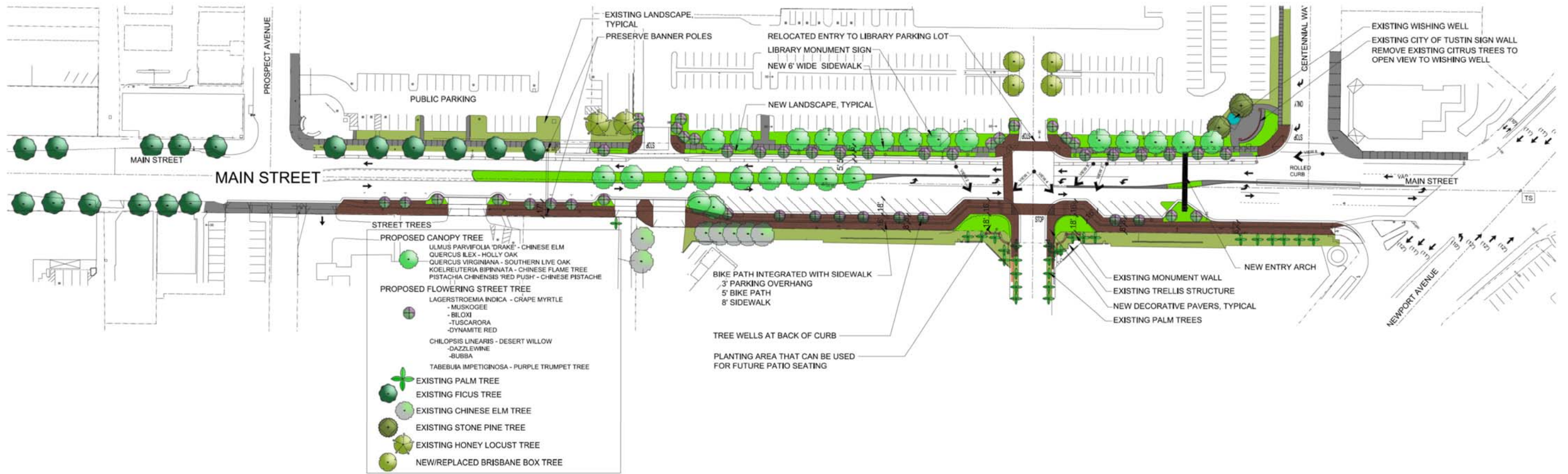


Figure 3-10 Main Street Conceptual Improvements

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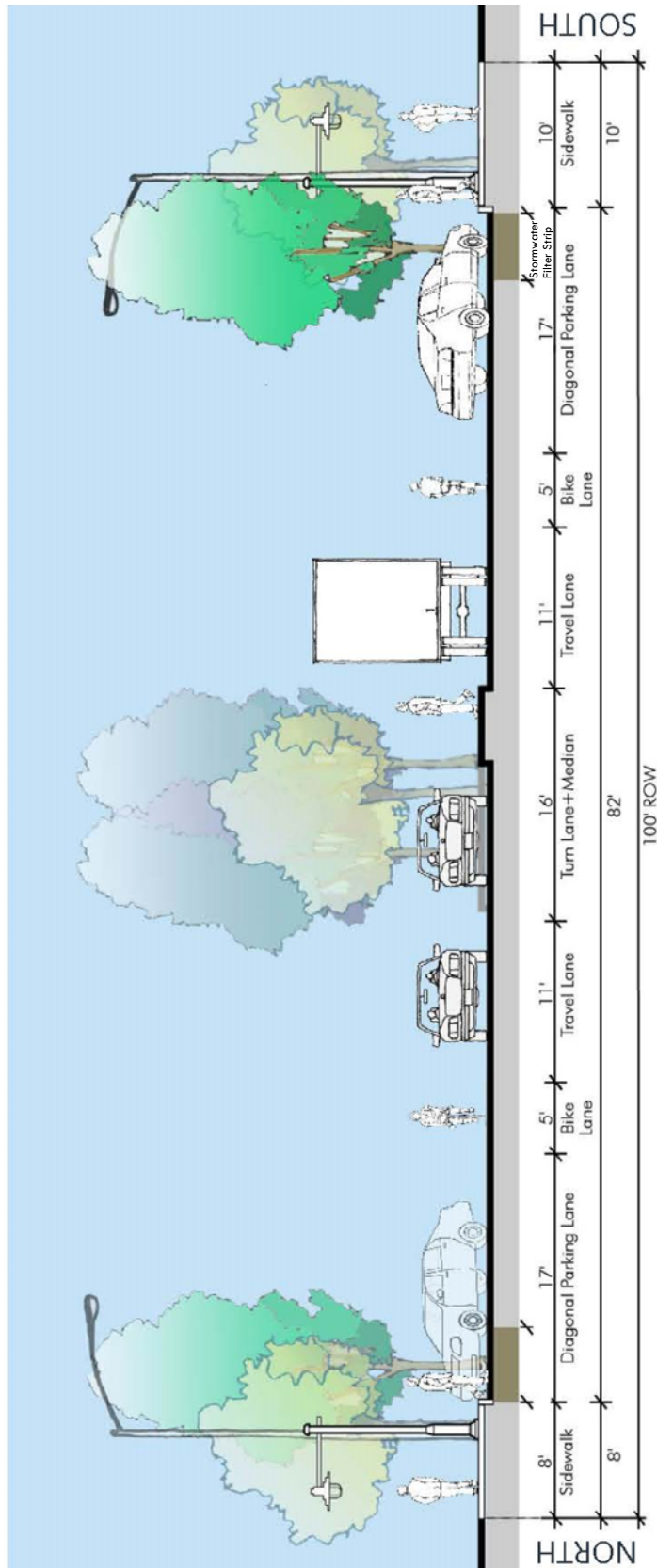


Figure 3-11: First Street Conceptual Improvements



- ➔ 2nd and 3rd Streets Proposed Traffic Directionality
- ➔ Permitted Turning Movements and Traffic Directionality

Figure 3-12: Conceptual Second and Third Street Traffic Movements

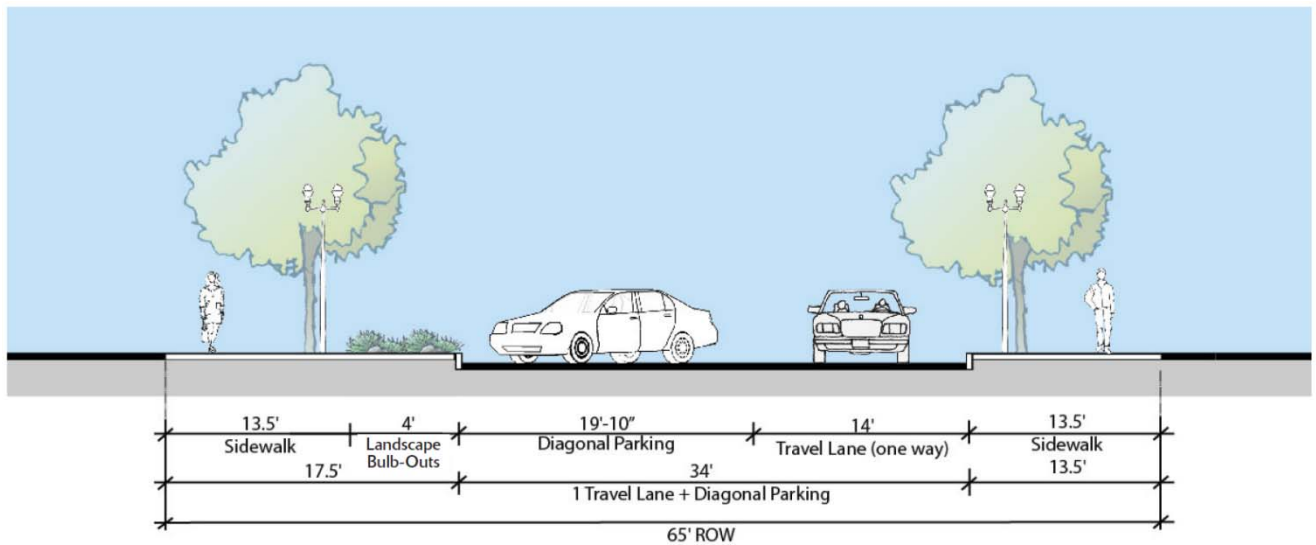


Figure 3-13: Second Street Conceptual Improvements

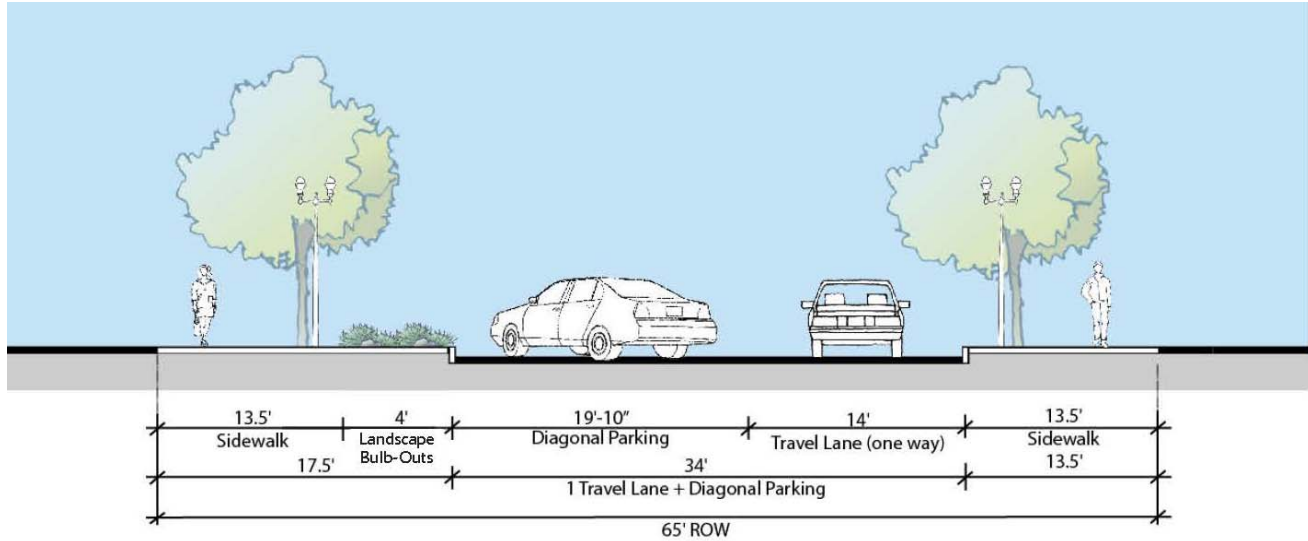


Figure 3-14: Third Street Conceptual Improvements

Bicycle Infrastructure: As described above, new Class 1 and, buffered Class 2 bicycle lanes would be installed on Main Street, and new Class 2 bicycle lanes would be installed on First Street. In addition, “Sharrow” bicycle lanes (Class 3), marked with on-street symbols but not striped, are proposed for the following street segments:

- Main Street from B Street to Prospect Avenue
- El Camino Real from First Street to Newport Avenue
- B Street between First Street and Sixth Street
- Prospect Avenue between First Street and Main Street
- Centennial Way between First Street and Main Street
- Sixth Street between B Street and Newport Avenue

Bicycle racks would be installed at regular intervals within the public right-of-way and within private development, as part of the DCCSP Design Criteria.

Transit: Transit service within the Plan Area is currently provided along Newport Avenue, First Street, and Centennial Way, with bus shelters located at select bus stops. Additional bus shelters would be provided along existing routes, and new development along transit routes would be required to be sited for easy access to transit stops and to provide connecting pedestrian walkways to promote transit use.

Parking: The Specific Plan includes mechanisms to address parking, including required on-site provisions, reduced parking options, including incentives and opportunities for shared and joint use parking, parking management strategies, and options for increased parking facilities.

Streetscape Improvements

Streetscape improvements include installation of benches, bicycle racks, trash receptacles, tree grates, landscaping, and lighting to better define the character of the Specific Plan area. Street lighting would be installed as a part of individual development projects, and would provide spatial definition to the sidewalk, ambiance to neighborhood settings, and provision of security. The light fixtures shall adhere to

guidelines set forth by the TCC. In addition, the Specific Plan requires that lighting for non-residential uses shall be appropriately designed, located, and shielded to ensure that they do not negatively impact the residential uses in the development or any adjacent residential uses.

Implementation of the proposed Specific Plan would result in the installation of consistent monumentation and wayfinding signs throughout the Specific Plan area.

Ficus Tree Replacement Program: Much of the street tree canopy in the Specific Plan consists of non-native Indian Laurel Fig (*Ficus microcarpa*), which is a non-native tree that has invasive roots, and are sometimes negatively affecting infrastructure within the Specific Plan area, including the penetration of water and sewer pipes and uplifting sidewalk pavement, creating potentially unsafe conditions. Therefore, the Specific Plan includes a program to gradually replace the existing Ficus trees with one tree species identified in the Street Tree Palette, 48-inch box sized or larger. The replacement of trees will follow a systematic, phased tree replacement schedule to replace all alternating Ficus trees within the Specific Plan area and then cycle back to replace the remaining Ficus trees.

Open Space

The DCCSP has conceptual plans to install public parklets within the right-of-way along El Camino Real, and on Main Street at the northern entrance to Tustin Plaza, that would consist of bulb-outs with enhanced paving and low walls to create public gathering or seating areas adjacent to the sidewalk. Although the current focus is to implement parklets on El Camino Real and Main Street within the heart of Old Town, expansion of the network of parklets to other areas within the DCC is envisioned and encouraged. In addition, pocket parks that would contain pedestrian amenities such as seating, shade, trash/recycle receptacles, and lighting are opportunities through public-private partnerships that the Specific Plan encourages.

Design Criteria and Development Standards

The design criteria and development standards included in the Specific Plan address: architectural styles for new development; building design, mass, and scale; roof forms; architectural details; lighting; window and door styles; signage; materials and colors; requirements for service areas and parking lots; landscaping; and open space. In addition, the Specific Plan includes design criteria specific to each DA to achieve the urban design visions described previously.

Buildout of the Proposed Specific Plan

Buildout of the proposed Specific Plan is anticipated to occur by 2035. However, the ultimate build out of the proposed land uses would be based on market demand and the overall economic health of Orange County.

3.5 ANTICIPATED DISCRETIONARY APPROVALS AND ACTIONS

City of Tustin Approvals

- Adoption of the proposed Downtown Commercial Core Specific Plan
- Certification of the Final EIR and adoption of Statement of Overriding Considerations
- Adoption of the Mitigation Monitoring and Reporting Program
- General Plan Land Use Amendment to re-designate land uses within the DCCSP area
- General Plan Circulation Element Amendment to be consistent with the proposed circulation changes

- Zoning change to designate the zoning map designation of the Specific Plan area zoning to DCCSP
- Rescission of First Street Specific Plan
- Rescission of the following Planned Communities:
 - Tustin Village
 - Tustin Plaza
 - 13682 Newport Avenue
 - Blockbuster Music
 - Ambrose Lane Area B
- Various zone text amendments

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4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide a “description of the physical environmental conditions in the vicinity of the proposed Specific Plan, as they exist at the time the notice of preparation was published, from both a local and a regional perspective” pursuant to provisions of the State CEQA Guidelines Section 15125. In addition to the summaries below, detailed environmental setting descriptions are provided in each subsection of Section 5 of this Draft EIR.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The City of Tustin is located in central Orange County, California, about 12 miles inland from the Pacific Ocean and is considered part of the greater Los Angeles metropolitan area. The City is bounded on the south by the cities of Irvine and Santa Ana, on the north by the unincorporated portions of the County of Orange and the City of Orange, on the east by unincorporated County territory and the City of Irvine, and on the west by the City of Santa Ana. Tustin is located approximately two miles north of Orange County's John Wayne Airport and is transected by Interstate 5 (I-5) and State Route 55 (SR-55). The City of Tustin and the adjacent jurisdictions characterize the urbanized core of Orange County, as shown in Figure 3-1, *Regional Vicinity Map*.

4.2.2 Regional Planning Considerations

Airport Land Use Commission

The Specific Plan area lies within approximately 4.5 miles of the John Wayne Airport. In 1975, the Airport Land Use Commission (ALUC) of Orange County adopted an Airport Environs Land Use Plan (AELUP) that included John Wayne Airport (formerly Orange County Airport). The AELUP is the authoritative planning document for the ALUC. The ALUC is an agency authorized under State law to assist local agencies in ensuring compatible land uses in the vicinity of airports. Primary areas of concern for ALUCs are noise, safety hazards and airport operational integrity. The Specific Plan area is outside of the airport influence area of John Wayne Airport.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. It is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. It is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation

infrastructure; increasing capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth, and opportunity; promoting the links between public health, environmental protection, and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas (GHG) emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency. The proposed project's consistency with the applicable 2016-2040 RTP/SCS policies is analyzed in detail in Section 5.4, *Greenhouse Gas Emissions*, and Section 5.5, *Land Use and Planning*.

High Quality Transit Areas

Beginning with the adoption of the 2012 RTP/SCS, the areas previously known as 2% Strategy Opportunity Areas were updated by SCAG and replaced with what are now called high quality transit areas (HQTAs), which are a part of—and integrated with—the SCS portion (Chapter 4) of the 2016 RTP/SCS. An HQTA is a walkable transit village or corridor, consistent with the adopted RTP/SCS, and is within one-half mile of a well-served transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The overall land use pattern of the 2016 RTP/SCS focuses jobs and housing in the region's designated HQTAs (SCAG 2016). Separate goals, policies, or guidelines have not been adopted for the HQTAs; therefore, a project's consistency with the HQTA is obtained by achieving consistency with the applicable 2016 RTP/SCS policies.

The entire Specific Plan area is identified as a high-quality transit area (HQTA) in the RTP/SCS.

Orange County Council of Governments and Orange County Transportation Authority

Orange County Sustainable Communities Strategy

Unique to the SCAG region is the option for subregions to create their own SCS. The Orange County Council of Governments and Orange County Transportation Authority adopted an SCS for the Orange County subregion—of which the City of Tustin is a member jurisdiction—on June 14, 2011.

Regional planning considerations are addressed in Section 5.5, *Land Use and Planning*.

Air Quality and Global Climate Change

Air Quality

The Specific Plan area is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County.

The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of Southern California combine to make the Basin an area of high air pollution potential. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers the photochemical reactions which produce ozone.

SCAQMD maintains monitoring stations that monitor air quality and compliance with associated ambient standards. The Basin currently does not meet state standards for ozone, PM₁₀, and PM_{2.5}; and does not meet federal standards for ozone, PM_{2.5}, and lead (Los Angeles County only).

The proposed Specific Plan's consistency with applicable ambient air quality standards is discussed in Section 5.2, *Air Quality*.

Greenhouse Gas Emissions

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long term global temperature increases.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). California produced 441.5 gross MMT/yr CO₂e in 2014. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions accounting for 36 percent of total GHG emissions in the state. This sector was followed by the electric power sector (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent).

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); and Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act.

Executive Order S-3-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05. Based on the GHG emissions inventory conducted for its 2008 Scoping Plan, the California Air Resources Board (CARB) approved a 2020 emissions limit of 427 million metric tons of carbon dioxide-equivalent (MMTCO₂e) for the state (CARB 2008).

Since release of the 2008 Scoping Plan, CARB has updated the statewide GHG emissions inventory to reflect GHG emissions in light of the economic downturn and measures not previously considered. The updated forecast predicts emissions to be 507 MMTCO_{2e} by 2020. The new inventory identifies that an estimated 80 MMTCO_{2e} of reductions are necessary in order to achieve the statewide emissions reduction of AB 32 by 2020 (CARB 2012).

In 2008, SB 375 was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO).

As the southern California region's MPO, SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The proposed targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's 2008 Scoping Plan (for AB 32) would be met (CARB 2008).

The proposed Specific Plan's consistency with CARB's Scoping Plan is discussed in Section 5.4, *Greenhouse Gas Emissions*.

Regional Water Quality Control Board/Watershed

The project area is in the jurisdictional area of the Santa Ana Regional Water Quality Control Board (Region 8). The project area is in the Newport Bay Watershed, which drains approximately 152 square miles of central Orange County from the southwestern foothills of the Santa Ana Mountains to the Pacific Ocean. Flood control channels and storm drains owned by the Orange County Flood Control District serve the area, and include a network of underground drainage pipes ranging in size from 18-inch diameter to 66-inch diameter at the downstream confluence point (Newport Avenue/I-5) and the Santa Ana - Santa Fe Channel, which flows southeast and into the Peters Canyon Channel. The Peters Canyon Channel flows south west and joins with the San Diego Creek, which flows south west and outlets into Upper Newport Bay, then ultimately into the Pacific Ocean.

Regional Habitat Conservation Plans and Areas

Central and Coastal Orange County NCCP/ HCP

The Central and Coastal Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) and its associated implementation agreement cover 13 cities in Orange County, including Tustin. The plan, which was adopted in 1996, created a multispecies/multihabitat reserve system and implements a long-term management program to protect coastal sage scrub and species that utilize coastal sage scrub habitat. Protected species include the coastal California gnatcatcher, cactus wren, and orange-throated whiptail. Because the City of Tustin is a participant in the funding and development of the NCCP/HCP, all city-owned parcels fall under the plan's participating landowner system. Individual property owners are considered "nonparticipating landowners" but must also satisfy regulatory requirements under the plan.

The project area is in the Central and Coastal Subregion, a 325-square-mile area that spans the middle portion of Orange County. There are no reserves designated under the NCCP/HCP on or next to the Specific Plan area.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Project Location and Land Use

Project Location

The proposed Specific Plan area consists of approximately 220 acres located in the northern portion of the city. The jurisdictions surrounding the planning area include the City of Tustin immediately to the north, south, east and west, unincorporated land within the County of Orange (North Tustin) further to the northeast, and the City of Santa Ana further to the northwest and southwest. See Figure 3-1, *Regional Vicinity Map* and Figure 3-2, *Specific Plan Area Boundary Map*.

Existing Land Uses

The project setting is a highly urbanized, developed area. There are existing buildings, street infrastructure, and utilities infrastructure in place. The Specific Plan area's primary uses are general commercial (office, retail, and services); residential (which is limited); parks and open space, public and institutional, industrial, and limited undeveloped parcels.

4.3.2 Surrounding Land Uses

The Specific Plan area is surrounded to the west by single family residential uses and SR-55; to the north by single family and multi-family residential uses and commercial uses; to the east by single family residential and multifamily residential uses; and to the south by I-5. The Specific Plan area surrounds, but excludes, two residential neighborhoods located along Prebble Drive/E. Second Street and Ambrose Lane/Platt Way.

4.4 AESTHETICS

Scenic Vistas

Scenic vistas are panoramic views of important visual features, as seen from public viewing areas. The City's General Plan does not identify any scenic vistas within the City. The dominant scenic resource in the Specific Plan area is views of the Santa Ana Mountains from east facing street corridors within the Specific Plan area that are intermittently obstructed by existing development and mature landscaping. Due to the developed urban landscape and the lack of topography in the Specific Plan area, no other scenic vistas exist from or of the Specific Plan area. In addition, the Orange County Scenic Highway Plan does not identify any scenic routes within the City of Tustin; and there are no designated or eligible state scenic highways within or nearby the Specific Plan area (Caltrans, 2017).

Visual Character and Quality

The Specific Plan area is a developed urban area that is generally laid out in a grid system, whereby the streets define the location of development. The existing visual character of the Specific Plan area consists of a low-density urban downtown area with small scale commercial development, neighborhood shopping centers, strip commercial, "main street," small scale office, civic facilities, parks, and auto-oriented drive-throughs. Existing buildings are one to three stories in height. Newport Avenue, in particular, is characterized by predominantly low-rise, single-story buildings and expansive parking lots.

The Old Town Tustin area (located generally between B Street and Prospect Avenue, and parcels from Sixth Street up to First Street) has streetscape elements that contribute to an aesthetically pleasing pedestrian environment. These elements include mature ficus trees, sidewalks, marked crosswalks, bulb-outs,

ground-floor windows, awnings, pedestrian-level lighting, signage, potted plants and planters and streetscape elements.

A range of public gateways and signs throughout the Specific Plan area creates varied visual effects. Currently, three separate sets of design guidelines allow for a variety of way-finding signage, lighting, and street furnishings. Streetscape elements such as benches, light fixtures, planters, bollards, trash receptacles, and bus shelters also vary in style throughout the area. The result in the Specific Plan area is a mixture of different streetscape elements that produce an inconsistent look and feel. Along First Street, unique private signage along building facades adds diversity and a “vintage” theme. In contrast, more recent commercial signage along First Street and Newport Avenue, diverges from the Old Town character.

Light and Glare

Nighttime lighting associated with the existing urban development is present throughout the Specific Plan area. Existing lighting involves street lights, parking lot and building façade lighting, interior illumination passing through windows, and illumination from vehicle headlights. Sensitive receptors relative to lighting and glare include residents living in the Specific Plan area, and motorists and pedestrians passing through the Specific Plan area.

Aesthetics considerations are addressed in Section 5.1, *Aesthetics*.

4.5 CULTURAL RESOURCES

Historic

There are two buildings within the Specific Plan area that are listed on the California Register of Historical Resources and the National Register of Historic Places. These are the Artz Building (150-158 West Main Street; California Register of Historical Resources Primary No. P-30-162095) and the Sherman Stevens House (228 West Main Street; Primary No. P-30-160206). In addition, the Cultural Resources District itself is a recorded historic resource (identified as the “Tustin Old Town Resources District - generally bounded by First Street in the north, Sixth Street in the south, the 55 Freeway to the west and Prospect Avenue to the east”; Primary No. P-30-16271).

The Tustin Historic Resources Survey, Parts 1 and 2, identifies over 400 sites of possible distinction and notable recognition. In addition, the Specific Plan area contains numerous buildings that are over 50 years of age or would be over 50 years of age sometime before 2035, the age when buildings may become historically significant.

Archaeological

Most researchers agree that the earliest occupation for the Tustin area dates to the early Holocene (8,500 to 5,000 years ago). The tools related to this time period includes scrapers, hammer stones, large flaked cores, drills, and choppers, which were used to process food and raw materials. Around 8,000 years ago, subsistence patterns changed, and tools from this time period include large, bifacially worked dart points and grinding stones, handstones and metates. Then approximately 3,500 years ago, groups in the general vicinity of the Specific Plan area adopted new mortar and pestle technology and started storing food that could be processed and saved for the leaner, cooler months of the year.

At approximately 1,500 years before present, bow and arrow technology started to emerge, and the Palomar Tradition is attributed to this time, which is characterized by soapstone bowls, arrowhead projectile points, pottery vessels, rock paintings, and cremation sites. The shift in material culture

assemblages is largely attributed to the emergence of Shoshonean (Tatic-speaking) people who entered California from the east.

Although there is a long history of human occupation in the Tustin region, the Specific Plan and the areas in the vicinity have been heavily disturbed and are not known to contain any existing archaeological resources.

Paleontological

All of Orange County consists of Miocene (22-5 million-year-old) marine sediments overlain by a relatively thin veneer of Pleistocene (2.4 million to 11-thousand-year-old) sediments and recent (11 thousand-year-old to present) alluvial sediments. Old Town Tustin is a flat plain across which streams flowed to the ocean depositing alluvium. No fossils are known to exist within the Specific Plan area (Cogstone, 2017).

Cultural resource considerations are addressed in Section 5.3, *Cultural Resources*.

4.6 LAND USE AND PLANNING

General Plan and Zoning Ordinance

The City's General Plan is its comprehensive, long-range plan for future growth and development. As mandated by state law, the General Plan identifies goals and policies for a number of specific topics; Tustin's General Plan organizes these topics into seven elements: land use, housing, circulation, conservation/open space/recreation, public safety, noise, and growth management.

The General Plan establishes seven designations within the Specific Plan area: CC (Community Commercial), OTC (Old Town Commercial), MHP (Mobile Home Park), PI (Public/Institutional), PO (Professional Office), I (Industrial), and PCCB (Planned Community Commercial/Business).

The City's zoning map identifies the following zoning designations within the Specific Plan area: SP10 (FSSP), C1 (Retail Commercial), C2 (Central Commercial), CG (Commercial General), PC COM (Planned Community Commercial), PR (Professional), PM (Planned Industrial), P&I (Public and Institutional), MHP (Mobile Home Park), and PC RES (Planned Community Residential). Planned Communities include: Tustin Village, Tustin Plaza, 13682 Newport Avenue, Blockbuster Music Plaza, Vintage, Prospect Village, and Ambrose Lane Area B.

First Street Specific Plan

The First Street Specific Plan (SP10) area is located within the Specific Plan area. The First Street Specific Plan was adopted in December 1985 and amended in November 2012. The primary intent of the First Street Specific Plan is to continue commercial retail, service, and office uses, including some commercial mixed-use projects. Implementation of the project would include a rescission of the First Street Specific Plan, and replacement of its regulations with those of the proposed Specific Plan.

Cultural Resources District Residential Guidelines

The Cultural Resources District (CRD) Residential Design Guidelines apply to new residential projects or modifications to existing historical residential homes in the CRD. There are some designated cultural resources located outside the CRD but within the Specific Plan boundaries for which these design guidelines would be applicable.

Cultural Resources District Commercial Design Guidelines

Similar to the CRD Residential Design Guidelines, the CRD Commercial Design Guidelines apply to new commercial projects or modifications to existing historical commercial buildings. There are some designated cultural resources located outside the CRD but within the Specific Plan boundaries for which these design guidelines would be applicable.

Land use and planning considerations are addressed in Section 5.5, *Land Use and Planning*.

4.7 NOISE

The primary sources of noise in the City include those related to urban development, such as vehicles on roadways and noise from commercial and residential land uses. The ambient noise in the Specific Plan area is dominated by traffic noise from the I-5 and SR-55 freeways, and aircraft overflights from/to John Wayne Airport. The Specific Plan area is located approximately 4.5 miles northeast of the John Wayne Airport. The Specific Plan area is located outside of the 60 dBA CNEL noise contour boundaries of John Wayne airport. This topic is addressed in Section 5.6, *Noise*.

4.8 RECREATION

Regional

The Orange County Parks and Recreation Department (OC Parks) operates and maintains 39,000 acres of regional park facilities and open space. The Orange County Parks Strategic Plan (October 2007) notes that regional resources include 32,000 acres in 25 urban and wilderness parks, 7 miles of beaches and coastal facilities, 7 regional historic sites and parks, archeological and paleontological collections, 7,000 acres of open space lands, and 230 miles of regional riding and hiking trails. Regional County recreational facilities near the Specific Plan area include Peters Canyon Regional Park, located approximately 2.5 miles to the northeast, and Mason Regional Park, approximately 5.5 miles to the south.

Local

The City of Tustin Parks and Recreation Department operates and maintains approximately 113.5 acres of park and recreation facilities, inclusive of approximately 106.7-acres of existing public parks. One 5.5-acre community parks, Peppertree Park, is located within the Specific Plan area. Additionally, the Tustin Legacy Linear Park is under construction, and the Veterans Sports Park at Tustin Legacy is expected to start construction in 2018. The Tustin Legacy Specific Plan identifies 33 acres of existing parks and an additional 230 acres of future parks to be developed within its boundaries (Tustin Legacy Specific Plan, 2017). Typical of older communities that were established prior to the establishment of parkland requirements, the Open Space/ Conservation/ Recreation Element of the General Plan has identified a parkland deficiency.

This topic is addressed in Section 5.8, *Recreation*.

4.9 TRANSPORTATION AND CIRCULATION

The Specific Plan area is generally bounded by I-5, SR-55, Newport Avenue and First Street, as shown in Figure 3-2, *Specific Plan Area Boundary Map*. It is bisected by Main Street and First Street as the primary east-west streets and B street and El Camino Real as the primary north-south streets. One intersection in the

vicinity of the Specific Plan, Newport Avenue at I-5 NB On-Ramp, currently operates at an unacceptable level of service, which occurs in the a.m. peak hour.

The Orange County Transportation Authority (OCTA) provides bus service within Orange County including the City of Tustin. The following routes serve the Specific Plan area: Route 60, Route 64, Route 71, Route 79, Route 167. These routes primarily serve stops on First Street and Newport Avenue, although there are several bus stops on Centennial Way near City Hall. The most heavily utilized bus stops are located near the intersection of First Street and Newport Avenue. OCTA is also responsible for administering the Master Plan of Arterial Highways (MPAH), which was initially established in 1956 and is continuously updated to reflect changing development and traffic patterns.

The Specific Plan area currently only includes one Class I bicycle facility on Newport Avenue. However, there are extensive pedestrian facilities in the Specific Plan area and the majority of intersections have designated crosswalks on more than one leg of an intersection. This topic is addressed in Section 5.9, *Traffic and Circulation*.

4.10 TRIBAL CULTURAL RESOURCES

In ethnographic times the City of Tustin and much of the area surrounding the city was populated by the Tongva, later known as the Gabrielino (derived from association with the San Gabriel Mission). The Tongva speak a language that is part of the Takic branch of the Uto-Aztecan language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands. At European contact, the tribe consisted of more than 5,000 people living in between 50 and 100 settlements throughout the area. Some of the villages were considered quite large, with up to 150 people.

The Tongva are considered to have been one of the wealthiest and most populous tribes, second only to the Chumash who occupied territories to the north. Catalina Island provided valuable deposits of steatite that was used in trade with other tribes, both as raw material and finished vessels and ornaments. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship. Houses were domed, circular structures thatched with tule or similar. The Tongva utilized a hunting and gathering economy (Bean and Smith 1978) and plant foods were, by far, the greatest part of the traditional diet during ethnohistoric times. This topic is addressed in Section 5.10, *Tribal Cultural Resources*.

4.11 UTILITIES AND SERVICE SYSTEMS

Wastewater

The Specific Plan area is served by a network of underground sewage collection lines operated by the Orange County Sanitation District (OCSD). The Specific Plan area contains a network of sewer lines that range from 6-inch to 27-inches in diameter and operate well within capacity. In 2016, management of local sewers within the project area was transferred from OCSD to the EOCWD. From 2004-2006, OCSD conducted a series of sewer improvement projects within the Specific Plan area. Specifically, sewer lines were upsized along the south end of Newport Avenue and El Camino Way, along the west end of Sixth Street, along Holt Avenue, and along the north-most end of Prospect. These lines were upsized to either 18-inch lines (Holt Avenue) or 27-inch lines (Newport Avenue, El Camino Way, Sixth Street, and Prospect Avenue). These improvements, as well as all other lines within the Specific Plan area, were implemented to accommodate future growth projections and have sufficient capacity to handle the increased flows

resulting from future development. The City's local system generally discharges to larger OCSD trunk pipelines that range in size from 12 to 96 inches in diameter, to convey wastewater to the reclamation plants. Given the growth within OCSD's service area, OCSD is currently upsizing a number of collection system pipelines to provide additional capacity (OCSD 2017).

The wastewater from the Specific Plan area flows to the OCSD Reclamation Plant No. 1 in Fountain Valley, which has a treatment capacity of 204 million gallons per day (mgd) and an average daily flow of 117 mgd; and Treatment Plant No. 2 in Huntington Beach, which has a treatment capacity of 258 mgd, and an average daily flow of 67 mgd (OCSD 2017). This topic is addressed in Section 5.11, *Utilities and Service Systems*.

Water Supply and Groundwater

Water service is provided to the Specific Plan area by the City of Tustin. Potable water is supplied by the Metropolitan Water District and groundwater is pumped from the Santa Ana River Basin via 12 City-operated wells. According to the City's 2015 Urban Water Management Plan (UWMP), the City delivers water supplies through 172 miles of 1.5-inch to 20-inch water mains and three booster stations. The City pumps its groundwater from 13 wells. Eight of the wells produce untreated or "clear" groundwater that pump directly into the distribution system. The other five wells produce water that is treated for nitrate and total dissolved solids (TDS) removal at the City's two water treatment facilities. The City also maintains six reservoirs, with a combined storage capacity of approximately 13.83 million gallons (MG) (UWMP 2015).

In 2015 the City delivered 11,113 acre-feet (AF) of water. The City receives 26 percent of its water supply from EOCWD, who imports it from the Metropolitan Water District (UWMP 2015). The City currently has a minimum available imported water supply of 12,401 AFY from MWDOC; however, it only utilizes 2,914 AFY annually of these imported supplies (UWMP 2015).

The other 74 percent of the City's water is obtained from the underlying Lower Santa Ana Groundwater Basin, which is managed by the Orange County Water District (OCWD). Each year, OCWD sets a Basin Production Percentage (BPP) that targets the amount of groundwater to be pumped from the basin. This, along with the City's water supply demands, sets the City's allowable groundwater pumping allocation. As discussed in detail in the City's UWMP, groundwater levels are managed within a safe basin operating range to protect the long-term sustainability of the Basin (UWMP 2015). This topic is addressed in Section 5.11, *Utilities and Service Systems*.

Drainage

The project area is served by a network of underground drainage pipes ranging in size from 18 to 66-inch diameter at the downstream confluence point (Newport Avenue/I-5). Catch basins and other structures maintained by the Orange County Flood Control District serve the area, and include a network of underground drainage pipes ranging in size from 18-inch diameter to 66-inch diameter at the downstream confluence point (Newport Avenue/I-5) and the Santa Ana - Santa Fe Channel, which flows southeast and into the Peters Canyon Channel. The Peters Canyon Channel flows south west and joins with the San Diego Creek, which flows south west and outlets into Upper Newport Bay, then ultimately into the Pacific Ocean. Facilities upstream of the Newport/I-5 confluence point are maintained by the City of Tustin.

4.12 ENERGY

Electricity

The Southern California Edison Company (SCE) is the electrical purveyor in the City of Tustin. SCE provides electricity service to more than 14 million people in a 50,000 square-mile area of central, coastal and Southern California. SCE is in the process of implementing infrastructure upgrades to ensure the ability to meet future demands. In the Orange County region, SCE is implementing the Preferred Resources Pilot Program that uses solar, wind, energy storage, energy efficiency and energy conservation programs to offset the increasing customer demand for electricity in central Orange County, including the Specific Plan area (SCE, 2017).

Natural Gas

The Southern California Gas Company (SoCalGas) is the natural gas purveyor in the City of Tustin and is the principal distributor of natural gas in Southern California. SoCalGas projects that gas demand will decline at an annual rate of 0.6 percent from 2016 to 2035 due to modest economic growth, mandated energy efficiency standards and programs, renewable electricity goals, and conservation savings linked to advanced metering infrastructure (CGEU 2016). The gas supply available to SoCalGas from California sources averaged 122 MMcf/day in 2015; however, southwestern U.S. sources of natural gas will continue to supply most of Southern California's natural gas demand, which are provided by interstate pipeline deliveries (CGEU 2016). SoCalGas designs its facilities and supplies to provide continuous service during extreme peak demands, and has identified the ability to meet peak demands through 2035 in its 2016 report (CGEU 2016).

Energy considerations are addressed in Section 5.12, *Energy Resources*.

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Tustin Downtown Commercial Core Specific Plan Traffic Study, Prepared by Stantec, 2017, Appendix E.

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5. Environmental Impact Analysis

This chapter focuses on evaluating the significant environmental effects of the proposed Specific Plan (proposed project), which is described in Chapter 3, *Project Description*. This Chapter describes the existing physical environmental setting (also referred to as “baseline”) for each environmental topic, and the impacts that would result from implementation of the proposed project. Because existing federal, state, and local regulations will also shape how the proposed project is implemented, and provide requirements for avoiding and reducing environmental impacts, a discussion of relevant plans, programs, and policies pertinent to each environmental issue is addressed in each environmental topic section. Additionally, as necessary, feasible mitigation measures are identified to reduce the significant impacts of the proposed project.

ENVIRONMENTAL TOPICS

The following sections in this chapter analyze the environmental topics listed below:

- | | |
|------------------------------|---|
| 5.1 Aesthetics | 5.8 Recreation |
| 5.2 Air Quality | 5.9 Transportation and Circulation |
| 5.3 Cultural Resources | 5.10 Tribal Cultural Resources |
| 5.4 Greenhouse Gas Emissions | 5.11 Utilities and Service Systems |
| 5.5 Land Use and Planning | 5.12 Energy Resources |
| 5.6 Noise | 5.13 Mandatory Findings of Significance |
| 5.7 Population and Housing | |

This EIR evaluates the direct and indirect impacts resulting from construction and ongoing operations of the proposed Specific Plan project. Under CEQA, EIRs are intended to focus their discussion on significant impacts, and may limit discussion of other impacts to a brief explanation of why the impacts are not significant. The Notice of Preparation (NOP)/Initial Study that was prepared for the proposed Specific Plan Project was used to help determine the scope of the environmental issues to be addressed in the EIR. Consistent with CEQA Guidelines Section 15128, issues considered Potentially Significant are addressed in this Program EIR. Issues identified as Less Than Significant or No Impact in the NOP/Initial Study are not addressed beyond the discussion contained in the Initial Study (included as Appendix A).

FORMAT OF ENVIRONMENTAL TOPIC SECTIONS

Each environmental topic section generally includes the following main subsections:

- *Regulatory Setting*, describes applicable federal, state, and local plans, policies, and regulations that the proposed Specific Plan must address, and will shape its implementation.

- *Existing Conditions*, describes the existing physical environmental conditions (environmental baseline) related to the environmental topic being analyzed.
- *Thresholds of Significance*, sets forth the thresholds of significance (significance criteria) used to determine whether impacts are “significant.”
- *Methodology*, provides a description of the methods used to analyze the impact and determine whether it would be significant or less than significant.
- *Environmental Impacts*, provides an analysis of the impact statements for each identified significance threshold. The analysis of each impact statement is organized as follows:
 - A statement of the CEQA threshold being analyzed.
 - The EIR’s conclusion as to the significance of the impact.
 - An impact assessment that evaluates the changes to the physical environment that would result from proposed project.
 - An identification of significance comparing identified impacts of the proposed Specific Plan to the significance threshold with implementation of any existing Plans, Programs, or Policies, prior to implementation of any required mitigation.
 - A discussion of potential cumulative impacts that could occur from implementation of the proposed Specific Plan and other cumulative projects.
 - A list of any existing related Plans Programs, or Policies.
 - For each impact determined to be potentially significant, feasible mitigation measure(s) to be implemented are provided. Mitigation measures include enforceable actions to:
 - avoid a significant impact;
 - minimize the severity of a significant impact;
 - rectify an impact by repairing, rehabilitating, or restoring the effected physical environment;
 - reduce or eliminate the impact over time through preservation and/or maintenance operations during the life of the project; and/or
 - compensating for the impact by replacing or providing substitute resources or environmental conditions.
 - Actions to be taken to ensure effective implementation of required mitigation measures.

ENVIRONMENTAL SETTING/BASELINE

The “Environmental Setting” subsections describe current conditions regarding the environmental resource area reviewed. CEQA Guidelines Section 15125 states that “An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, from both a local and regional perspective. The environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to gain an understanding of the significant effects of the proposed project and its alternatives.”

CEQA Guidelines and case law recognize that the date for establishing an environmental baseline cannot be rigid (see CEQA Guidelines Sections 15146, 15151, and 15204). In some instances, information is presented in the environmental setting that differs from the precise time of the NOP/Initial Study. This information is considered representative of baseline conditions. Furthermore, environmental conditions may vary from year to year, and in some cases, it is necessary to consider conditions over a range of time periods.

A NOP/Initial Study was prepared for the proposed Specific Plan Project, and was distributed on August 1, 2016 for a 30-day public review and comment period that ended on August 31, 2016. This time period would generally consist of the baseline, however, the baseline conditions relevant to the environmental issues being analyzed vary depending on the availability of agency data, such as growth projections and air quality emissions. The baseline conditions are described within each environmental topic section within this chapter, and within Chapter 4, Environmental Setting.

THRESHOLDS OF SIGNIFICANCE/SIGNIFICANCE CRITERIA

CEQA Guidelines Section 15382 defines a significant effect on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

The “Thresholds of Significance” subsections provide the specific thresholds of significance by which impacts are judged to be significant or less than significant in this EIR. These include identifiable quantitative or qualitative standards or sets of criteria pursuant to which the significance of each given environmental effect can be determined. Exceedance of a threshold of significance normally means the effect will be determined to be “significant” (CEQA Guidelines Section 15064.7(a)). However, an iron-clad definition of a “significant” effect is not always possible because the significance of an activity may vary with the setting (CEQA Guidelines Section 15064(b)). Therefore, a Lead Agency has the discretion to determine whether to classify an impact described in an EIR as “significant,” depending on the nature of the area affected. The thresholds of significance used to assess the significance of impacts are based on those provided in Appendix G of the CEQA Guidelines.

IMPACT SIGNIFICANCE CLASSIFICATIONS

The following classifications are used throughout the impact analysis in this EIR to describe the level of significance of environmental impacts:

- **Significant Impact:** A significant impact is defined by Section 15382 of the CEQA Guidelines as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself “shall not be considered a significant effect on the environment ... [but] may be considered in determining whether the physical change is significant.” As defined in this EIR, a significant impact exceeds the defined significance criteria and therefore requires mitigation.
- **No Impact:** No adverse effect on the environment would occur, and mitigation measures are not required.

- **Less than Significant Impact:** The impact does not reach or exceed the defined threshold (criterion) of significance. Therefore, no mitigation is required.
- **Less than Significant Impact with Mitigation Incorporated:** The impact reaches or exceeds the defined threshold (criterion) of significance, and mitigation is therefore required. Feasible mitigation measures, including standard conditions of approval and applicable plans, programs, and policies, when implemented, will reduce the significant impact to a less-than-significant level.
- **Significant and Unavoidable Impact:** The impact reaches or exceeds the defined threshold (criterion) of significance, and mitigation is therefore required. However, application of all feasible mitigation measures, standard conditions of approval, and applicable plans, programs, and policies would not reduce the impact to a less-than-significant level.

While CEQA requires that an EIR identify all feasible mitigation to avoid or reduce the significant impacts of a project, it also permits public agencies to approve a project even though it would result in one or more significant unavoidable environmental effects. For a Lead Agency to approve a project with one or more significant unavoidable impacts, it must first prepare a statement of overriding considerations, which identifies the specific economic, legal, social, technological, or other benefits of the project, including region-wide or statewide environmental benefits, that outweigh its significant unavoidable effects, and thereby warrant its approval (Public Resources Code Section 21083; CEQA Guidelines Section 15093). The statement of overriding considerations must be supported by substantial evidence in the record (CEQA Guidelines Section 15093(a)).

CUMULATIVE IMPACTS

Cumulative impacts refer to the combined effect of the proposed Specific Plan project's impacts with the impacts of other past, present, and reasonably foreseeable probable future projects. Both CEQA and the CEQA Guidelines require that cumulative impacts be analyzed in an EIR. As set forth in the CEQA Guidelines Section 15130(b), "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." The CEQA Guidelines direct that the discussion should be guided by practicality and reasonableness, and focus on the cumulative impacts that would result from the combination of the proposed project and other projects, rather than the attributes of other projects which do not contribute to cumulative impacts.

According to Section 15355 of the CEQA Guidelines,

'Cumulative impacts' refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- a) The individual effects may be changes resulting from a single project or a number of separate projects.
- b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Therefore, the cumulative discussion in this EIR focuses on whether the impacts of the proposed project are cumulatively considerable within the context of impacts caused by other past, present, and reasonably foreseeable future projects.

Additionally, pursuant to the CEQA Guidelines Section 15130(a)(1), an EIR should not discuss cumulative impacts that do not result at least in part from the project being evaluated in the EIR. Thus, cumulative impact analysis is not provided for any environmental issue where the proposed project would have no environmental impact. Analysis of cumulative impacts is, however, provided for all project impacts that are evaluated within this EIR.

CEQA Guidelines Section 15130(b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of the following, or a reasonable combination of the two:

- A list of past, present and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency; or
- A summary of projections contained in an adopted local, regional or statewide plan or related planning document that describes or evaluates conditions contributing to the cumulative effect.

The information for the cumulative analysis is dependent upon the environmental topic area. Cumulative information for air quality, greenhouse gas emissions, and traffic relies on projections contained in adopted local, regional, or statewide plans or related planning documents, such as Southern California Regional Transportation Plan and relevant regional plans developed by the Southern California Association of Governments (SCAG). Conversely, cumulative information for noise and vibration is based on the location of other past, present, and reasonably foreseeable future projects.

Additionally, different types of cumulative impacts occur over different geographic areas. For example, the geographic scope of the cumulative air quality analysis, where cumulative impacts occur over a large area, is different from the geographic scope considered for cumulative analysis of aesthetic resources, for which cumulative impacts are limited to specific viewsheds. Thus, in assessing aesthetic resources impacts, only development within and immediately adjacent to the project area would contribute to a cumulative visual effect is analyzed, whereas cumulative traffic impacts are based upon all development within the traffic study area of roadways and intersections. Because the geographic scope and other parameters of each cumulative analysis discussion can vary, the cumulative scope is described for each environmental topic.

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5.1 Aesthetics

5.1.1 INTRODUCTION

This section describes the existing visual setting for the proposed Specific Plan, and evaluates changes in the visual and aesthetic environment that would result from the Plan's implementation. The analysis focuses on visual changes that would be seen from public viewpoints and potential impacts of new sources of light and glare.

Aesthetics Terminology

- **Aesthetic Resources** include a combination of numerous elements, such as landforms, vegetation, water features, urban design, and/or architecture, that impart an overall visual impression that is pleasing to, or valued by, its observers. Factors important in describing the aesthetic resources of an area include visual character, scenic resources, and scenic vistas. These factors together not only describe the intrinsic aesthetic appeal of an area, but also communicate the value placed upon a landscape or scene by its observers. These factors include:
 - **Visual Character**, which broadly describes the unique combination of aesthetic elements and scenic resources that characterize a particular area. The quality of an area's visual character can be qualitatively assessed considering the overall visual impression or attractiveness created by the particular landscape characteristics. In urban settings, these characteristics largely include land use type and density, urban landscaping and design, architecture, topography, and background setting;
 - **Scenic Resources**, which are visually significant hillsides, ridges, water bodies, and buildings that are critical in shaping the visual character and scenic identity of the Specific Plan area, and the surrounding region; and
- **Glare** is the sensation produced by a source of brightness within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss of vision.

5.1.2 REGULATORY SETTING

City of Tustin General Plan

The following policies contained in the Land Use Element are relevant to the proposed project:

Goal 3: Ensure that new development is compatible with surrounding land uses in the community, the City's circulation network, availability of public facilities, existing development constraints and the City's unique characteristics and resources.

Policy 3.7: Encourage the preservation and enhancement of public vistas, particularly those seen from public places.

Goal 4: Assure a safe, healthy and aesthetically pleasing community for residents and businesses.

Goal 6: Improve urban design in Tustin to ensure development that is both architecturally and functionally compatible, and to create uniquely identifiable neighborhoods, commercial and business park districts.

Policy 6.2: Encourage and promote high quality design and physical appearance in all development projects.

Policy 6.5: Preserve historically significant structures and sites, and encourage the conservation and rehabilitation of older buildings, sites and neighborhoods that contribute to the City's historic character.

Policy 6.10: Reinforce Tustin's image and community identity within the greater Orange County urban area.

Policy 6.11: Encourage the establishment of unique identity in the City's neighborhoods.

Goal 10: Improve and strengthen the Tustin Old Town/First Street area with a unique pedestrian environment and diverse mix of goods, services, and uses.

Policy 10.1: Improve the Old Town District's identity as the City's historical and architectural focus and its contribution to the City's economic base.

Policy 10.2: Review and consider the possible development of residential uses in the Old Town area both as individual residential projects, and integrated above ground floor retail and office uses.

Policy 10.3: Encourage outdoor pedestrian spaces, such as courtyards, arcades and open landscaped passages, to be integrated into new development. Encourage high-quality pedestrian-oriented building frontages which open onto these pedestrian spaces and public sidewalks.

Tustin City Code

Article 4, Chapter 6, Section 4617: Limits construction activity to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays; with no activity allowed on Sundays and Federal holidays. Construction activities may be permitted outside of those limitations identified in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted.

Article 9, Chapter 2, Part 7, Section 9271hh: All exterior lighting shall be subject to the following standards, unless otherwise exempted by the City of Tustin:

- (a) Outdoor lighting shall be designed so as to minimize impacts from light pollution including light trespass and glare to minimize conflict caused by unnecessary illumination.
- (b) Outdoor lighting fixtures that are used to illuminate a premises, architectural feature or landscape feature on private property shall be directed, shielded, or located in such a manner that the light source is not directed off-site.

Tustin Cultural Resources District Commercial and Residential Design Guidelines

The City Council declared as a matter of public policy that, "the recognition, preservation, protection and use of culturally significant structures, natural features, sites and neighborhoods within the City of Tustin is required in the interest of the health, safety, prosperity, social and cultural enrichment and general welfare of City residents" (Code Section 9252a).

To ensure the maintenance, preservation, and enhancement of Tustin's Old Town, the City Council adopted the Cultural Resources District. The primary purpose and intent of these commercial and residential design guidelines is to promote the City's goals to preserve, protect, safeguard, and enhance the existing character of historic or culturally significant structures.

The Cultural Resources District Residential Design Guidelines guide new projects or modifications to existing historical residential homes. The Specific Plan area does not include residential neighborhoods. However,

there are some residential homes located within the Specific Plan boundaries that are designated cultural resources to which these Design Guidelines would be applicable.

The Cultural Resources District Commercial Design Guidelines guide new projects or modifications to existing historical commercial buildings. The Design Guidelines are applicable to any historical building in the Cultural Resources District, which a portion is a part of the Specific Plan area.

The Design Guidelines are to be used to determine whether new building alterations, additions, new infill buildings, signs, and other improvements are appropriate for the commercial district within Old Town Tustin. These Design Guidelines are intended to be flexible in nature in order to respond to changes in the use of properties, in addition to opportunities for adaption and reuse of existing structures. These Design Guidelines were developed to protect Old Town Tustin and the features that contribute to the area's unique identity and character, and to provide flexibility to complement the District's distinctive architecture, character, and streetscape.

Within the Cultural Resources District, project design is required to be reviewed and approved through a design review process prior to the issuance of a building permit. Design review is required for any project involving new structures, major exterior alteration or enlargement of an existing structure, and/or buildings needing to be relocated. In addition, a Certificate of Appropriateness is necessary prior to, or concurrent with, a building permit for all permitted structures in the Cultural Resources District. As stated in TCC Article 9, Chapter 2, Part 5, Section 9252f, a Certificate of Appropriateness shall be required prior to:

- New construction.
- Alteration of the exterior features of a building or site within a designated Cultural Resource District, or alteration of a Designated Cultural Resource, or construction of improvements within a designated Cultural Resources District requiring a City building permit.
- Demolition or removal of any Designated Cultural Resource or of any improvements in a Cultural Resources District.

The Director of Community Development (or Designee) is authorized to do the following: 1) Approve, 2) Approve with conditions, or 3) Deny Certificates of Appropriateness for improvements requiring a City building permit, including demolition and relocation of structures. A Certificate of Appropriateness is granted for a finite amount of time; refer to TCC Article 9, Chapter 2, Part 5, Section 9252 to ensure work is completed within the time frame allotted by the Certificate.

5.1.3 ENVIRONMENTAL SETTING

Aesthetic resources include a combination of numerous elements, such as landforms, vegetation, water features, urban design, and/or architecture, that impart an overall visual impression that is pleasing to, or valued by, its observers. Factors important in describing the aesthetic resources of an area include visual character, scenic resources, and scenic vistas. These factors together not only describe the intrinsic aesthetic appeal of an area, but also communicate the value placed upon a landscape or scene by its observers.

Scenic Vistas

Scenic vistas are panoramic views of important visual features, as seen from public viewing areas. The City's General Plan does not identify any scenic vistas within the City. The dominant scenic resource in the Specific Plan area is views of the Santa Ana Mountains from east facing street corridors within the Specific Plan area that are intermittently obstructed by existing development and mature landscaping. Due to the

developed urban landscape and the lack of topography in the Specific Plan area, no other scenic vistas exist from or of the Specific Plan area. In addition, the Orange County Scenic Highway Plan does not identify any scenic routes within the City of Tustin; and there are no designated or eligible state scenic highways within or nearby the Specific Plan area (Caltrans, 2017).

Visual Character and Quality

The Specific Plan area is a developed urban area that is generally laid out in a grid system, whereby the streets define the location of development. The existing visual character of the Specific Plan area consists of a low-density urban downtown area with small scale commercial development, neighborhood shopping centers, strip commercial, “main street,” small scale office, civic facilities, park and auto-oriented drive-throughs. Existing buildings are one to three stories in height. Newport Avenue, in particular, is characterized by predominantly low-rise, single-story buildings and expansive parking lots.

The Old Town Tustin area (located generally between B Street and Prospect Avenue, and parcels from Sixth Street up to First Street) has streetscape elements that contribute to an aesthetically pleasing pedestrian environment. These elements include mature trees, sidewalks, marked crosswalks, bulb-outs, ground-floor windows, awnings, pedestrian-level lighting, signage, potted plants and planters and streetscape elements.

A range of public gateways and signs throughout the Specific Plan area creates varied visual effects as different design guidelines allow for a variety of way-finding signage, lighting, and street furnishings. Streetscape elements such as benches, light fixtures, planters, bollards, trash receptacles, and bus shelters also vary in style throughout the area. The result in the Specific Plan area is a mixture of different streetscape elements that produce an inconsistent look and feel. Along First Street, unique private signage along building facades adds diversity and a “vintage” theme. In contrast, more recent commercial signage along First Street and Newport Avenue, diverges from the Old Town character.

Light and Glare

Nighttime lighting associated with the existing urban development is present throughout the Specific Plan area. Existing lighting involves street lights, parking lot and building façade lighting, interior illumination passing through windows, and illumination from vehicle headlights. Sensitive receptors relative to lighting and glare include residents living in the Specific Plan area, and motorists and pedestrians passing through the Specific Plan area.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the Specific Plan area is generated by building and vehicle windows reflecting light. However, there are no buildings, structures, or facilities in the Specific Plan area that presently generate substantial glare since most of the buildings are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area. In addition, surface parking lots in the area are not substantially large and are generally separated by buildings, walkways, landscaping and other non-reflective surfaces; therefore, the source of glare from sunlight or exterior light reflecting from car windshields is limited.

5.1.4 THRESHOLDS OF SIGNIFICANCE

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

- AE-1 Have a substantial adverse effect on a scenic vista?

- AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- AE-3 Substantially degrade the existing visual character or quality of the site and its surroundings?
- AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Initial Study, included as Appendix A, established that the project would result in no impacts related to Thresholds AE-1 and AE-2; no further assessment of these impacts is required in this EIR. The Initial Study also substantiated that Thresholds AE-3 and AE-4 would have less than significant impacts, however, these impact areas have been carried forward from the Initial Study for further analysis in this EIR.

5.1.5 METHODOLOGY

Aesthetic resources were assessed based on the visual quality of the area immediately surrounding the Specific Plan area and the impacts with respect to the existing aesthetic environment. The significance determination for scenic vistas is based on consideration of whether the vista can be viewed from public areas within or near the Specific Plan area and the potential for implementation of the Specific Plan to either hinder views of the scenic vista or result in its visual degradation. The evaluation of aesthetics character identifies the proposed Specific Plan's development characteristics and the expected appearance, and compares it to the area's existing appearance and character, compared to the character of adjacent existing and future planned uses to determine whether and/or to what extent a degradation of the visual character of the area could occur. Factors considered include the blending/contrasting of new and existing buildings given the proposed uses, density, height, bulk, setbacks, signage, etc. An impact would be considered significant if the project would result in development that is incompatible with existing uses in relation to type of use or scale or is inconsistent with adopted policies regarding visual and urban design quality.

The EIR recognizes that assessment of whether changes in the character of development from existing conditions would be comparatively better (substantially improved) or worse (substantially degraded) is largely subjective. The following analysis, therefore, focuses in a factual manner on the extent to which new development pursuant to the proposed Specific Plan would be compatible or conflict with the area's existing character or features.

The analysis of light and glare identifies light-sensitive land uses and describes the Specific Plan's proposed light and glare sources, and the extent to which project lighting, including illuminated signage, could spill off the project site onto adjacent existing and future light-sensitive areas. The analysis also considers the potential for sunlight to reflect off building surfaces (glare) and the extent to which such glare would interfere with the operation of motor vehicles or other activities.

5.1.6 ENVIRONMENTAL IMPACTS

IMPACT AE-1: THE PROJECT WOULD NOT SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF THE SITE AND ITS SURROUNDINGS [THRESHOLD AE-3].

Less than Significant Impact. The proposed Specific Plan would guide infill development, which would alter the existing visual character of the Specific Plan area over the plan implementation period (through 2035) by introducing additional mixed-use development to the area. The Specific Plan provides design criteria, which includes requirements and guidelines for specific development sites, new community

amenities, and architectural designs specific to each of the DA's. The design criteria in the Specific Plan provides for compatibility with existing uses to enhance the aesthetics and character of the Specific Plan area. The Specific Plan provides design guidelines for streetscape improvements that includes a specified palette of street trees, street furniture (planters, benches, bicycle parking, trash receptacles, etc.), wayfinding signage, and open space areas. Implementation of the Specific Plan's design criteria with improvements to existing streetscapes, would enhance the existing visual character of the Specific Plan area as the Specific Plan's design criteria would promote compatibility for new improvements with the area. The urban design vision and descriptions of the physical changes that would occur in the six DAs, including the three subareas (DA-6A, DA-6B, and DA-6C) are summarized below and illustrated in Figure 3-6, *Urban Design Plan*.

DA-1, DA-2, and DA-3: First Street

First Street, located north of Old Town at the terminus of El Camino Real, is the focus of three DAs: DA-1, DA-2 and DA-3. The boundaries of DA-1 stretch from the 55 Freeway to C Street and DA-2 extends from C Street to Centennial Way. DA-1 and DA-2 currently provides a mix of retail, services, offices, restaurants, medical services, hospitality, and auto services. Residential mixed use (approved through a discretionary permit) would be allowed on upper floors of two and three-story buildings, with commercial use provided on the ground floor. Because most parcels in the western portion of First Street are small, the Specific Plan establishes a maximum building or tenant space size of 10,000 square feet in DA-1 as well as design that emphasizes the pedestrian realm through landscaping, pedestrian patios and parking lot setbacks. This building size limitation would encourage pedestrian-scale development, and through building placement adjacent to the street, would support the transformation of First Street from a four-lane arterial to a pedestrian and bicycle friendly street, which would enhance (and not degrade) the visual character and quality of the area. The planned First Street improvements include reducing the number of traffic lanes and lane widths, adding street parking, providing a bike lane, and expanding the pedestrian sidewalk (an 8-foot-wide sidewalk on the north side and a 10-foot-wide sidewalk on the south side of First Street). It is anticipated that these changes would improve the existing visual character and quality of the area.

DA-3 is situated in the eastern portion of First Street extending from approximately Centennial Way to Newport Avenue. An important characteristic of DA-3 is its large parcels, which facilitate the implementation of broad scale mixed use shopping, gathering, and entertainment destinations. The urban design vision for DA-3 adjacent to Newport Avenue includes commercial buildings with active ground floor uses or vertical format mixed use buildings with commercial use on the ground floor and up to three floors of residential use above. The mixed use requires approval of a discretionary permit. Vertical residential mixed use would be allowed up to three stories high along First Street and Irvine Boulevard. Vertical or horizontal mixed use would be allowed up to three stories high along Centennial Way and Holt Avenue, with up to four stories high within the interior of the parcels (see the development standards in Table 3.2). The intent is to place buildings close to the street to create a strong visual edge with easy access from the sidewalk. The Specific Plan provides specific criteria, including setbacks, landscaping, and architectural treatments that would ensure that a degradation of the character of DA-3 would not occur with implementation of the vision for this DA.

DA-4: Old Town Tustin

DA-4 consists of Old Town, located between C Street on the west and Prospect Avenue on the east, from south of the First Street frontage to Sixth Street. Many historic buildings are located within this DA, concentrated primarily at the intersection of Main Street and El Camino Real, which visually characterizes the area. DA-4 is part of the Cultural Resources District and properties within this district, as well as identified historic resources in other parts of the City, are subject to the Cultural Resources District Commercial Design Guidelines and/or Residential Design Guidelines.

With the approval of a discretionary permit, generally vertical residential mixed uses would be allowed on upper floors in buildings that would be up to three stories high. The Specific Plan requires new development be designed to provide pedestrian-oriented commercial on the ground floor. While vertical mixed use is primarily envisioned, a horizontal format is not precluded pending a site that could accommodate such and adhere to the Specific Plan. New development consistent with the historic pedestrian-oriented pattern of Old Town, would be allowed pursuant to the Cultural Resources District Design Guidelines, and would create a continuous walkable area that draws visitors to new and existing shops, restaurants, and leisure activities. The Specific Plan Design Guidelines for DA-4 are intended to enhance the visual character of the Old Town Tustin area.

The planned Main Street improvements (which span both DA-4 and DA-5) include reducing the number of traffic lanes and lane widths, adding angled street parking, providing an on-street bike lane on the north side, expanding the pedestrian sidewalk on the south side to accommodate a shared sidewalk/bicycle lane, and installing an entry arch spanning the street. These planned improvements foster a pedestrian-friendly environment, lead patrons in the direction of Old Town, and transform the street from auto-dominated to a pedestrian and bicycle-friendly link between the Tustin Branch Library and Civic Center, Old Town, and the shopping centers and bicycle path along Newport Avenue, which would enhance the visual character of the area. The Specific Plan also includes a program to gradually replace the existing Ficus trees, predominantly in DA-4, with a new tree species identified in the Street Tree Palette, 48-inch box sized or larger. The Ficus is a non-native tree that has invasive roots, and these trees have sometimes negatively affected some infrastructure within the Specific Plan area, including by penetrating water and sewer pipes and uplifting sidewalk pavement, creating potentially unsafe and unsightly conditions. To maintain the visual character of the area, the replacement of trees would follow a systematic, phased tree replacement schedule to replace all alternating Ficus trees within the Specific Plan area and then cycle back to replace the remaining Ficus trees.

In addition, the Specific Plan provides multiple opportunities to expand the pedestrian environment, including parklets in strategic locations along El Camino Real, pocket green spaces and plazas, and enhanced pedestrian crosswalks, which would also enhance the visual character of the area.

The Specific Plan states that the architectural styles and historic character are the highest priority in DA-4, and that developments shall be consistent with the City of Tustin's Cultural Resources District Design Guidelines, which apply to all residential and commercial projects within the Cultural Resources District. Thus, implementation of the Specific Plan would not result in a degradation of the visual character of the area; conversely, the Specific Plan would provide for improvements.

DA-5: Newport Avenue

DA-5 includes Newport Avenue from First Street to El Camino Real (excluding parcels located within a major shopping center on the west side within DA-3) and a portion of Main Street including the Tustin Civic Center and Tustin Branch Library.

The Specific Plan's vision for redevelopment of the clusters of parcels along the east side of Newport Avenue is to balance the auto-centric nature of the arterial by locating buildings up to four stories high close to the street to create a strong presence and to screen parking lots in the interior of the parcels. Within these parcels, the vision for new development provides enhanced pedestrian amenities such as outdoor dining, gathering areas, and walkways that connect the parking lot and buildings to place greater emphasis on pedestrians, which would enhance the visual character of the area.

Improvements to Main Street east of Prospect Avenue within DA-5 address vehicular, pedestrian, and bicycle travel, on-street parking, pedestrian bulb outs and enhanced crossings, and landscaping to visually

support a transformation of what was previously designated as an arterial roadway. The Main Street improvements envisioned by the Specific Plan include:

- Reducing the street from a four-lane roadway (two lanes in each direction) to a two-lane roadway (one lane in each direction) and reducing vehicular travel lanes from 13.5 to 10 feet. This would allow space for the addition of a landscaped center median and on-street diagonal parking on the south side of the street.
- Providing an on-street bicycle lane (Class 2) on the north side of the street, to be accessed from the off-street bicycle lane (Class 1) along the west side of Newport Avenue.
- Expanding the pedestrian sidewalk with an integrated bicycle lane and decorative pavement on the south side of the street.
- Aligning the Tustin Branch Library driveway on the north side of Main Street with the Tustin Plaza driveway on the south side, including bulb outs that narrow the roadway and a crosswalk with decorative pavement that calls attention to pedestrians crossing between the library and Civic Center on the north and Tustin Plaza on the south side of the street.
- Providing an entry arch spanning Main Street near the intersection with Centennial Way to draw attention to Old Town and add aesthetic appeal.
- Adding a new landscaped median and additional trees along the street to foster a pedestrian-friendly environment.

The purpose of the planned Main Street improvements within DA-5 is to strengthen the pedestrian and bicycle connections between the adjacent Tustin Plaza, the nearby library and Civic Center, and Old Town. The Specific Plan also encourages that future improvements to nearby parcels strengthen the orientation and connection of buildings to Main Street. Overall, these planned improvements and design criteria that would be implemented for each development project to enhance the existing visual environment, and would ensure that a degradation of the visual character of the area would not occur.

DA-6A: South of Sixth Street

DA-6A encompasses the blocks on the south side of Sixth Street from I-5 to B Street. This DA includes an approved 140-unit condominium development, a self-storage facility, the Tustin Boys and Girls Club, and a small church building. The recently approved condominium development exemplifies the urban design vision for this DA, as it is designed to be sensitive to the existing single-family residences on the north side of Sixth Street within the Cultural Resources District. This is accomplished through use of historic architectural styles, articulated building mass, limiting buildings adjacent to Sixth Street to two stories, allowing up to four stories adjacent to the freeway, and featuring stepped down one-story elements and patios on the front facades facing Sixth Street. The planning of this DA provides for a visual transition between developed areas, which would complement the character of the area. The vision for this DA is to transition entirely to residential development (requiring a discretionary entitlement; however, one residential unit per parcel is allowed by right with administrative Design Review). Implementation of this vision along with the Specific Plan's design criteria, would assure that visual degradation of the character of the area would not occur.

DA-6B South of Sixth Street

The boundaries of DA-6B include B Street on the west, Sixth Street on the north, the eastern frontage of El Camino Real, I-5 on the south, and Newport Avenue on the southeast. DA-6B is intended to serve as a mixed use shopping, gathering, and entertainment destination. Residential units would be approved through a discretionary entitlement, and may be development as vertical and/or horizontal mixed use.

The design vision for DA-6B includes active ground floor buildings up to four stories high adjacent to Newport Avenue and El Camino Real. Buildings up to three stories are envisioned along Sixth Street, which may include ground floor commercial near El Camino Real and residential through horizontal mixed use further west on Sixth Street. In the interior of the parcels clustered on the west side of El Camino Real, buildings up to four stories are allowed (up to five stories adjacent to I-5) and may include ground floor residential through horizontal mixed use.

The design vision for the parcels clustered on the west side of El Camino Real includes building siting that facilitates community gathering through large public plazas and emphasizes pedestrian orientation, especially in the northern part of the DA adjacent to Old Town. The vision for the architectural design is to make a statement that attracts attention and draws patrons from Newport Avenue, yet is compatible with the historic character of the adjacent Old Town.

The east side of El Camino Real features shallow parcels, facilitating commercial rather than mixed use. Pedestrian-friendly building siting and design is encouraged on the east side. The architectural design on the east side of El Camino Real is envisioned to complement the design on the west side, in a smaller scale. This vision and the design criteria that would be implemented for each development project would enhance the existing visual environment through community orientation and architectural treatments, and would ensure that a degradation of the visual character of the area would not occur.

DA-6C: East of Newport Avenue

DA-6C is bordered on the northeast by El Camino Real, on the northwest by Newport Avenue, and on the south by I-5. The Specific Plan envisions this DA to be developed likely with horizontal mixed use, with commercial clustered in the northwestern portion of the DA along Newport Avenue and El Camino Real and residential on the remainder along El Camino Real. Buildings along Newport Avenue and immediately adjacent to El Camino Real are envisioned to be four stories or less, but five-story buildings would be appropriate adjacent to I-5.

As detailed above, for each DA, the proposed Specific Plan provides design criteria that would respect the existing character of all the DAs. Development standards and design criteria in the Specific Plan would ensure that new buildings incorporate visually interesting active ground floors and public realm improvements that would include creating active outdoor gathering spaces, outdoor seating areas, and installation of landscaping. Furthermore, the City's Cultural Resources District Commercial Design Guidelines and Residential Design Guidelines and Certificate of Appropriateness process (TCC Article 9, Chapter 2, Part 5, Section 9252) would ensure that new uses and structures enhance their sites and are harmonious with the highest standards of improvements to the surrounding area and total community.

These public realm improvements and design criteria would create a high-quality and active pedestrian environment that is compatible with the existing surrounding community. With the introduction of additional higher intensity buildings, various aspects of the visual character of the Specific Plan area would change. However, as described above, these changes would provide compatibility in scale and character and would not result in a degradation of visual character.

Overall, implementation of the proposed Specific Plan would not degrade the character of the area or surrounding lands. Rather, the development standards and design criteria included in the Specific Plan would ensure that development projects would enhance the character of the area. Therefore, impacts related to the visual character or quality of the Specific Plan area and its surroundings would be less than significant.

IMPACT AE-2: THE PROJECT WOULD NOT CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE WHICH WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA [THRESHOLD AE-4].

Less than Significant Impact. Light and glare sensitive uses include the existing residences and the proposed residences that are located within the Specific Plan area.

Construction

Limited, if any, nighttime lighting would be needed during construction projects implemented by the Specific Plan because Article 4, Chapter 6, Section 4616 of the TCC limits construction activities to the hours of 7:00 a.m. and 6:00 p.m. on a weekday or between the hours of 9:00 a.m. and 5:00 p.m. on a Saturday. Construction activities may be permitted outside of those limitations identified in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted. Thus, most construction activity would occur during daytime hours, and construction-related low-level illumination would be used for safety and security purposes only. In addition, construction activities do not include any materials or machinery that would generate offsite glare. Therefore, impacts related to lighting and glare during construction activities would be less than significant.

Operation

Lighting

The proposed Specific Plan area is urbanized and includes a mix of residential, retail, and office land uses. Sources of light include interior and exterior building lighting, parking lot lighting, vehicular lighting, street lighting, and landscape lighting. Implementation of the proposed Specific Plan would increase overall nighttime lighting because it would result in greater intensity and density of land uses than currently exists. New lighting would accompany all new development, including exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting, which could be visible through windows to the outside. In addition, existing and proposed residential uses, considered light-sensitive receptors, would be located throughout the Specific Plan area.

The requirements of Article 9, Chapter 2, Part 7, Section 9271 hh(b) of the TCC related to lighting and shielding of light sources limit the potential for increased lighting on sensitive uses. Light emanating from new uses within the Specific Plan area would be required to be either low scaled lighting or shielded to focus lighting and prevent lighting from spilling onto adjacent sensitive uses, such as residential, or from streaming directly into streets, which could impair views of drivers on streets at night. With compliance with the TCC, which is checked by the City through the building plan check and project permitting process, impacts related to increased sources of light would be less than significant.

Glare

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare from reflective surfaces could occur if development uses large expanses of glass, metal, and other reflective surfaces for building façades. However, the Specific Plan area is currently developed with similar urban land uses, and implementation of the Specific Plan would not result in a substantial net increase in daytime glare, even though an increase in building area would occur. Implementation of the Specific Plan's design criteria, Section 4.3.5, *Materials and Colors*, would encourage use of traditional materials including brick, stone, and wood. Highly reflective and mirrored surfaces would be prohibited (except glass used for windows in a traditional manner). Furthermore, all projects would require design review, which would ensure that reflective surfaces that would result in glare are not used in projects implemented pursuant to the proposed Specific Plan. The requirements of TCC Article 9, Chapter 2, Part 7, Section 9271 hh(a) state that outdoor lighting shall be

designed to minimize glare and conflict from unnecessary illumination. Thus, with compliance with the Specific Plan's design criteria that are checked by the City through the design review, plan check and development permit process, and compliance with TCC, impacts related to increased sources of glare would be less than significant.

5.1.7 CUMULATIVE IMPACTS

Less than Significant Impact. The cumulative aesthetics analysis area for the proposed Specific Plan is the viewshed that the Specific Plan areas lie within. Like the Specific Plan area, the cumulative analysis area has been long developed with urban uses and is defined by a grid system of roadways. Thus, cumulative development would be characterized as infill, and would primarily consist of increasing existing development intensities. As a result, cumulative development would reinforce the existing urban and developed character of the area. Future cumulative development would result in changes to the existing development intensities through conversion of vacant land to developed uses, as well as through the conversion of existing land uses to higher development intensities. However, because the General Plan sets forth policies to protect the character of existing development (as previously listed), it is anticipated that cumulative projects adopted in a manner consistent with those General Plan policies would not cumulatively degrade the existing character of area land uses. As a result, there would be no significant cumulative impact to which implementation of the proposed Specific Plan could contribute.

The cumulative change in visual condition that would result from the proposed Specific Plan, in combination with nearby projects, would not be considered adverse because, as described previously, the proposed Specific Plan would provide design criteria with respect to architecture, landscaping, signs, lighting, and other related items. The design criteria have the goal of improving the visual quality of the Plan area by providing requirements and guidelines to ensure consistent, quality development. Thus, with implementation of the proposed Specific Plan's associated development standards and design criteria (and the TCC where the Specific Plan is directing and/or silent), implementation of the proposed Specific Plan would result in a less than significant cumulatively considerable impact related to degradation of the existing visual character or quality of the site and its surroundings.

The cumulative study area for light and glare for the proposed Specific Plan area is immediately adjacent to lands that could receive light or glare from new development within the Specific Plan, or could generate daytime glare or nighttime lighting that would be visible within the Specific Plan area. All such areas contain a variety of sources of nighttime lighting, such as roadways, vehicle lights, exterior security lighting, as well as sources of daytime glare, such as glass windows on buildings. Because cumulative projects would result in more intense development than currently exists, the proposed Specific Plan, in combination with past, present, and reasonably foreseeable future projects could create significant cumulative nighttime lighting and daytime glare impacts. However, application of the TCC regulations and the Specific Plan's design criteria would avoid significant effects. These regulations state that lighting shall be shielded to prevent light from shining onto adjacent properties, and exclude features that could create glare. With implementation of the existing City regulations and the Specific Plan's Design Guidelines, the development that would occur by the implementation of the Specific Plan would not result in a cumulatively considerable contribution of light and glare. Thus, the cumulative effects of development from the Specific Plan in combination with cumulative projects related to light and glare are less than significant.

5.1.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- City of Tustin General Plan Land Use Element
- City of Tustin City Code
 - Article 4, Chapter 6, Section 4617
 - Article 9, Chapter 2, Part 5, Section 9252
 - Article 9, Chapter 2, Part 7, Section 9271hh
- City of Tustin Cultural Resources District Commercial Design Guidelines
- City of Tustin Cultural Resources District Residential Design Guidelines

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.1.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less than Significant Impact. Upon implementation of regulatory requirements and the proposed Specific Plan's design criteria, Impacts AE-1 and AE-2 would be less than significant.

5.1.10 MITIGATION MEASURES

No mitigation measures are required.

5.1.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant Impact. Existing regulatory programs and the proposed Specific Plan's design criteria would reduce potential impacts associated with aesthetics for Impacts AE-1 and AE-2 to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to aesthetics would occur.

REFERENCES

California Department of Transportation (Caltrans) Scenic Highways Program. Accessed at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm.

County of Orange Scenic Highway Plan. Accessed at: <https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=8588>

Tustin City Code (2017). Accessed at: https://library.municode.com/ca/tustin/codes/code_of_ordinances?nodeId=11307

5.2 Air Quality

5.2.1 INTRODUCTION

This section provides an overview of the existing air quality within the Specific Plan area and surrounding region, a summary of applicable regulations, and analyses of potential short-term and long-term air quality impacts from implementation of the proposed Specific Plan. Mitigation measures are recommended as necessary to reduce significant air quality impacts. This section is based upon the Tustin Downtown Commercial Core Specific Plan Focused Air Quality and Greenhouse Gas Analysis, Prepared by Urban Crossroads, 2017, which is included as Appendix B.

5.2.2 REGULATORY SETTING

United States Environmental Protection Agency

Criteria Air Pollutants

At the federal level, the United States Environmental Protection Agency (USEPA) has been charged with implementing national air quality programs. The USEPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments to the CAA were made by Congress in 1990. The CAA requires the USEPA to establish National Ambient Air Quality Standards (NAAQS). The USEPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. Table 5.2-1 shows the NAAQS for these pollutants.

The CAA also requires each state to prepare an air quality control plan, referred to as a state implementation plan (SIP). The CAA Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. The USEPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and to determine whether implementing the SIPs will achieve air quality goals. If the USEPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary sources of air pollution in the air basin.

The USEPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. The USEPA's primary role at the state level is to oversee state air quality programs. The USEPA sets federal vehicle and stationary source emissions standards and provides research and guidance in air pollution programs.

Hazardous Air Pollutants

The USEPA has programs for identifying and regulating hazardous air pollutants (HAPs). Title III of the CAAA directed the USEPA to promulgate national emissions standards for HAPs (NESHAP). Major sources are defined as stationary sources with potential to emit more than 10 tons per year (tpy) of any HAP or more than 25 tpy of any combination of HAPs; all other sources are considered area sources. The emissions standards are to be promulgated in two phases. In the first phase (1992–2000), the USEPA developed

technology-based emission standards designed to produce the maximum emission reduction achievable. These standards are generally referred to as requiring maximum achievable control technology (MACT). For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), the USEPA promulgated health-risk-based emissions standards when deemed necessary, to address risks remaining after implementation of the technology-based NESHAP standards.

Table 5.2-1: Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when ROG and NO _x react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hours	0.07 ppm	0.075 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide (NO₂)	1 hour	0.18 ppm	0.100 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Arithmetic Mean	0.030 ppm	0.053 ppm		
Sulfur Dioxide (SO₂)	1 hour	0.25 ppm	75 ppb	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	---	0.50 ppm		
	24 hours	0.04 ppm	0.14 ppm		
	Annual Arithmetic Mean	---	0.03 ppm		
Respirable Particulate Matter (PM₁₀)	24 hours	50 µg/m ³	150 µg/m ³	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Arithmetic Mean	20 µg/m ³	---		
Fine Particulate Matter (PM_{2.5})	24 hours	---	35 µg/m ³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.
	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³		
Lead (Pb)	30 Day Average	1.5 µg/m ³	---	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases).	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	---	1.5 µg/m ³		
	Rolling 3-Month Average	---	0.15 µg/m ³		
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations)	Geothermal power plants, petroleum production and refining
Sulfates (SO₄)	24 hour	25 µg/m ³	No National Standard	Decrease in ventilatory functions; aggravation of asthmatic symptoms; aggravation of cardiopulmonary disease; vegetation damage; degradation of visibility; property damage.	Industrial processes.
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism.	See PM _{2.5} .

NOTE: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter.

The CAAA also required the USEPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions of, at a minimum, benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, Section 219 required the use of reformulated gasoline in selected areas with the most severe ozone nonattainment conditions to further reduce mobile-source emissions.

California Air Resources Board

Criteria Air Pollutants

The California Air Resources Board (CARB), a department of the California Environmental Protection Agency, oversees air quality planning and control throughout California. CARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementation of the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, requires CARB to establish the California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. Applicable CAAQS are shown in Table 5.2-1.

The CCAA requires all local air districts in the state to endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts shall focus particular attention on reducing the emissions from transportation and area-wide emission sources, and provides districts with the authority to regulate indirect sources.

Among CARB's other responsibilities are overseeing compliance by local air districts with California and federal laws, approving local air quality plans, submitting SIPs to the USEPA, monitoring air quality, determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

Diesel Regulations

The CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing diesel particulate matter (DPM). More specifically, the CARB Drayage Truck Regulation, the CARB statewide On-road Truck and Bus Regulation, and the Ports of Los Angeles and Long Beach "Clean Truck Program" (CTP) require accelerated implementation of "clean trucks" into the statewide truck fleet. In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these regulatory requirements.

Moreover, the average statewide DPM emissions for Heavy Duty Trucks (HHDT), in terms of grams of DPM generated per mile traveled, will dramatically be reduced due to these regulatory requirements. Diesel emissions identified in this analysis would overstate future DPM emissions because not all the regulatory requirements are reflected in the modeling.

Toxic Air Contaminants

Air quality regulations also focus on toxic air contaminants (TACs). In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no safe level of exposure. This contrasts with the criteria air pollutants, for which acceptable levels of exposure can be determined and for which the ambient standards have been established. Instead, the USEPA and CARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the MACT or best available control technology (BACT) for toxics and to limit emissions. These statutes and regulations, in conjunction with additional rules set forth by the districts, establish the regulatory framework for TACs.

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807 [Chapter 1047, Statutes of 1983]) and the Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) (AB 2588 [Chapter 1252, Statutes of 1987]). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted the USEPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an airborne toxics control measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the

control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The Air Toxics Hot Spots Information and Assessment Act requires existing facilities emitting toxic substances above a specified level to prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (Handbook), which provides guidance concerning land use compatibility with TAC sources (CARB, 2005). Although it is not a law or adopted policy, the Handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way. In addition, CARB has promulgated the following specific rules to limit TAC emissions:

- **CARB Rule 2485** (13 CCR, Chapter 10 Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- **CARB Rule 2480** (13 CCR Chapter 10 Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- **CARB Rule 2477** (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

SCAQMD

Criteria Air Pollutants

South Coast Air Quality Management District (SCAQMD) attains and maintains air quality conditions in the Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of SCAQMD includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. SCAQMD also inspects stationary sources of air pollution and responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the CAA, CAAA, and CCAA. Air quality plans applicable to the proposed Specific Plan are discussed below.

Air Quality Management Plan

SCAQMD and the Southern California Association of Governments (SCAG) are responsible for preparing the air quality management plan (AQMP), which addresses federal and state CAA requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. The 2012 AQMP was adopted by the SCAQMD Governing Board on December 12, 2012. The purpose of the 2012 AQMP for the Basin is to set forth a comprehensive and integrated program that will lead the region into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the Basin's commitment towards meeting the federal 8-hour ozone standards (SCAQMD, 2013). The AQMP would also serve to satisfy recent USEPA requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles travelled (VMT) emissions offset demonstration.¹ Specifically, once

¹ Although the federal 1-hour ozone standard was revoked in 2005, the USEPA has proposed to require a new 1-hour ozone attainment demonstration in the South Coast extreme ozone nonattainment area as a result of a recent court decision. Although USEPA has replaced the 1-hour ozone standard with a more health protective 8-hour standard, the CAA anti-backsliding provisions require that California have approved plans for attaining the 1-hour standard.

approved by CARB, the AQMP would serve as the official SIP submittal for the federal 2006 24-hour PM_{2.5} standard, for which the USEPA has established a due date of December 14, 2012. In addition, the AQMP updates specific new control measures and commitments for emissions reductions to implement the attainment strategy for the 8-hour ozone SIP. The 2012 AQMP set forth programs which require integrated planning efforts and the cooperation of all levels of government: local, regional, state, and federal.

In March 2017 AQMD finalized the 2016 AQMP, which continues to evaluate integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 RTP/SCS and updated emission inventory methodologies for various source categories.

SCAQMD Rules and Regulations

All projects are subject to SCAQMD rules and regulations. Specific rules applicable to the proposed Specific Plan include the following:

Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Rule 402 – Nuisance. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Rule 403 – Fugitive Dust. SCAQMD Rule 403 governs emissions of fugitive dust during and after construction. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires project applicants to control fugitive dust using the best available control measures such that dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a, offsite nuisance. Applicable Rule 403 dust suppression (and PM₁₀ generation) techniques to reduce impacts on nearby sensitive receptors may include, but are not limited to, the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. Locations where grading is to occur shall be thoroughly watered prior to earthmoving.
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.
- Suspend all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Provide bumper strips or similar best management practices where vehicles enter and exit the construction site onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- Replant disturbed areas as soon as practical.
- Sweep onsite streets (and offsite streets if silt is carried to adjacent public thoroughfares) to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

Rule 445 – Wood Burning. This rule prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

Rule 481 – Spray Coating. This rule applies to all spray painting and spray coating operations and equipment and states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

- The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.
- Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.
- An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

Rule 1108 - Volatile Organic Compounds. This rule governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the Basin. This rule also regulates the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule. A list of low/no-VOC paints is provided at the following SCAQMD website: www.aqmd.gov/prdas/brochures/paintguide.html. All paints will be applied using either high volume low-pressure spray equipment or by hand application.

Rule 1143 – Paint Thinners and Solvents. This rule governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

Toxic Air Contaminants

Based on information available from CARB, overall cancer risk throughout the basin has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, the State of

California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study, called MATES-II (for Multiple Air Toxics Exposure Study). Diesel particulate matter (DPM) accounts for more than 70 percent of the cancer risk.

In 2008, the SCAQMD prepared an update to the MATES-II study, referred to as MATES-III. MATES-III estimates the average excess cancer risk level from exposure to TACs is an approximately 17 percent decrease in comparison to the MATES-II study.

Nonetheless, the SCAQMD's most recent in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California was from the Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV," which shows that cancer risk has decreased more than 55 percent between MATES III (2005) and MATES IV (2012).

MATES-IV study represents the baseline health risk for a cumulative analysis. MATES-IV calculated cancer risks based on monitoring data collected at ten fixed sites within the South Coast Air Basin (SCAB). None of the fixed monitoring sites are within the local area of the Specific Plan area. However, MATES-IV has extrapolated the excess cancer risk levels throughout the basin by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 977.48 in one million for the Specific Plan area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68 percent of the total risk shown in MATES-IV. Cumulative Specific Plan generated TACs are limited to DPM.

City of Tustin General Plan

The Conservation, Open Space, and Recreation Element of the City General Plan contains the following goal and policies that are relevant to the proposed Specific Plan:

Goal 1: Reduce air pollution through proper land use, transportation and energy use planning.

Policy 1.3: Locate multiple family developments close to commercial areas to encourage pedestrian rather than vehicular travel.

Policy 1.5: Provide commercial areas that are conducive to pedestrian circulation.

Policy 1.7: Create the maximum possible opportunities for bicycles as an alternative transportation mode and recreational use.

Goal 2: Improve air quality by influencing transportation choices of mode, time of day, or whether to travel and to establish a jobs/housing balance.

Policy 2.6: Encourage non-motorized transportation through the provision of bicycle and pedestrian pathways.

Goal 4: Assure a safe, healthy and aesthetically pleasing community for residents and businesses.

Policy 4.1: Promote energy conservation in all sectors of the City including residential, commercial, and industrial.

5.2.3 ENVIRONMENTAL SETTING

Climate and Meteorology

The Specific Plan area is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the SCAQMD. The Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The

Basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County.

The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of Southern California combine to make the Basin an area of high air pollution potential. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers the photochemical reactions which produce ozone.

Criteria Air Pollutants

The CARB and the USEPA currently focus on the following air pollutants as indicators of ambient air quality: ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM₁₀), fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}), and lead. These pollutants are referred to as "criteria air pollutants" because they are the most prevalent air pollutants known to be injurious to human health. Extensive health-effects criteria documents regarding the effects of these pollutants on human health and welfare have been prepared over the years.² Standards have been established for each criteria pollutant to meet specific public health and welfare criteria set forth in the federal CAA. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants (CAAQS or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard (NAAQS), such as sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

Ozone

Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air, but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROGs) or volatile organic compounds (VOCs), and oxides of nitrogen (NO_x). While both ROGs and VOCs refer to compounds of carbon, ROG is a term used by CARB and is based on a list of exempted carbon compounds determined by CARB. VOC is a term used by the USEPA and is based on its own exempt list. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing regional pollution problems. Ozone

² Additional sources of information on the health effects of criteria pollutants can be found at CARB and USEPA's websites at <http://www.arb.ca.gov/research/health/health.htm> and <http://www.epa.gov/air/airpollutants.html>, respectively.

concentrations are the cumulative result of regional development patterns rather than the result of a few significant emission sources.

Once ozone is formed, it remains in the atmosphere for one or two days. Ozone is then eliminated through reaction with chemicals on the leaves of plants, attachment to water droplets as they fall to earth ("rainout"), or absorption by water molecules in clouds that later fall to earth with rain ("washout").

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. In addition to causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Nitrogen Dioxide

NO₂ is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as NO_x, which are reported as equivalent NO₂. Aside from its contribution to ozone formation, NO₂ can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Sulfur Dioxide

SO₂ is a colorless, extremely irritating gas or liquid that enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfur trioxide (SO₃). Collectively, these pollutants are referred to as sulfur oxides (SO_x).

Major sources of SO₂ include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO₂ aggravate lung diseases, especially bronchitis. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. SO₂ potentially causes wheezing, shortness of breath, and coughing. Long-term SO₂ exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease.

Particulate Matter

PM₁₀ and PM_{2.5} consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively (a micron is one-millionth of a meter). PM₁₀ and PM_{2.5} represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis and respiratory illnesses in children. Particulate matter can also damage materials and reduce visibility. One common source of PM_{2.5} is diesel exhaust emissions.

PM₁₀ consists of particulate matter emitted directly into the air (e.g., fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust) and particulate matter formed in the atmosphere by condensation and/or transformation of SO₂ and ROG. Traffic generates particulate matter emissions through entrainment of dust and dirt particles that settle onto roadways and parking lots. PM₁₀ and PM_{2.5} are also emitted by burning wood in residential wood stoves

and fireplaces and open agricultural burning. PM_{2.5} can also be formed through secondary processes such as airborne reactions with certain pollutant precursors, including ROGs, ammonia (NH₃), NO_x, and SO_x.

Lead

Lead is a metal found naturally in the environment and present in some manufactured products. There are a variety of activities that can contribute to lead emissions, which are grouped into two general categories, stationary and mobile sources. On-road mobile sources include light-duty automobiles; light-, medium-, and heavy-duty trucks; and motorcycles.

Emissions of lead have dropped substantially over the past 40 years. The reduction before 1990 is largely due to the phase-out of lead as an anti-knock agent in gasoline for on-road automobiles. Substantial emission reductions have also been achieved due to enhanced controls in the metals processing industry. In the Basin, atmospheric lead is generated almost entirely by the combustion of leaded gasoline and contributes less than one percent of the material collected as total suspended particulates.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

According to the California Almanac of Emissions and Air Quality (CARB, 2009), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a particulate matter exposure method. This method uses the CARB emissions inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Odorous Emissions

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Offensive odors are unpleasant and can lead to public distress generating citizen complaints to local governments. Although unpleasant, offensive odors rarely cause physical harm. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source, wind speed, direction, and the sensitivity of receptors.

Existing Conditions

SCAQMD maintains monitoring stations within district boundaries that monitor air quality and compliance with associated ambient standards. The Specific Plan area is located within the Central Orange County monitoring station (SRA 17). The most recent 3 years of data is shown on Table 5.2-2 and identifies the

number of days ambient air quality standards were exceeded in the area. Additionally, data for SO₂ has been omitted as attainment is regularly met in the South Coast Air Basin and few monitoring stations measure SO₂ concentrations.

Both CARB and the USEPA use this type of monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. Nonattainment is defined as any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the primary or secondary ambient air quality standard for the pollutant. Attainment is defined as any area that meets the primary or secondary ambient air quality standard for the pollutant. Unclassifiable is defined as any area that cannot be classified on the basis of available information as meeting or not meeting the primary or secondary ambient air quality standard for the pollutant. In addition, California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment.

In 2016, the federal and state ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM₁₀, and PM_{2.5} at most monitoring locations. No areas of the SCAB exceeded federal or state standards for NO₂, SO₂, CO, sulfates or lead. See Table 5.2-3, for attainment designations for the SCAB.

Table 5.2-2: Air Quality Monitoring Summary 2014-2016

Pollutant	Standard	Year		
		2014	2015	2016
Ozone (O ₃)				
Maximum 1-Hour Concentration (ppm)		0.111	0.100	0.103
Maximum 8-Hour Concentration (ppm)		0.081	0.080	0.074
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	2	1	2
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	6	1	4
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	6	1	4
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		3.0	3.1	2.6
Maximum 8-Hour Concentration (ppm)		2.1	2.2	2.1
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO ₂)				
Maximum 1-Hour Concentration (ppm)		0.075	0.059	0.064
Annual Arithmetic Mean Concentration (ppm)		0.15	0.14	0.027
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM ₁₀)				
Maximum 24-Hour Concentration (µg/m ³)		122	66	24.4
Number of Samples		12	11	3
Number of Samples Exceeding State Standard	> 50 µg/m ³	3%	3%	1%
Number of Samples Exceeding Federal Standard	> 150 µg/m ³	0	0	0
Particulate Matter ≤ 2.5 Microns (PM _{2.5})				
Maximum 24-Hour Concentration (µg/m ³)		56.2	45.8	44.45
Annual Arithmetic Mean (µg/m ³)		10.53	9.38	9.47
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m ³	6	3	1

Table 5.2-3: Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB)

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1 hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Nonattainment (Extreme)
PM ₁₀	Nonattainment	Attainment (Maintenance)
PM _{2.5}	Nonattainment	Nonattainment (Serious)
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Attainment (Maintenance)
Sulfur Dioxide	Attainment	Attainment
Lead ³	Attainment	Nonattainment (Partial)

Source: <http://www.arb.ca.gov/degis/adm/adm.htm>

Sensitive Land Uses

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive to poor air quality than the general public because the population groups associated with these uses have increased susceptibility to respiratory distress. In addition, residential uses are considered more sensitive to air quality conditions than commercial and industrial uses, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation.

5.2.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project could have a significant adverse effect on air quality resources if it would:

- AQ-1 Conflict with or obstruct implementation of the applicable air quality plan;
- AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- AQ-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- AQ-4 Expose sensitive receptors to substantial pollutant concentrations; or
- AQ-5 Create objectionable odors affecting a substantial number of people.

The Initial Study, included as Appendix A, established that the project would result in no impact related to Threshold AQ-5; no further assessment of this impact is required in this EIR.

Regional Thresholds

The SCAQMD's most recent regional significance thresholds from March 2015 for regulated pollutants are listed in Table 5.2-4. The SCAQMD's CEQA air quality methodology provides that any projects that result in

³ The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

daily emissions that exceed any of the thresholds in Table 5.2-4 would be considered to have both an individually (project-level) and cumulatively significant air quality impact.

Table 5.2-4: SCAQMD Regional Air Quality Thresholds

Pollutant	Construction	Operations
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: SCAQMD 2015

Localized Significance Thresholds

SCAQMD developed LSTs to determine if emissions of NO₂, CO, PM₁₀, or PM_{2.5} generated at a project site would expose sensitive receptors to substantial concentrations of criteria air pollutants. LSTs are the maximum emissions from a project's onsite activities that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor.

However, an LST analysis can only be conducted at a development project level, and quantification of LSTs is not applicable for this program-level environmental analysis. For informational purposes, Table 5.2-5, provides the localized significance thresholds for projects in the South Coast Air Basin.

Table 5.2-5: SCAQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (SCAQMD)	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (SCAQMD)	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (SCAQMD)	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (SCAQMD)	2.5 µg/m ³
Annual Average PM ₁₀ Standard (SCAQMD)	1.0 µg/m ³

Source: SCAQMD 2015

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles and introduction of cleaner fuels as well as implementation of control technology on industrial facilities, CO concentrations in the South Coast Air Basin and the state have steadily declined.

5.2.5 METHODOLOGY

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the proposed Specific Plan. Air pollutant emissions associated with the proposed Specific Plan would result from construction activities within the Specific Plan area and on roadways resulting from construction-related traffic. Additionally, emissions would also be generated from operations of the developments that would occur by the proposed Specific Plan and from traffic volumes generated by these developments. The net increase in emissions generated by these activities and other secondary sources have been quantitatively estimated and compared to the applicable thresholds of significance recommended by SCAQMD.

AQMP Consistency

SCAQMD's CEQA Handbook suggests an evaluation of the following two criteria to determine whether a project involving a legislative land use action (such as the proposed Specific Plan) would be consistent or in conflict with the AQMP:

1. The project would not generate population and employment growth that would be inconsistent with SCAG's growth forecasts.
2. The project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 1 refers to the SCAG's growth forecasts and associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG's growth projections, which are based, in part, on the general plans of cities located within the SCAG region. Therefore, if the uses and level of housing and employment growth of the proposed Specific Plan are consistent with the applicable assumptions used in the development of the AQMP, the Plan would not jeopardize attainment of the air quality levels identified in the AQMP, even if emissions would exceed the SCAQMD's recommended daily emissions thresholds.

Consistency Criterion No. 2 refers to the California Ambient Air Quality Standards. An impact would occur if the long-term emissions associated with the proposed Specific Plan would exceed SCAQMD's regional significance thresholds for operation-phase emissions.

Construction

Buildout of the Specific Plan is anticipated to occur over 17 years (2018 through 2035), with the location, type, and timing of site-specific development projects and construction activities determined by market demand. Because of the uncertainty of the specific timing and methods of construction activities for future site-specific development projects that would occur by the proposed Specific Plan, a worst-case construction scenario is analyzed in this EIR. It was conservatively assumed that construction would occur throughout the 17-year period, and the emissions that would be generated from buildout of the proposed Specific Plan was averaged over this timeframe. Given a 17-year buildout, it is conservatively assumed that project-related development might be undergoing some stage of onsite activity (demolition, site preparation, and construction) on the theoretical "maximum construction day." In addition, an estimate of the construction equipment that might be active on the theoretical "maximum construction day" was identified based on the size of parcels and type of existing development within the Specific Plan area.

Construction-generated emissions of criteria air pollutants and ozone precursors were assessed in accordance with methods recommended by SCAQMD. The proposed Specific Plan's regional emissions were modeled using the California Emissions Estimator Model (CalEEMod), as recommended by SCAQMD. CalEEMod was used to determine whether construction-related emissions of criteria air pollutants

associated with the proposed Specific Plan would exceed applicable regional thresholds and if mitigation would be required.

Operations

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors, including mobile- and area-source emissions, were also quantified using the CalEEMod computer model. Area-source emissions were modeled according to the land uses that would be developed at buildout of the proposed Specific Plan. Mass mobile-source emissions were modeled based on the increase in daily vehicle trips that would result from the proposed Specific Plan. Trip generation rates were available from the traffic impact analysis prepared for the proposed Specific Plan, and predicted long-term operational emissions were compared with applicable SCAQMD thresholds for determination of significance.

5.2.6 ENVIRONMENTAL IMPACTS

Impact AQ-1: THE PROJECT WOULD CONFLICT WITH IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN [THRESHOLD AQ-1].

Significant and Unavoidable. The SCAQMD's 2016 AQMP is the applicable air quality plan for the proposed Specific Plan.

Pursuant to Consistency Criterion No. 1, described in the methodology section previously, projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP that result in air quality emissions.

As detailed in Section 5.7, *Population and Housing*, buildout of the proposed Specific Plan would allow development of 887 residential units and 300,000 square feet of non-residential space, representing a population of approximately 2,696 persons and 840 employees at buildout and full occupancy (maximum impact condition). Development pursuant to the proposed Specific Plan would consist mostly of infill, mixed-use, and redevelopment projects that are market and need dependent. As described in Section 3.0, *Project Description*, the 300,000 square feet of non-residential development that is assumed by the Specific Plan consists of that which might occur by the year 2035 (build out) of the existing non-residential parcels in the Specific Plan area that are designated by the existing General Plan and Zoning Ordinance. Because the employment land designated areas in the Specific Plan area are existing and would not change with implementation of the Specific Plan, the 840 jobs expected in the Specific Plan area are included in the SCAG projections.

The SCAG 2016 projections for the City of Tustin anticipate a 56.8 percent increase in employment in the City by 2035 (an increase of 23,500 over 2017 employment). The 840 jobs that are anticipated within the Specific Plan area would be approximately 3.6 percent of the anticipated job growth, and within the growth assumptions of the 2016 AQMP.

The housing added by the Specific Plan would help to meet housing demands from projected employment growth in the City while maintaining a healthy vacancy rate. SCAG projects a jobs-to-housing ratio of 2.32 in 2035, which indicates that more employees than the existing 1.5 jobs to household ratio would be commuting into the City for employment. When combined with existing jobs and housing units, the residential units generated from the proposed Specific Plan would result in a more balanced ratio of jobs and housing (1.41) than the existing condition (1.52) and projected condition (2.32). The balance of jobs and housing would reduce vehicle miles traveled and the related air quality emissions. In addition, the Specific Plan implements infill development, located in an urbanized area with existing infrastructure, near

existing transit, and implements bicycle and pedestrian infrastructure; all of which are intended to reduce vehicle miles traveled and vehicular emissions. Thus, the proposed Specific Plan would support AQMP objectives to reduce trips, promote infill development, and balance jobs and housing, and would not conflict with implementation of the AQMP.

Furthermore, implementing infill development, the Specific Plan would utilize existing infrastructure such as roadways, drainage, sewer and other infrastructure, and would be consistent with the SCAG objective to “Encourage patterns of urban development and land use that reduce costs in infrastructure construction and make better use of existing facilities.” As a result, the proposed Specific Plan would comply with Consistency Criterion No. 1 listed above in the Methodology Section.

However, in regard to Consistency Criterion No. 2, which evaluates the potential of the proposed Specific Plan to increase the frequency or severity of existing air quality violations, the quantified air quality emissions analysis (part of Impact AQ-2, below) describes that due to the uncertainty of the timing and methods of construction activities related to Specific Plan development projects, a significant impact could occur related to construction emissions of ROG_s and NO_x, with implementation of SCAQMD Rules and mitigation measures. In addition, operation of the proposed Specific Plan would result in exceedance of the applicable SCAQMD thresholds for ROG_s, NO_x, and CO after implementation of mitigation. Therefore, buildout of the proposed Specific Plan would increase the frequency or severity of existing air quality violations, and an impact regarding Consistency Criterion No. 2 would occur. As described below in Impact AQ-2, because emissions exceedances would be a significant and unavoidable impact, the consistency impact related to AQMP Consistency Criterion No. 2 would also be significant and unavoidable.

Impact AQ-2: THE PROJECT WOULD VIOLATE AN AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION [THRESHOLD AQ-2].

Construction

Significant and Unavoidable. Construction activities result in short-term emissions of criteria air pollutants. The primary source of NO_x, CO, and SO_x emissions is from the operation of construction equipment. The primary sources of particulate matter (PM₁₀ and PM_{2.5}) emissions are from activities that disturb the soil, such as grading and excavation road construction, and building demolition and construction. The primary source of VOC emissions is the application of architectural coating and off-gas emissions associated with asphalt paving.

Construction activities from individual development projects that could occur pursuant to the proposed Specific Plan would temporarily increase PM₁₀, PM_{2.5}, VOC, NO_x, SO_x, and CO regional emissions. Construction activities associated with buildout of the proposed Specific Plan would likely occur sporadically over a 17-year period or longer. However, due to the uncertainty of the specific timing and methods of construction activities related to Specific Plan development projects, the maximum daily emissions are based on a very conservative scenario that construction could occur throughout the Specific Plan implementation period and based on maximum equipment use.

Table 5.2-6 provides the maximum daily emissions of criteria air pollutants from construction. The air quality emissions modeling is included within the air quality technical analysis prepared for the proposed Specific Plan, which is included as Appendix B. As shown, construction activities could exceed the applicable SCAQMD thresholds for emissions of ROG_s and NO_x. Therefore, a potentially significant impact would occur during construction activities due to the potential overlap of concurrent projects and various construction activities pursuant to the Specific Plan.

Table 5.2-6: Maximum Potential Construction Emissions (lbs/day)

Phase	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Demolition	4.19	42.80	23.67	0.04	2.36	2.09
Site Preparation	5.06	52.34	24.25	0.04	21.15	12.63
Grading	5.86	68.02	39.67	0.06	11.97	6.48
Grading	5.19	59.59	35.88	0.06	11.53	6.08
Building Construction	7.33	46.08	53.64	0.16	11.51	4.23
Building Construction	6.65	42.48	50.07	0.16	11.28	4.02
Building Construction	6.07	38.76	47.03	0.15	11.07	3.82
Building Construction	5.56	35.03	44.57	0.15	10.85	3.61
Building Construction	5.17	32.18	42.63	0.15	10.70	3.46
Paving	1.16	11.16	15.01	0.02	0.74	0.57
Architectural Coating	129.94	1.75	6.24	0.02	1.84	0.55
Peak Daily Potential	182.18	430.19	382.66	1.01	105.00	47.54
SCAQMD Threshold	75	100	550	150	150	55
Exceed Significance?	Yes	Yes	No	No	No	No

Source: Urban Crossroads, 2017; Appendix B.

Development projects would be required, through City review and construction permitting, to implement SCAQMD rules, including: Rule 401, Rule 402, Rule 403, Rule 481, Rule 1108, Rule 1113, and Rule 1143 (described previously) that would reduce construction related emissions.

In addition, Mitigation Measures AQ-1 through AQ-6 are included to further reduce construction related emissions from development projects that are implemented pursuant to the proposed Specific Plan. The mitigation measures require the use of: diesel construction equipment that complies with EPA/CARB Tier 3 emissions standards; “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113; electricity infrastructure surrounding construction sites, rather than electrical generators powered by internal combustion engines; assurance that all construction equipment is properly maintained; alternative fueled, engine retrofit technology, after-treatment products; and requirements for construction plans to be provided that include low-emission features.

With implementation of Mitigation Measures AQ-1 through AQ-6, emissions of ROG_s and NO_x would be reduced and emissions from most development projects would be reduced to a less than significant level. However, due to the potential overlap of development projects and construction activities, it cannot be assured that the mitigation measures would reduce emissions below the SCAQMD significance thresholds. As shown in Table 5.2-6, ROG emissions have the potential to be 243 percent above thresholds, and NO_x emissions have the potential to be 430 percent above thresholds, with this level of potential emissions exceedances, construction emissions could continue to exceed thresholds with implementation of Mitigation Measures AQ-1 through AQ-6. Therefore, based on the very conservative scenario of construction timing and construction equipment use, impacts related to construction emissions would remain significant and unavoidable.

Operation

Significant and Unavoidable. As described previously in Impact AQ-1, the City of Tustin is largely built out, and future development under the proposed Specific Plan would consist mostly of infill, mixed-use, and redevelopment projects that are market and need dependent. Additionally, the residential development that would occur would help to meet housing demands from projected employment growth in the City while maintaining a healthy vacancy rate. This growth that would be accommodated by the proposed Specific

Plan would result in long-term emissions of criteria air pollutants from area sources generated by vehicular emissions, natural gas consumption, landscaping, applications of architectural coatings, and use of consumer products.

Emissions from operation of the land uses within the proposed Specific Plan are summarized in Table 5.2-7, and modeling outputs are included in Appendix B. As shown, the proposed operation of the land uses included in the Specific Plan at buildout and full occupancy would generate emissions that would exceed the applicable SCAQMD thresholds for ROG_s, NO_x, CO and PM₁₀, and PM_{2.5}.

Table 5.2-7: Summary of Unmitigated Operational Emissions (lbs/day)

Operational Activity		ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
On-Site	Area	263.66	19.25	524.05	1.15	68.16	68.16
On-Site	Energy	0.57	4.91	2.19	0.03	0.40	0.40
Off-Site	Mobile	30.92	140.18	341.97	1.67	129.51	36.68
Peak Daily Total		295.15	164.34	868.21	2.85	198.07	105.24
SCAQMD Threshold		55	55	550	150	150	55
Exceed Significance?		Yes	Yes	Yes	No	Yes	Yes

Source Urban Crossroads, 2017, Appendix B.

As a result, Mitigation Measure AQ-7 would be implemented to require development projects in the Specific Plan area to achieve 5 percent efficiency beyond the 2016 California Building Code Title 24 requirements; and Mitigation Measure AQ-8 would require enhanced water conservation for Specific Plan development projects. However, as shown on Table 5.2-8, even with implementation of Mitigation Measures AQ-7 and AQ-8, emissions would continue to exceed regional thresholds of significance established by the SCAQMD, and impacts would be significant and unavoidable.

Table 5.2-8: Summary of Mitigated Operational Emissions (lbs/day)

Operational Activity		ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
On-Site	Area	263.66	19.25	524.05	1.15	68.16	68.16
On-Site	Energy	0.57	4.91	2.19	0.03	0.40	0.40
Off-Site	Mobile	28.91	132.25	291.76	1.38	105.57	29.91
Peak Daily Total		293.14	156.41	818.00	2.56	174.13	98.47
SCAQMD Threshold		55	55	550	150	150	55
Exceed Significance?		Yes	Yes	Yes	No	Yes	Yes

Source Urban Crossroads, 2017, Appendix B.

Impact AQ-3: THE PROJECT WOULD RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF A CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD [THRESHOLD AQ-3].

Significant and Unavoidable. According to SCAQMD's methodology, if an individual project results in air emissions of criteria pollutants (ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}) that exceeds the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the proposed project region is in non-attainment under an applicable federal or state ambient air quality standard.

As described in Impact AQ-2 above, emissions from construction activities pursuant to the proposed Specific Plan would exceed SCAQMD's thresholds for ROG_s and NO_x after implementation of SCAQMD Rules and mitigation measures. In addition, emissions from operational activities at buildout of the

proposed Specific Plan would exceed the applicable SCAQMD thresholds for ROG_s, NO_x, CO, PM₁₀, and PM_{2.5} after implementation of mitigation. Therefore, emissions from implementation of the proposed Specific Plan would be cumulatively considerable, and cumulative air quality impacts would be significant and unavoidable.

Impact AQ-4: THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS [THRESHOLD AQ-4]

Less than Significant with Mitigation Incorporated.

Localized Construction Air Quality Impacts

Less than Significant with Mitigation Incorporated. As described previously, an LST analysis can only be conducted at a development project level, and quantification of LST's is not applicable for this program-level environmental analysis. However, implementation of developments pursuant to the Specific Plan could result in localized emissions that exceed air quality standards. Thus, implementation of the Specific Plan could result in a significant impact related to LST's. As a result, Mitigation Measure AQ-9 is included, which requires development projects, one acre or larger, pursuant to the proposed Specific Plan to provide modeling of the regional and the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development; and requires grading activity to be limited to ensure that there would be no impacts related to LST's. Therefore, impacts related to localized construction air quality impacts would be less than significant with implementation of Mitigation Measure AQ-9.

Toxic Air Contaminants

Less than Significant with Mitigation Incorporated. CARB has issued advisory recommendations for siting new sensitive land uses in proximity to sources associated with Toxic Air Contaminants (TAC's), and recommends performing site specific environmental evaluations. However, it is currently unknown what development projects that could include a sensitive receptor would be proposed next to an existing TAC, such as the I-5 and SR-55 Freeways. Therefore, consistent with CARB guidance, Mitigation Measure AQ-10 is included to require a site-specific evaluation prior to approving any sensitive land use in proximity to an existing TAC, which includes the I-5 and SR-55 Freeways within the Specific Plan area. Implementation of Mitigation Measure AQ-10 would reduce potential impacts related to TAC's to a less than significant level.

CO Hotspots

Less than Significant Impact. An adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. In 2003, 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 (2003 SCAQMD AQMP).

With operation of buildout of the proposed Specific Plan, the highest average daily trips on a segment of road would be at the Newport Avenue at I-5 NB on-ramp. The proposed project would result in 660 a.m. peak hour trips and 719 p.m. peak hour trips. Of these trips 5 percent would be to/from the north on Newport Avenue (33 a.m. peak hour trips and 36 p.m. peak hour trips), and 30 percent would be to/from the south on Newport Avenue (198 a.m. peak hour trips and 216 p.m. peak hour trips). This traffic volume is not high enough to generate a CO "hot spot" per the 2003 SCAQMD AQMP hot spot study. Therefore, impacts related to CO "hot spots" from operation of the proposed Specific Plan would be less than significant.

5.2.7 CUMULATIVE IMPACTS

Significant and Unavoidable. As described previously, per SCAQMD's methodology, if an individual project results in air emissions of criteria pollutants that exceeds the SCAQMD's thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants.

As described in Impact AQ-2 above, emissions from construction of projects pursuant to the proposed Specific Plan would exceed SCAQMD's threshold for ROG_s and NO_x after implementation of SCAQMD Rules and mitigation measures. In addition, emissions from buildout of the proposed Specific Plan would exceed the applicable SCAQMD thresholds for ROG_s, NO_x, and CO after implementation of mitigation. Therefore, operational-source emissions from implementation of the proposed Specific Plan would be cumulatively considerable, and cumulative air quality impacts would be significant and unavoidable.

5.2.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

New development projects shall comply with Title 24 of the California Code of Regulations established by the California Energy Commission regarding energy conservation standards.

Plans, Program and Policies (PPPs) and Standard Conditions

The following Plans, Programs, and Policies (PPP) and Standard Conditions (SCs) related to air quality are incorporated into the project, and would reduce impacts related to air quality. These actions will be included in the project's mitigation monitoring and reporting program (MMRP):

PPP AQ-1: Development projects shall comply with the following South Coast Air Quality District Rules:

- Rule 401 – Visible Emissions
- Rule 402 – Nuisance
- Rule 403 – Fugitive Dust
- Rule 481 – Spray Coating
- Rule 1113 – Architectural Coatings
- Rule 1143 – Paint Thinners and Solvents

5.2.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Significant. Without mitigation, the following impacts would be significant:

Impact AQ-1: Buildout of the proposed Specific Plan would increase the frequency or severity of existing air quality violations, and an impact regarding AQMP Consistency Criterion No. 2 would occur.

Impact AQ-2: Construction and operation associated with buildout of the proposed Specific Plan would generate a substantial increase criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SCAB.

Impact AQ-3: Construction and operation associated with buildout of the proposed Specific Plan would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SCAB.

Impact AQ-4: Buildout of the proposed project could result in new sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors.

5.2.10 MITIGATION MEASURES

Mitigation Measure AQ-1: Tier 3. The construction plans and specifications shall state that project construction that utilizes construction equipment greater than 150 horsepower (>150 HP) shall comply with EPA/CARB Tier 3 emissions standards during all construction phases and shall ensure that all construction equipment be tuned and maintained in accordance with the manufacturer's specifications.

Mitigation Measure AQ-2: Low VOC. The construction plans and specifications shall state that project construction shall utilize "Super-Compliant" low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Alternatively, the applicant/developer may utilize valid construction techniques that do not require the use of architectural coatings.

Mitigation Measure AQ-3: Electricity. The construction plans and specifications shall state that contractors shall use the electricity infrastructure surrounding the construction site, if available, rather than electrical generators powered by internal combustion engines.

Mitigation Measure AQ-4: Alternative Technology. The construction plans and specifications shall state that contractors shall use alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment.

Mitigation Measure AQ-5: Equipment Maintenance. Construction plans and specifications shall state that construction equipment be maintained in good operating condition to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer's specification. Maintenance records shall be available at the construction site for City verification.

Mitigation Measure AQ-6: Construction Vehicle Management Plan. For projects requiring construction vehicles, construction plans and specifications shall state that the applicant/developer and/or building operators shall prepare and maintain a construction vehicle management plan, to be made available upon request to the City of Tustin Building Division, denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include, as a minimum: idling time requirements; requiring hour meters on equipment; documenting the serial number, horsepower, age, emissions ratings, and fuel of all onsite equipment. The plan shall state that California state law requires equipment fleets to limit idling to no more than 5 minutes, and that low emission vehicles will be used. If low emission mobile construction equipment is not used, construction contractor shall provide evidence in the construction vehicle management plan that their use was investigated and found to be infeasible. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District as well as the City of Tustin.

Mitigation Measure AQ-7: Energy Usage Calculations. Prior to the issuance of building permits for new development projects ~~requiring with design review, project applicants/developers shall submit plans certifying energy usage calculations to the City of Tustin Building Divisions showing that the proposed~~

development is designed to achieve 5 percent efficiency beyond the 2016 California Building Code Title 24 requirements to the satisfaction of the City of Tustin Building Division. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable):

- Increase in insulation such that heat transfer and thermal bridging is minimized;
- Limit air leakage through the structure and/or within the heating and cooling distributions systems;
- Use of energy-efficient space heating and cooling equipment;
- Installation of dual-paned or other energy efficient windows;
- Use of interior and exterior energy efficient lighting that exceeds the 2016 California Title 24 Energy Efficiency performance standards;
- Installation of automatic devices to turn off lights when they are not needed;
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;
- Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;
- Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; and
- Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.

Mitigation Measure AQ-8: Enhanced Water Conservation. Prior to the issuance of building permits for new development projects requiring design review, project applicants/developers shall certify that the project is designed to reduce water usage by a minimum of 30 percent when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Projects shall also implement the following:

- Landscaping palette emphasizing drought tolerant plants;
- Use of water-efficient irrigation techniques; and
- U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

The above measures reduce water consumption, but it is understood that the list is not all-inclusive and other features that reduce water consumption also are acceptable.

Mitigation Measure AQ-9: Localized Emissions. Prior to issuance of a grading permit for new development projects; that are one acre or larger, ~~pursuant to the Specific Plan~~, the applicant/developer shall provide modeling of the regional and the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development. If the modeling shows that emission would exceed the SCAQMD’s significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD’s significance thresholds for those emissions.

Mitigation Measure AQ-10: Toxic Air Contaminants. Development proposals for new residential and other sensitive land use projects (e.g., nursing homes, day care centers) in the Specific Plan area within 500 feet of major sources of toxic air contaminants ((e.g., Interstate 5, and roadways with traffic volumes over 100,000 vehicles per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Tustin

Planning Division prior to design review approval. The HRA shall be prepared in accordance with policies and procedures of the SCAQMD. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM₁₀ concentrations exceed 2.5 µg/m³, PM_{2.5} concentrations exceed 2.5 µg/m³, or the appropriate noncancer hazard index exceeds 1.0, the project applicant/developer shall be required to submit an HRA that demonstrates and certifies that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

- Air intakes located away from high volume roadways and/or truck loading zones; and
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters (e.g., MERV 12 or better).
- Buffering sensitive uses away from emission sources.

5.2.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable. As described previously, the development anticipated by the Specific Plan would increase the frequency or severity of existing air quality violations, and an impact regarding net increase of criteria pollutants and AQMP consistency would remain significant and unavoidable with implementation of Mitigation Measures AQ-1 through AQ-8.

However, impacts related to localized emissions would be less than significant with implementation of Mitigation Measure AQ-9 for localized emissions. Also, with implementation of Mitigation Measure AQ-10, potential impacts related to TACs would be less than significant.

REFERENCES

2003 Air Quality Management Plan. (2003 SCAQMD AQMP). Accessed: <http://www.aqmd.gov/aqmp/aqmd03aqmp.htm>.

South Coast Air Quality Management District Historical Data by Year. Accessed at: <http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year>

Tustin Downtown Commercial Core Specific Plan Focused Air Quality and Greenhouse Gas Analysis, Prepared by Urban Crossroads, 2017. Included as Appendix B.

Tustin Downtown Commercial Core Specific Plan Traffic Study, Prepared by Stantec, 2017. Included as Appendix E.

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5.3 Cultural Resources

5.3.1 INTRODUCTION

This section describes existing cultural (historic architectural and prehistoric-period archaeological) resources, and analyzes impacts associated with implementation of the proposed Specific Plan on these resources. Information in the following section is based on the Cultural Resource Assessment for the Tustin Downtown Commercial Core Specific Plan that was prepared by Cogstone, 2017 (Cogstone, 2017), and is included as Appendix C.

CULTURAL RESOURCE TERMINOLOGY

Various cultural resource terms are utilized in this EIR analysis, and are summarized as follows:

- **Archaeological resources** include any material remains of human life or activities that are at least 100 years of age, and that are of scientific interest. A unique or significant archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; and (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Before Present (BP)** is a time scale used to specify when events in the past occurred. BP, when placed after a number (as in 2,500 BP), means “years before the present.” This terminology is used in this section to refer to dates that were obtained through the radiocarbon dating method.
- **Cultural resources** are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance, according to the California Environmental Quality Act (CEQA).
- **Historic building or site** is one that is noteworthy for its significance in local, state, or national history or culture, its architecture or design, or its works of art, memorabilia, or artifacts.
- **Historic Context** refers to the broad patterns of historical development in a community or its region that is represented by cultural resources. A historic context statement is organized by themes such as economic, residential, and commercial development.
- **Historic District** means a geographical area or neighborhood containing a collection of residential and/or commercial historical buildings which generally represents a significant aspect of the community’s architectural and/or development history.
- **Historic integrity** is defined as “the ability of a property to convey its significance.”
- **Historical resources** are defined as “a resource listed or eligible for listing on the California Register of Historical Resources” (CRHR) (Public Resources Code, Section 5024.1; 14 CCR 15064.5). Under CEQA Guidelines Section 15064.5(a), the term “historical resources” includes the following:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1).
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1) including the following:
 - A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - B. Is associated with the lives of persons important in California's past;
 - C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - D. Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

5.3.2 REGULATORY SETTING

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) established the National Register of Historic Places (National Register), which is the official register of designated historic places. The National Register is administered by the National Park Service, and includes listings of buildings, structures, sites, objects, and districts that possess historical, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

To be eligible for the National Register, a property must be significant under one or more of the following criteria per 36 Code of Federal Regulations Part 60:

- a) Properties that are associated with events that have made a significant contribution to the broad patterns of our history;
- b) Properties that are associated with the lives of persons significant in our past;
- c) Properties that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the aforementioned criteria, an eligible property must also possess historic “integrity,” which is “the ability of a property to convey its significance.” The National Register criteria recognize seven qualities that define integrity: location, design, setting, materials, workmanship, feeling, and association.

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the National Register as significant historical resources. Properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the National Register. Properties listed in or eligible for listing in the NRHP are also eligible for listing in the California Register of Historic Resources (described below), and as such, are considered historical resources for CEQA purposes.

California Register of Historical Resources

The California Register of Historical Resources (CRHP) is an inventory of significant architectural, archeological, and historical resources in the State of California. Resources can be listed on the California Register through a number of methods. State Historical Landmarks and National Register listed properties are automatically listed on the California Register. Properties can also be nominated to the California Register by local governments, private organizations, or citizens. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register. In order for a property to be eligible for listing on the California Register, it must be found significant under one or more of the following criteria:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- (B) Is associated with the lives of persons important in California’s past;
- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, resources eligible for the National Register of Historic Places are automatically listed on the California Register of Historical Resources.

City of Tustin General Plan

The City of Tustin General Plan Conservation Open Space and Recreation Element includes the following goals and policies related to the conservation of cultural resources that are relevant to the proposed Specific Plan:

Goal 12: Maintain and enhance the City's unique culturally and historically significant building sites or features.

Policy 12.1: Identify, designate, and protect facilities of historical significance, where feasible.

Policy 12.2: Retain and protect significant areas of archaeological, paleontological, or historical value for education and scientific purposes.

Policy 12.3: Development adjacent to a place, structure or object found to be of historic significance should be designed so that the uses permitted and the architectural design will protect the visual setting of the historical site.

Goal 13: Preserve Tustin's archaeological and paleontological resources.

Policy 13.1: Require a site inspection by certified archaeologists or paleontologists for new development in designated sensitive areas.

Policy 13.2: Require mitigation measures where development will affect archaeological or paleontological resources.

Tustin City Code

Cultural Resource District (CR), Article 9, Chapter 2, Section 9252

The Cultural Resources District Code Section 9252(d) states that "any improvement or natural feature may be designated as a cultural resource" and further states, "any area within the City may be designated as a Cultural Resource District" by approval of the City Council, if it meets the following criteria:

- Criterion 1: It exemplifies or reflects special elements of the City's cultural, architectural, aesthetic, social, economic, political, artistic, engineering and or architectural heritage; or
- Criterion 2: It is identified with persons, a business use or events significant in local, state, or national history; or
- Criterion 3: It embodies distinctive characteristics of style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship; or
- Criterion 4: It is representative of the notable work of a builder, designer, or architect; or
- Criterion 5: Its unique location or singular physical characteristic represents an established and familiar visual feature of a neighborhood, community of the City; or
- Criterion 6: Its integrity as a natural environment or feature strongly contributes to the well-being of residents of the City or the well-being of a neighborhood within the City; or
- Criterion 7: Its geographically definable area possesses a concentration or continuity of site, buildings, structures or objects as unified by past events or aesthetically by plan or physical development.

An individual may nominate a cultural or historic resource for local listing if it is 50-years old or older, consistent with the NRHP guidelines.

A Certificate of Appropriateness shall be required prior to:

- Alteration of the exterior features of a building or site within a designated Cultural Resource District, or alteration of a Designated Cultural Resource, or construction of improvements within a designated Cultural Resources District requiring a City building permit.
- Demolition or removal of any Designated Cultural Resource or of any improvements in a Cultural Resource District.
- A Certificate of Appropriateness shall not be required for the following: (1) ordinary maintenance or repairs that do not involve a change in design, exterior material or original appearance of an improvement, nor (2) any construction, reconstruction, alteration or removal of any feature which has been determined by the Building Official to be necessary to protect the public health or safety due to an unsafe or dangerous condition provided the Building Official certifies such action.

Application for a Certificate of Appropriateness shall be made on forms provided by the Community Development Department and shall contain whatever detailed information (plans, drawings, agreements, photographs, etc.) as is determined by the Community Development Department to be necessary for the Department to act on the request. Where the proposed project requires other discretionary approvals such as a tentative tract map, the background information shall also be concurrently submitted to the Department on each of these applications.

City of Tustin Cultural Resources District Guidelines

Cultural Resources District Residential Design Guidelines

The Cultural Resources District (CRD) Residential Design Guidelines apply to new residential projects or modifications to existing historical residential homes in the CRD. There are designated cultural resources located within the Specific Plan boundaries, both inside and outside the CRD, for which these design guidelines would be applicable, including those identified in the Tustin Historical Resources Survey.

Cultural Resources District Commercial Design Guidelines

Similar to the CRD Residential Design Guidelines, the CRD Commercial Design Guidelines apply to new commercial projects or modifications to existing historical commercial buildings. There are some designated cultural resources located within the Specific Plan boundaries, both inside and outside the CRD for which these design guidelines would be applicable, including those identified in the Tustin Historical Resources Survey.

5.3.3 ENVIRONMENTAL SETTING

Prehistoric Resources

A total of six cultural studies have been performed within the Planning Area and an additional 35 previous cultural studies have been performed within the City boundaries. There are no known prehistoric cultural

resources known with the Specific Plan area; however, 4 prehistoric sites are located within a one-mile radius of the project area that are listed in Table 5.3-1, *Recorded Prehistoric Cultural Resources*.

Table 5.3-1: Recorded Prehistoric Cultural Resources

Primary No. (P-30-000)	Description	Distance from Specific Plan area (miles)
300	Shell midden with one chalcedony triangular point base, chert, quartz core, basalt flake, one piece of obsidian, one steatite bowl, an incised stone, and pestles. Five burials were present with one additional burial reported nearby.	1
301	Metate and Pestle found at six feet below surface during trenching.	0.25
352	Stone bowl and two pestles found during trenching.	0.50
353	Large stone bowl (stolen), granite pestle, well-used scraper, and pestle fragments.	1

Source: Cogstone, 2017, Appendix C.

Historic Setting

The present-day City of Tustin lies primarily within the boundaries of the Rancho San Antonio land grant, which totaled 62,500 acres and was given to Jose Antonio Yorba in 1801 by the Spanish Alta California Governor José Joaquín de Arrillaga on behalf of the Spanish government. This land grant was the only one given under Spanish Rule in present-day Orange County.

After the United States took possession of California in 1848 following the Mexican-American War, the Treaty of Guadalupe Hidalgo ensured that the land grants would be honored. In 1852 a claim for the Rancho Santiago de Santa Ana was filed with the Public Land Commission, which was patented to Bernardo, Teodoro, and Ramón Yorba in 1883.

In the late 1860's Columbus Tustin, a northern California carriage maker, and his partner, Nelson Stafford, purchased 1,300 acres of what had been the Rancho Santiago de Santa Ana for one dollar and fifty cents per acre. Tustin then attempted to create "Tustin City," but the sales of home sites were slow. By the early 1870s, Tustin ended up giving free lots to anyone who would build a home (Tustin Area Historical Society).

The community gradually became established as an agricultural center due to a dependable water supply. In the 1890s, agriculture continued to develop, with groves of apricots and walnuts being replaced with the more profitable Valencia oranges around the turn of the century (Tustin Area Historical Society). Over time, agricultural lands were sold for land development. By the 1960s, only Development Areas 3 and 5 retained any groves, and a majority of the City core was developed with housing, retail and some industrial uses.

Historic Resources

There are two buildings within the Specific Plan area that are listed on the California Register of Historical Resources and the National Register of Historic Places. These are the Artz Building (150-158 West Main Street; California Register of Historical Resources Primary No. P-30-162095) and the Sherman Stevens

House (228 West Main Street; Primary No. P-30-160206). In addition, the Cultural Resources District itself is a recorded historic resource (identified as the “Tustin Old Town Resources District - generally bounded by First Street in the north, Sixth Street in the south, the 55 Freeway to the west and Prospect Avenue to the east”; Primary No. P-30-16271).

The Tustin Historic Resources Survey, Parts 1 and 2, identifies over 400 sites of possible distinction and notable recognition. Using criteria from the National Register and the State of California and a customized evaluation form for Tustin, these sites were reviewed and assessed for national, state, regional, and local significance. The properties were reviewed in terms of architectural significance, but significance was also determined because of historical, landscape and cultural importance, as identified from local sources. Properties listed in the Tustin Historic Resources Survey, both within and outside of the Specific Plan area, are also subject to the CRD Residential and Commercial Design Guidelines.

The Specific Plan area also contains numerous buildings that are over 50 years of age or would be over 50 years of age during implementation of the proposed Specific Plan. The buildings within the Specific Plan area and the decade they were developed is provided in Table 5.3-2, *Age of Buildings within the Specific Plan Area*.

Table 5.3-2: Age of Buildings within the Specific Plan Area

Decade	Count
1880	4
1890	1
1900	2
1910	17
1920	14
1930	9
1940	4
1950	28
1960	54
1970	46
1980	35
1990	6
2000	16
Total	236

Source: Cogstone, 2017, Appendix C.

Paleontological Resources

Paleontological resources include fossil remains, as well as fossil localities and rock or soil formations that have produced fossil material. Fossils are the remains or traces of prehistoric animals and plants. Fossils are important scientific and educational resources because of their use in (1) documenting the presence and evolutionary history of particular groups of now extinct organisms (2) reconstructing the environments in which these organisms lived, and (3) determining the relative ages of the strata in which they occur and of the geologic events that resulted in the deposition of the sediments that formed these strata and in their subsequent deformation.

Paleontological sensitivity is the potential for a particular geologic unit to produce scientifically important fossils. There is a direct correlation between fossils and the geologic units in which they are preserved;

therefore, paleontological sensitivity is determined by rock type, the history of a particular geologic unit for producing significant fossils, and the recorded or known fossil localities derived from that unit.

All of Orange County consists of Miocene (22-5 million-year-old) marine sediments overlain by a relatively thin veneer of Pleistocene (2.4 million to 11-thousand-year-old) sediments and recent (11 thousand-year-old to present) alluvial sediments. Downtown Tustin is a flat plain across which streams flowed to the ocean depositing alluvium. No fossils are known to exist within the Specific Plan area or within the City's limits; Pleistocene fossils were recovered eight feet below the surface east of the City of Tustin (Cogstone, 2017).

5.3.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- CUL-1 Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.
- CUL-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
- CUL-3 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- CUL-4 Disturb any human remains, including those interred outside of formal cemeteries.

The Initial Study, included as Appendix A, established that the project would result in less than significant impacts related to Threshold CUL-3 and CUL-4; no further assessment of these impacts is required in this EIR.

5.3.5 METHODOLOGY

As part of preparation of the Cultural Resource Assessment for the proposed Specific Plan a records search was completed on January 26, 2017 at the South Central Coast Information Center (SCCIC), California State University at Fullerton. Other sources consulted include the National Register of Historic Places, California Register of Historical Resources, California Inventory of Historic Resources, Bureau of Land Management General Land Office Records, California Historical Landmarks, and California Points of Historical Interest. In addition, USGS historic topographical maps were reviewed, and a consultation with the Tustin Area Historical Society.

5.3.6 ENVIRONMENTAL IMPACTS

IMPACT CUL-1: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE AS DEFINED IN CEQA GUIDELINES SECTION 15064.5 [THRESHOLD CUL-1].

Less than Significant. The Specific Plan area has a rich history, and as listed above, contains two buildings that are listed on the California Register of Historical Resources and the National Register of Historic Places. In addition, other structures are eligible or potentially eligible for a historic designation. Also, the

Specific Plan would be implemented through 2035, and over that time additional buildings and/or structures in the City could become 50 years of age or more, and therefore potentially historic resources.

Recognizing the important role of historic resources in Tustin, the proposed Specific Plan intends to preserve the City's historic resources, and enhance their role in the community by implementing historic architectural styles. As described in the proposed Specific Plan, development within the Specific Plan area shall be based on the historic architectural styles found in Old Town; and buildings adjacent to historic structures shall be designed in a manner that safeguards the prominence and integrity of the historic structure as detailed in the Secretary of the Interior's standards for historic resources. Additionally, the proposed Specific Plan sets forth restrictions for historic residential structures, as listed below, to support the preservation of historic resources.

Historic residential structures are subject to the following provisions:

1. Single-family use of historic residential structures consistent with the City's Cultural Resources District Residential Design Guidelines is a permitted use.
2. Commercial use of historic single-family residential structures converted in compliance with the Cultural Resources District Commercial Design Guidelines and the Secretary of the Interior's Standards for Rehabilitation is permitted as specified under the land use designation in which the structure is located, as shown in Table 3.1, *Permitted Use Table of the proposed Specific Plan*.
3. Historic single-family residential structures lawfully converted to commercial use cannot be converted back to residential use and must thereafter be maintained as a commercial use.

In addition, all projects within the Specific Plan area are required to adhere to the CRD Residential and Commercial Design Guidelines, described previously. Although no historically significant buildings are planned for demolition and the proposed Specific Plan aims to ensure preservation of historic resources, implementation of site-specific development projects pursuant to the proposed Specific Plan could cause a substantial adverse change in the significance of a historical resource by altering a historical resource's physical characteristics, which convey its historical significance. Adherence to TCC Article 9, Chapter 2, Part 5, Section 9252, and Certificate of Appropriateness procedures, would address unidentified, potential historical resources (buildings, structures, and features aged 50 years and older) and would ensure preservation of known historic resources as new development within the Specific Plan area occurs. A project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings is considered to have a less than significant impact.

Much of the street tree canopy in the Specific Plan consists of Indian Laurel Fig (*Ficus microcarpa*), which is a non-native tree species with invasive roots, and are sometimes negatively affecting infrastructure within the Specific Plan area, including the penetration of water and sewer pipes and uplifting sidewalk pavement, creating potentially unsafe conditions. Therefore, the Specific Plan includes a program to gradually replace the existing Ficus trees with a tree species identified in the Street Tree Palette, 48-inch box sized or larger. The replacement of trees will follow a systematic, phased tree replacement schedule to replace all alternating Ficus trees within the Specific Plan area and then cycle back to replace the remaining Ficus trees. These trees were planted in the 1970's in the public right of way. They are not

identified as landmark trees in Tustin. (Jordan, 2003). The Ficus trees do not constitute a historic landscape, and their phased replacement would not be considered an impact to a historic resource.

Therefore, with implementation of the historic design standards that would be implemented as part of the proposed Specific Plan and TCC Article 9, Chapter 2, Part 5, Section 9252 (provided as PPP- CUL-1), impacts related to a substantial adverse change in the significance of a historic resource would be less than significant.

IMPACT CUL-2: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL RESOURCE PURSUANT TO CEQA GUIDELINES SECTION 15064.5 [THRESHOLD CUL-2].

Less than Significant with Mitigation Incorporated. Archaeology is the recovery and study of material evidence of human life and culture of past ages. Over time this material evidence becomes buried, fragmented, or scattered or otherwise hidden from view and is not always evident from a field survey of a project site. Thus, the possible presence of archaeological materials is often determined by the presence of geographic, vegetative, and rock features that are known or thought to be associated with early human life and culture, as well as knowledge of events or material evidence in the area.

The Specific Plan is located in an urbanized area, with a limited number of vacant parcels that were previously disturbed by past development activities. While the Specific Plan area has been previously disturbed and developed, future site-specific development projects pursuant to the Specific Plan could involve grading and excavation to greater depths than previously undertaken. In addition, infill development would occur on vacant parcels, some of which may not have been previously exposed to ground disturbing activities, and therefore could result in the disturbance of unknown archaeological resources.

Because future site-specific development pursuant to the proposed Specific Plan could involve grading and excavation to greater depths than was previously undertaken, such future development could disturb buried archaeological resources. Thus, Mitigation Measure CUL-1 is included to reduce the potential for archaeological resources to be impacted during earthmoving activities and provides for preservation of any identified resources. With implementation of this mitigation measure, impacts related to a substantial adverse change in the significance of an archaeological resource would be less than significant.

5.3.7 CUMULATIVE IMPACTS

Less than Significant with Mitigation Incorporated. Cumulative effects involving cultural resources occur as the result of multiple projects affecting cultural resources involving a resource type or theme, such as historic ethnic sites or an industry (e.g., Old Town Tustin), that occur within a larger geographic context than a site-specific development project site. Thus, this analysis considers cumulative development projects that are located immediately adjacent to the Specific Plan area.

Historic Resources

Because all historical resources are unique and nonrenewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Federal and state laws and regulations protect historical resources when feasible. However, it is not always feasible to protect historical resources,

particularly when an historic building has deteriorated beyond repair. For this reason, the cumulative effects of development on historical resources from cumulative projects in the region are considered significant.

However, the proposed Specific Plan development requirements and special use restrictions include provisions related to preservation of historic resources, as described above. In addition, projects within the Specific Plan area are required to adhere to the CRD Residential and Commercial Design Guidelines, described previously. Furthermore, implementation of PPP CUL-1 and PPP CUL-2 would avoid demolition of historically significant structures and would ensure that adaptive reuse of historically significant structures comply with Secretary of the Interior Standards and thereby protect the historic integrity of the structure's façade. Thus, with the application of PPP CUL-1 and CUL-2, and the applicable Specific Plan design criteria, the proposed Plan's contribution to the cumulative effect to historic resources in the region would be less than cumulatively considerable.

Archaeological Resources

As described above, there is a possibility that ground-disturbing activities at or below 2-feet in depth during future construction may uncover or disturb unknown archaeological resources. However, the project has included Mitigation Measure CUL-1 that would reduce the potential impact to unknown resources. The likelihood of uncovering multiple currently unknown resources within the previously developed area that is sufficient to create a significant cumulative impact is low given the built nature of the Specific Plan area and few archaeological resources that have been found in the area to date. Thus, the cumulative effects of development on archaeological resources from implementation of the proposed Specific Plan in combination with other projects would be less than significant.

5.3.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- National Historic Preservation Act
- Tustin City Code
- California Health and Safety Code Section 7050.5
- Public Resources Code Section 5097.98

Plans, Program and Policies (PPPs) and Standard Conditions

The following Plans, Programs, and Policies (PPP) and Standard Conditions (SCs) related to cultural resources are incorporated into the project and would reduce impacts related to cultural resources. These actions will be included in the project's mitigation monitoring and reporting program:

- **PPP CUL-1:** The City of Tustin Cultural Resources District Residential/Commercial Design Guidelines shall apply to all projects within the Specific Plan area.
- **PPP CUL-2:** The Certificate of Appropriateness process applies to all projects within the Specific Plan, when appropriate, as outlined in Tustin City Code, Article 9, Chapter 2, Part 5, Section 9252.

5.3.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of existing regulations, including PPPs CUL-1 and CUL-2, impact CUL-1 would be less than significant. As described previously, without mitigation impacts CUL-2 would be potentially significant.

5.3.10 MITIGATION MEASURES

Mitigation Measure CUL-1: Prior to issuance of a grading permit for grading of 2 feet or more in depth below the natural or existing grade, the applicant/developer shall provide written evidence to the City Planning Division that a qualified archaeologist has been retained by the applicant/developer to respond on an as-needed basis to address unanticipated archaeological discoveries and any archaeological requirements (e.g., conditions of approval) that are applicable to the project. The applicant/developer is encouraged to conduct a field meeting prior to the start of construction activity with all construction supervisors to train staff to identify potential archaeological resources. In the event that archaeological materials are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.

If discovered archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that confirmed resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery, reburial/relocation, deposit at a local museum that accepts such resources or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

If discovered materials are found not to be significant archaeological resources but may be considered a Tribal Cultural Resource or objects with cultural value to a California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.

5.3.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant. To reduce impacts associated with Impact CUL-2, Mitigation Measure CUL-1 is included to reduce the potential for archaeological resources to be impacted during earthmoving activities and provides for preservation of any identified resources. Implementation of this mitigation measure would reduce potential impacts related to cultural resources to a less than significant level.

REFERENCES

Cultural Resource Assessment for the Tustin Downtown Commercial Core Specific Plan. Prepared by Cogstone, May 2017. Included as Appendix C.

2003 City of Tustin Historic Resources Survey. Prepared by TBA West.

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5.4 Greenhouse Gas Emissions

5.4.1 INTRODUCTION

This section evaluates the potential for implementation of the proposed Specific Plan to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, impacts of the proposed Specific Plan are considered on a cumulative basis. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). This section also addresses the Specific Plan's consistency with applicable plans, policies, and public agency regulations adopted for the purpose of reducing the emissions of greenhouse gases. The analysis within this section is based on the Air Quality and Greenhouse Gas Analysis prepared for the Specific Plan by Urban Crossroads (UC 2017), included as Appendix B.

5.4.2 REGULATORY SETTING

National Climate Action Plan

In June 2013, President Obama enacted a national Climate Action Plan (CAP) that consisted of a wide variety of executive actions and had three pillars discussed below.

- **Cut Carbon in America:** The CAP consists of actions to help cut carbon by deploying clean energy such as cutting carbon from power plants, promoting renewable energy, and unlocking long-term investment in clean energy innovation.
- **Prepare the United States for Impacts of Climate Change:** The CAP consists of actions to help prepare for the impacts of climate change through building stronger and safer communities and infrastructure by supporting climate resilient investments and supporting communities as they prepare for impacts, and boosting resilience of building and infrastructure; protecting the economy and natural resources by identifying vulnerabilities, promoting insurance leadership, conserving land and water resources, managing drought, reducing wildfire risks, and preparing for future floods; and using sound science to manage climate impacts.
- **Lead International Efforts:** The CAP consists of actions to help the United States lead international efforts through working with other countries to take action by enhancing multilateral engagements with major economies, expanding bilateral cooperation among major emerging economies, combating short-lived climate pollutants, reducing deforestation and degradation, expanding clean energy use and cutting energy waste, promoting global free trade in environmental goods and services, phasing out subsidies that encourage wasteful use of fossil fuels, and by leading efforts to address climate change through international negotiations.

California Assembly Bill 1493 – Pavley

In 2002, the California legislature adopted regulations to reduce GHG emissions in the transportation sector. In September 2004, pursuant to AB 1493, the CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. In September 2009, CARB adopted amendments to the Pavley regulations to reduce GHG from 2009 to 2016. CARB, EPA, and the U.S. Department of Transportation's National Highway Traffic and Safety Administration (NHTSA) have coordinated efforts to develop fuel economy and GHG standards for model 2017-2025 vehicles. The GHG standards are incorporated into the "Low Emission Vehicle" (LEV) Regulations.

California Executive Order S-3-05 – Statewide Emission Reduction Targets

Executive Order S-3-05 was established by Governor Arnold Schwarzenegger in June 2005. Executive Order S-3-05 establishes statewide emission reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

California Assembly Bill 32, Global Warming Solutions Act of 2006

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 to mandate the quantification and reduction of GHGs to 1990 levels by the year 2020. The law establishes periodic targets for reductions, and requires certain facilities to report emissions of GHGs annually. The legislation authorizes CARB to reduce emissions from certain sectors that contribute the most to statewide emissions of GHGs.

Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Also, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. The three-original early-action regulations meeting the narrow legal definition of “discrete early action GHG reduction measures” include:

- A low-carbon fuel standard to reduce the “carbon intensity” of California fuels.
- Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of “do-it-yourself” automotive refrigerants.
- Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early-action regulations, which were also considered “discrete early action GHG reduction measures,” consist of:

- Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology.
- Reduction of auxiliary engine emissions of docked ships by requiring port electrification.
- Reduction of PFCs from the semiconductor industry.
- Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products).
- Requirements that all tune-up, smog check, and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency.
- Restriction on the use of SF₆ from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MTCO₂E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for large facilities that account for 94 percent of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO₂ in excess of specified thresholds.

On December 11, 2008, CARB approved the Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan; CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS).
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

The AB 32 Scoping Plan also anticipates that local government actions will result in reduced GHG emissions because local governments have the primary authority to plan, zone, approve, and permit development to accommodate population growth and the changing needs of their jurisdictions. The Scoping Plan also relies on the requirements of Senate Bill (SB) 375 (discussed below) to align local land use and transportation planning for achieving GHG reductions.

The Scoping Plan must be updated every five years to evaluate AB 32 policies and ensure that California is on track to achieve the 2020 GHG reduction goal. In 2014, CARB released the First Update to the Scoping Plan, which builds upon the Initial Scoping Plan with new strategies and recommendations. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. This update defines CARB's climate change priorities for the next five years and sets the groundwork to reach long-term goals set forth in Executive Order S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals in the original 2008 Scoping Plan. It also evaluates how to align the state's "longer-term" GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update would reflect the 2030 target of a 40

percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes. The proposed Second Update is undergoing a review period and has not yet been adopted.

Senate Bill 375

In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed, SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations (MPOs) will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for “transit priority projects,” as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or Alternative Planning Strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional MPOs.

Executive Order B-30-15 – 2030 Statewide Emission Reduction Target

Executive Order B-30-15 was signed by Governor Jerry Brown on April 29, 2015, establishing an interim statewide GHG reduction target of 40 percent below 1990 levels by 2030, which is necessary to guide regulatory policy and investments in California in the midterm, and put California on the most cost-effective path for long-term emission reductions. Under this Executive Order, all state agencies with jurisdiction over sources of greenhouse gas emissions are required to continue to develop and implement emissions reduction programs to reach the state’s 2050 target and attain a level of emissions necessary to avoid dangerous climate change. According to the Governor’s Office, this Executive Order is in line with the scientifically established levels needed in the United States to limit global warming below 2°C - the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels.

Title 24 Energy Efficiency Standards and California Green Building Standards

The newest version of California Code of Regulations Title 24 Part 6 was adopted by the California Energy Commission (CEC) in June 2015 and became effective on January 1, 2017. The CEC indicates that these Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above that achieved by the 2013 Title 24.

5.4.3 ENVIRONMENTAL SETTING

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is

a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long term global temperature increases.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential, and CO₂ is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, SF₆ is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF₆, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG, with 22,800 times the global warming potential as CO₂. Therefore, an emission of one metric ton (MT) of SF₆ could be reported as an emission of 22,800 MT of CO₂e. Large emission sources are reported in million metric tons (MMT) of CO₂e. The principal GHGs are described below, along with their global warming potential.

Carbon dioxide: Carbon dioxide (CO₂) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (manmade) sources are from burning coal, oil, natural gas, and wood.

Methane: Methane (CH₄) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years, and its global warming potential is 28. Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.

Nitrous oxide: Nitrous oxide (N₂O) (laughing gas) is a colorless greenhouse gas that has a lifetime of 121 years, and its global warming potential is 265. Sources include microbial processes in soil and water, fuel combustion, and industrial processes.

Sulfur hexafluoride: Sulfur hexafluoride (SF₆) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas that has a lifetime of 3,200 years and a high global warming potential of 23,500. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.

Perfluorocarbons: Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Their global warming potential ranges from 7,000 to 11,000. Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.

Hydrofluorocarbons: Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Their global warming potential ranges from 100 to 12,000. Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.

Some of the potential effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB, 2009). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;

- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

GHGs are produced by both direct and indirect emissions sources. Direct emissions include consumption of natural gas, heating and cooling of buildings, landscaping activities and other equipment used directly by land uses. Indirect emissions include the consumption of fossil fuels for vehicle trips, electricity generation, water usage, and solid waste disposal.

California produced 441.5 gross MMT/yr CO₂e in 2014. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions accounting for 36 percent of total GHG emissions in the state. This sector was followed by the electric power sector (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent).

Existing Project Site Conditions

The Specific Plan area is a developed urban area that consists of the following uses: general commercial (80 percent), housing (5 percent), parks and open space (5 percent), and underutilized uses (10 percent), which are further described in Section 5.5, *Land Use and Planning*. The existing uses within the Specific Plan area currently generate GHG emissions from natural gas used for energy, heating and cooking, electricity usage, vehicle trips associated with each land use, area sources such as landscaping equipment and consumer cleaning products, from water demand, wastewater generation, and solid waste generation.

5.4.4 THRESHOLDS OF SIGNIFICANCE

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

- GHG-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- GHG-2 Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The SCAQMD formed a working group to identify greenhouse gas emissions thresholds for land use projects that could be used by local lead agencies in the Basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold, that could be applied by lead agencies, which includes the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years

and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:

- All land use types: 3,000 MTCO₂E per year
- Based on land use type:
 - Residential: 3,500 MTCO₂E per year
 - Commercial: 1,400 MTCO₂E per year
 - Mixed use: 3,000 MTCO₂E per year
- Tier 4 has the following options:
 - Option 1: Reduce business as usual emissions by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
 - Option 3, 2020 Target: For service populations (SP), including residents and employees, 4.8 MTCO₂E/SP/year for projects and 6.6 MTCO₂E/SP/year for plans.
 - Option 3, 2035 Target: 3.0 MTCO₂E/SP/year for projects and 4.1 MTCO₂E/SP/year for plans.

Due to the multiple development projects and number of residential units and non-residential square footage that would be developed over the 17-year build out of the proposed Specific Plan, the SCAQMD screening threshold would be exceeded, as detailed below. This screening threshold is typically applied for analysis of specific development projects.

Thus, for the purpose of the proposed Specific Plan, SCAQMD's threshold related to the plan-level efficiency metric is more appropriate for general plan-level analysis. If projects exceed the thresholds, GHG emissions would be considered potentially significant in the absence of mitigation measures. As the proposed Specific Plan anticipates buildout in 2035, the efficiency target is 4.1 MTCO₂E/SP/year, as listed above.

5.4.5 METHODOLOGY

The California Emissions Estimator Model (CalEEMod) v2016.3.1 is the most recent version, and has been used to determine construction and operational GHG emissions for build out of the proposed Specific Plan. The purpose of this model is to calculate construction-source and operational-source GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures, if applied.

For construction phase project emissions, GHGs are quantified and per SCAQMD methodology, the total greenhouse gas emissions for construction activities are divided by 30-years, and then added to the annual operational phase of GHG emissions.

The City of Tustin does not have an adopted numeric threshold of significance for determining impacts from GHG emissions. Thus, a significant impact would occur if GHG emissions resulting from implementation of the proposed Specific Plan would exceed applicable threshold levels set forth by SCAQMD's plans and programs, which includes the thresholds listed above.

5.4.6 ENVIRONMENTAL IMPACTS

IMPACT GHG-1: THE PROJECT WOULD GENERATE GHG EMISSIONS THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT [THRESHOLD GHG-1].

Significant and Unavoidable.

Construction

Construction activities would occur at different sites throughout the Specific Plan area through the Plan's estimated 17-year build out. The site-specific development projects that would occur pursuant to the Specific Plan would be temporary at any one location, but numerous site-specific development projects are anticipated to occur pursuant to buildout of the proposed Specific Plan. Construction of site-specific development projects would create new sources of GHG, and could contribute to global climate change impacts. Construction activities would result in the emission of GHGs from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers.

Total estimated construction-related GHG emissions from build out of the proposed Specific Plan were amortized over 30 years per SCAQMD methodology, and as shown on Table 5.4-1 would equal approximately 61.61 MT/yr CO₂E per year.

Table 5.4-1: Summary of Greenhouse Gas Emissions (Annual)

Emission Source	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Construction Emissions (amortized)	61.49	0.006	--	61.61
Operational Emissions	30,655.32	14.91	0.13	31,065.98
Total CO ₂ E (All Sources)	31,127.6			
SCAQMD Screening Threshold (CO₂E)	3,000			
Screening Threshold Exceeded?	Yes			
Service Population Generated	3,619			
Project Efficiency	8.6			
SCAQMD Efficiency Target Threshold (2035)	4.1			
Efficiency Target Threshold Exceeded?	Yes			

Source Urban Crossroads, 2017, Appendix B.

Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.

Table results include scientific notation. e is used to represent times ten raised to the power of (which would be written as x 10^b) and is followed by the value of the exponent.

Operation

Area and indirect sources associated with the proposed Specific Plan would primarily result from mobile transportation sources, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation from new developments. GHG emissions from electricity consumed within the Specific Plan area would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. In addition, the proposed Specific Plan would generate GHG emissions from motor vehicle trips.

The estimated operational GHG emissions that would be generated from build out of the land uses identified within the Specific Plan are shown in Table 5.4-1. As shown, the total net annual GHG emissions would be approximately 31,127.6 MTCO₂E per year, which would exceed the SCAQMD screening

threshold of 3,000 MTCO₂E per year. In addition, the annual GHG emissions per service population for the proposed Specific Plan would be 8.6 MT/yr CO₂E, which would exceed SCAQMD's 2035 efficiency level threshold of 4.1 MT/yr CO₂E. Therefore, GHG emissions from build out of the proposed Specific Plan would be significant. As a result, Mitigation Measures AQ-7 and AQ-8, described in Section 5.2, *Air Quality*, are included to require Specific Plan development projects to be designed to achieve a 5 percent efficiency beyond the incumbent California Building Code Title 24 requirements, and be designed to reduce water usage by a minimum of 30 percent when compared to baseline water demand. However, even with implementation of these mitigation measures the GHG emissions generated by the proposed Specific Plan would remain significant and unavoidable.

IMPACT GHG-2: THE PROJECT WOULD CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION OF AN AGENCY ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES [THRESHOLD GHG-2].

Significant and Unavoidable. The City of Tustin is largely built out, and future development under the proposed Specific Plan would consist mostly of infill, mixed-use, and redevelopment projects that are market and need dependent, and would help to meet housing demands from projected employment growth in the City while maintaining a healthy vacancy rate. This growth that would be accommodated by the proposed Specific Plan would result in GHG emissions. The proposed Specific Plan provides for bicycle and pedestrian circulation infrastructure to reduction of vehicle miles traveled and related GHG emissions. In addition, the proposed Specific Plan would be implemented pursuant to the CALGreen Building (Title 24) requirements, and provide new land uses in a sustainable manner. This is consistent with the intent of the AB 32 Scoping Plan and SB 375, which is focused on changing land use patterns and improving transportation alternatives.

However, as described in Impact 5.4-1 previously, the GHG emissions that would be generated from the increase in population and the resulting vehicular trips and use of electricity, water, and fuels from construction and operation of the anticipated land uses at build out of the Specific Plan would be in excess of both the SCAQMD screening threshold and 2035 efficiency level threshold.

The SCAQMD thresholds for service population are consistent with California Climate Change Scoping Plan GHG emissions reduction targets for which its set of strategies were developed to reduce GHG emissions statewide. Thus, a project could not exceed the efficiency threshold without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (California Climate Change Scoping Plan). Therefore, because the development that would be guided by the proposed Specific Plan would result in GHG emissions that would exceed 4.1 metric tons of CO₂E per service population annually, a significant impact related to conflict with an applicable plan or policy adopted for the purpose of reducing the emissions of greenhouse gasses would result. As described in Impact GHG-1 previously, even with implementation of mitigation measures the GHG emissions generated by the proposed Specific Plan would exceed the SCAQMD thresholds, and therefore would remain significant and unavoidable.

5.4.7 CUMULATIVE IMPACTS

Significant and Unavoidable. GHG emissions impacts are assessed in a cumulative context, since no single project can cause a discernible change to climate. Climate change impacts are the result of incremental contributions from natural processes, and past and present human-related activities. Therefore, the area in which a proposed project in combination with other past, present, or future projects, could contribute to a significant cumulative climate change impact would not be defined by a geographical boundary such as a

project site or combination of sites, city or air basin. GHG emissions have high atmospheric lifetimes and can travel across the globe over a period of 50 to 100 years or more. Even though the emissions of GHGs cannot be defined by a geographic boundary and are effectively part of the global issue of climate change, CEQA places a boundary for the analysis of impacts at the state's borders. Thus, the geographic area for analysis of cumulative GHG emissions impacts is the State of California.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006 (Nunez), recognizes that California is the source of substantial amounts of GHG emissions. The statute begins with several legislative findings and declarations of intent, including the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems" (California Health and Safety Code, Section 38501(a)).

Thus, AB 32 recognizes the significance of the statewide cumulative impact of greenhouse gas emissions from sources throughout the state, and sets a performance standard for mitigation of that cumulative impact.

The analysis of greenhouse gas emission impacts under CEQA contained in this EIR effectively constitutes an analysis of a project's contribution to the significant statewide cumulative impact of GHG emissions. As described previously, the estimated GHG emissions from development and operation of the proposed Specific Plan at build out would exceed the AQMD screening threshold of 3,000 MTCO₂E per year and exceed the SCAQMD 2035 efficiency level threshold of 4.1 MT/yr CO₂E after implementation of mitigation measures. Therefore, the contribution of the Specific Plan to significant cumulative GHG impacts is significant and unavoidable and cumulatively considerable.

5.4.8 EXISTING STANDARD REGULATIONS, CONDITIONS AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- California Assembly Bill 1493 (Pavley)
- California Executive Order S-3-05
- Assembly Bill 32 (Global Warming Solutions Act of 2006)
- Senate Bill 375 (Steinberg)
- California Executive Order B-30-15
- California Energy Code
- California Green Building Standards Code

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.4.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Significant. Without mitigation, the following impacts would be potentially significant:

- Impact GHG-1: The GHG emissions generated from implementation of the proposed Specific Plan would result in a significant impact.
- Impact GHG-2: The project would conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

5.4.10 MITIGATION MEASURES

See Mitigation Measure AQ-7: See Section 5.2, *Air Quality* for mitigation measure's text.

See Mitigation Measure AQ-8: See Section 5.2, *Air Quality* for mitigation measure's text.

5.4.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable. Greenhouse gas emissions from construction and operation of build out of the proposed Specific Plan and conflicting with existing policies would remain significant and unavoidable, even with implementation of Air Quality Mitigation Measures AQ-7 and AQ-8.

REFERENCES

Tustin Downtown Commercial Core Specific Plan Focused Air Quality and Greenhouse Gas Analysis, Prepared by Urban Crossroads, 2017. Included as Appendix B.

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5.5 Land Use and Planning

5.5.1 INTRODUCTION

This section evaluates the potential impacts to land use in the city of Tustin from implementation of the proposed project. This section is based on the proposed land use designations and land uses described in detail in Chapter 3, Project Description, and shown in Figure 3-5, *Proposed Land Use Plan*. This section evaluates the proposed Specific Plan to determine its consistency with relevant goals and policies of the Tustin General Plan, the City's Zoning Code, and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

5.5.2 REGULATORY SETTING

Southern California Association of Governments

SCAG is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's MPO, SCAG cooperates with the South Coast Air Quality Management District (SCAQMD), the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives. The plans most applicable to the proposed project are discussed below.

The project is considered a project of regionwide significance pursuant to the criteria outlined in Section 15206 of the CEQA Guidelines. Therefore, this section addresses the project's consistency with the applicable SCAG regional planning guidelines and policies.

SCAG Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG's Regional Council adopted the 2016–2040 RTP/SCS. This long-range visioning plan balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. It balances the region's future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS is required by the state of California and the federal government and is updated by SCAG every four years as demographic, economic, and policy circumstances change (SCAG 2016). The RTP/SCS goals and policies relevant to the proposed Specific Plan are provided 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.

Policies

Identify regional strategic areas for infill and investment: Identify strategic opportunity areas for infill development of aging and underutilized areas and increased investment in order to accommodate future growth. This strategy makes efficient use of existing and planned infrastructure, revitalizes communities, and maintains or improves quality of life. Strategic areas are primarily identified as those with potential for transit-oriented development, existing and emerging centers, and small mixed-use areas.

Develop “Complete Communities”: Create mixed-use districts or “complete communities” in strategic growth areas through a concentration of activities with housing, employment, and a mix of retail and services, located in close proximity to each other. Focusing a mix of land uses in strategic growth areas creates complete communities wherein most daily needs can be met within a short distance of home, providing residents with the opportunity to patronize their local area and run daily errands by walking or cycling rather traveling by automobile.

Plan for additional housing and jobs near transit: Pedestrian-friendly environments and more compact development patterns in close proximity to transit serve to support and improve transit use and ridership. Focusing housing and employment growth in transit-accessible locations through this transit-oriented development approach will serve to reduce auto use and support more multi-modal travel behavior.

Plan for changing demand in types of housing: Shifts in the labor force, as the large cohort of aging “baby boomers” retires over the next 15 years and is replaced by new immigrants and “echo boomers,” will likely induce a demand shift in the housing market for additional development types such as multi-family and infill housing in central locations, appealing to the needs and lifestyles of these large populations.

Continue to protect stable, existing single-family areas: Continue to protect stable existing single-family neighborhoods as future growth and a more diverse housing stock are accommodated in infill locations near transit stations, in nodes along corridors and in existing centers. Concurrently, focusing growth in central areas and maintaining less development in outlying areas preserves the housing option for large-lot single-family homes, while reducing the number of long trips and vehicle miles traveled to employment centers.

SCAG High Quality Transit Areas

The 2016–2040 RTP/SCS identifies High Quality Transit Areas (HQTA), which is a walkable transit area or corridor that is within a half mile of a transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The proposed Specific Plan area is within an HQTA identified by the RTP/SCS. The overall land use pattern of the 2016–2040 RTP/SCS focuses jobs and housing in the region’s designated QTAs. Separate goals, policies, or guidelines have not been adopted for the QTAs; therefore, a project’s consistency with the HQTA is obtained by achieving consistency with the applicable 2016–2040 RTP/SCS policies.

Orange County Council of Governments and Orange County Transportation Authority

Orange County Sustainable Communities Strategy

Unique to the SCAG region is the option for subregions to create their own SCS. The Orange County Council of Governments and Orange County Transportation Authority adopted an SCS for the Orange County subregion—of which the City of Tustin is a member jurisdiction—on June 14, 2011. The Orange County SCS includes the following strategies that are relevant to the proposed Specific Plan that include:

Strategy A: Support transit-oriented development

Strategy B: Support infill housing development and redevelopment

Strategy C: Support mixed-use development and thereby improve walkability of communities

Strategy D: Increase regional accessibility in order to reduce vehicle miles traveled

Strategy E: Improve jobs to housing ratio

Strategy F: Promote land use patterns that encourage the use of alternatives to single-occupant automobile use.

Strategy G: Support retention and/or development of affordable housing

City of Tustin

General Plan and Zoning Ordinance

The City's General Plan is its comprehensive, long-range plan for future growth and development. As mandated by state law, the General Plan identifies goals and policies for a number of specific topics; Tustin's General Plan organizes these topics into seven elements: land use, housing, circulation, conservation/open space/recreation, public safety, noise, and growth management. The majority of the Specific Plan area is currently designated with the land uses PCCB (Planned Community Commercial/Business) and OTC (Old Town Commercial), as adopted in the 2013 Tustin General Plan. The remainder of the Specific Plan area includes the land use designations MHP (Mobile Home Park), PO (Professional Office), CC (Community Commercial), I (Industrial), and PI (Public and Institutional). The existing land uses are shown in Figure 3-3, *Existing Land Use Plan*, and a description of the existing land use categories is provided in Table 3-1, *Existing Land Use Categories*.

The Specific Plan area currently has the following zoning designations: SP10 (First Street Specific Plan), PI (Public and Institutional), C2 (Central Commercial), C1 (Retail Commercial), CG (General Commercial), PC COM (Planned Community Commercial), PM (Planned Industrial), MHP (Mobile Home Park), PC RES (Planned Community Residential), and PR (Professional). Figure 3-4, *Existing Zoning Map*, depicts the existing zoning designations.

Existing Overlay Districts

First Street Specific Plan

The First Street Specific Plan is located within the Specific Plan area. The First Street Specific Plan was adopted in November 2012. The primary intent of the First Street Specific Plan is to continue commercial retail, service, and office uses, including some commercial mixed use projects. Implementation of the project would include a rescission of the First Street Specific Plan, and replacement of its regulations with those of the proposed DCC Specific Plan.

Cultural Resources District

Residential Design Guidelines. The Cultural Resources District (CRD) Residential Design Guidelines apply to new residential projects or modifications to existing historical residential homes in the CRD. There are some designated cultural resources located outside the CRD but within the Specific Plan boundaries for which these design guidelines would be applicable.

Commercial Design Guidelines. Similar to the CRD Residential Design Guidelines, the CRD Commercial Design Guidelines apply to new commercial projects or modifications to existing historical commercial buildings. There are some designated cultural resources located outside the CRD but within the Specific Plan boundaries for which these design guidelines would be applicable.

Parking Overlay District

The City of Tustin has established parking code requirements for off-street parking as well as a Parking Overlay District that allows the City to offer modifications of certain off-street parking requirements under certain circumstances. The boundaries of the Parking Overlay District are shown in Figure 3-6: *Parking Overlay District*.

5.5.3 ENVIRONMENTAL SETTING

The Specific Plan area is located north east of Interstate 5 (I-5) and State Route (SR) 55. This area includes approximately 220 acres, which is 3 percent of the City of Tustin. The downtown Tustin area has been long urbanized. Currently, the Specific Plan area includes diverse uses and spaces, ranging from a quaint “Old Town” to auto-oriented boulevards and historic adjacent neighborhoods. The existing land uses are generally categorized as: general commercial (80 percent), housing (5 percent), parks and open space (5 percent), and underutilized uses (10 percent). Existing land uses within the Specific Plan area include:

- Retail and commercial. Predominantly located along First Street, Newport Avenue, and El Camino Real, these uses include over 1.3 million square feet of space.
- Office. Approximately 680,000 square feet of office space is interspersed through the Specific Plan area.
- Industrial. Limited light industrial uses are located on Sixth Street, west of El Camino Real.
- Public and institutional. The Specific Plan area contains numerous local civic and cultural institutions, clustered north of Main Street between Prospect Avenue and Centennial Way, and between B and C Streets south of Peppertree Park.
- Residential. In addition to limited single-family residential homes, the only residential area that exists within the Specific Plan area is a mobile home park and a live/work development along Prospect Avenue. In addition, a multi-family residential community is under construction on the west side of B Street.
- Parks and open space. The only existing park in the Specific Plan area is the 4.5-acre Peppertree Park. Other open spaces within the Specific Plan area include a small pocket park along the west side of El Camino Real between Main and Sixth streets, and a private green parcel (lawn) on the northwest corner of Stevens Square (Main Street and B Street).

- Vacant and underutilized parcels. Vacant and underutilized lands make up 10 percent of the available developable area within the Specific Plan area.

5.5.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project could have a significant effect on the environment if the project would:

- LU-1 Physically divide an established community.
- LU-2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- LU-3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

The Initial Study, included as Appendix A, established that the project would result in no impact related to Thresholds LU-1 and LU-3; no further assessment of these impacts is required in this EIR.

5.5.5 METHODOLOGY

The evaluation of impacts to land use and planning is based on a comparison of the proposed Specific Plan and the applicable plans, policies, and regulations to determine if implementation of the project would conflict with a plan, policy, or regulation related to environmental effects.

5.5.6 ENVIRONMENTAL IMPACTS

IMPACT LU-1: CONFLICT WITH ANY APPLICABLE LAND USE PLAN, POLICY, OR REGULATION OF AN AGENCY WITH JURISDICTION OVER THE PROJECT ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT [THRESHOLD LU-2].

No Impact. The analysis below, evaluates the consistency of the proposed Specific Plan with existing regional and City plans and policies. As described in detail below, the proposed Specific Plan would be consistent with applicable regional and local goals and policies that are intended to avoid or mitigate adverse environmental effects. Thus, impacts related to conflict with these plans, policies, and regulations would not occur.

SCAG Regional Transportation Plan/Sustainable Communities Strategy

Table 5.5-1, *Consistency with SCAG Regional Transportation Plan/Sustainable Communities Strategy*, lists the policies from SCAG's 2016 RTP/SCS that are relevant to the proposed Specific Plan. SCAG policies focus largely on implementing transit oriented development and increasing the use of regional transit, encouraging development patterns and densities that reduce infrastructure costs, and providing affordable and a variety of housing types.

The proposed Specific Plan would implement many of the SCAG policies related to high-density, infill development, and improvement of the job/housing balance that is centered around public transit opportunities. The proposed Specific Plan would involve providing for infill development in an already developed urban area in the City of Tustin that would make use of the existing circulation and utility

infrastructure. The proposed Specific Plan would introduce higher-density residential uses, and create a mixed-use environment in which residents would benefit from nearby shopping and employment opportunities. Thus, the Specific Plan would be consistent with SCAG goals to provide infill residential and mixed-use development and increase the availability of transit-oriented development. In addition, SCAG policies include use of green building measures, such as water efficiency, Low Impact Development, and renewable energy sources that would be implemented by the proposed Specific Plan’s Project Design Features (listed in Section 3.0, *Project Description*). Overall, the proposed Specific Plan would be consistent with SCAG’s 2016 RTP/SCS policies. Therefore, implementation of the Specific Plan would not result in conflict with SCAG policies, and impacts would not occur.

Table 5.5-1: Consistency with SCAG Regional Transportation Plan/Sustainable Communities Strategy

RTP Goal	Specific Plan Consistency with Goal
1. Align the plan investments and policies with improving regional economic development and competitiveness.	Consistent. The proposed Specific Plan aligns economic development with transit availability by focusing revitalization efforts in the downtown area, which is currently served by transit. Proposed land uses in the Specific Plan are provided to enhance Tustin’s economic competitiveness by contributing to the balancing of the jobs-housing ratio.
2. Maximize mobility and accessibility for all people and goods in the region.	Consistent. The proposed Specific Plan provides improvements to pedestrian, bicycle, and transit facilities, and emphasizes access to transit. In addition, the proposed Specific Plan would provide retail and commercial uses that would increase the accessibility of goods in the Specific Plan area.
3. Ensure travel safety and reliability for all people and goods in the region.	Consistent. The proposed Specific Plan does not involve regional travel improvements, but does provide street improvements, and additional pedestrian and bicycle facilities that are designed to provide a safe onsite circulation system (as detailed in Section 5.8, <i>Traffic and Circulation</i>) that provides for reliable safe travel to, from, and within the Specific Plan area.
4. Preserve and ensure a sustainable regional transportation system.	Consistent. As described above, the proposed Specific Plan does not involve regional travel improvements, but does provide improvements to pedestrian and bicycle facilities within the Specific Plan area.
5. Maximize the productivity of our transportation system.	Consistent. The proposed Specific Plan would maximize the productivity of the local transportation system by increasing options for non-motorized transportation, such as walking and bicycling.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).	Consistent. The proposed Specific Plan would increase options for non-motorized transportation, such as walking and bicycling.
7. Actively encourage and create incentives for energy efficiency, where possible.	Consistent. As described in Section 3.0, <i>Project Description</i> , the proposed Specific Plan includes project design features that promote energy efficiency and sustainability.
8. Encourage land use and growth patterns that facilitate transit and active transportation.	Consistent. The proposed Specific Plan provides for housing near existing transit, would implement pedestrian and bicycling facilities.
RTP Land Use Policy	Specific Plan Consistency with Policy
Identify regional strategic areas for infill and investment	Consistent. The proposed Specific Plan has identified that the downtown Tustin area would provide for infill mixed-land uses in proximity to transit and freeways for infill and investment.

Develop “Complete Communities”	Consistent. The proposed Specific Plan provides for development of a complete community, with housing, employment, and a mix of retail and services, located in close proximity to each other.
Plan for additional housing and jobs near transit	Consistent. The proposed Specific Plan provides for additional housing and jobs near existing transit.
Plan for changing demand in types of housing	Consistent. The proposed Specific Plan provides for development of a range of housing types, including housing within mixed-use developments, and higher density housing in the downtown area.
Continue to protect stable, existing single-family areas	Consistent. The proposed Specific Plan does not propose any changes to existing single-family areas.

SCAG High Quality Transit Areas

As described above, the Specific Plan area is identified as a HQTAs in the RTP/SCS. An HQTAs is a walkable transit village or corridor that is within one-half-mile of a well-served transit corridor. The purpose of identifying these areas is to balance employment, housing, and services on a regional level to reduce vehicle miles traveled, reduce air pollutant emissions, enhance livability, expand prosperity, and increase sustainability in the SCAG region.

The proposed Specific Plan is consistent with the HQTAs designation because it encourages an enhanced mix of uses, including high density residential uses and employment-generating non-residential land uses, in the vicinity of a transit corridor with bicycle and pedestrian facilities. The proposed Specific Plan would increase the number of housing units near job opportunities, and thereby reducing vehicle miles traveled by commuters. Thus, impacts related to conflict with the SCAG RTP/SCS designation of a HQTAs would not occur from implementation of the proposed Specific Plan.

Orange County Sustainable Communities Strategy

Table 5.5-2, *Consistency with Orange County Sustainable Communities Strategy*, lists the policies from the Orange County Sustainable Communities Strategy that are relevant to the proposed Specific Plan. These policies focus largely on implementing transit oriented development and increasing the use of transit, improving the jobs-to-housing ratio, and providing affordable housing.

The proposed Specific Plan would implement many of the Orange County Sustainable Communities Strategy policies related to infill development, mixed-use developments, and improvement of the job/housing balance. The proposed Specific Plan would involve providing for infill development in an area with transit, and housing that would improve the jobs-to-housing balance (as detailed in Section 5.7, *Population and Housing*). Thus, proposed Specific Plan would be consistent with Orange County Sustainable Communities Strategy policies, as detailed in Table 5.5-2, and therefore, implementation of the Specific Plan would not result in conflict with Orange County Sustainable Communities Strategy policies, and impacts would not occur.

Table 5.5-2: Consistency with Orange County Sustainable Communities Strategy

OC SCS Policy	Specific Plan Consistency with Policy
Strategy A: Support transit-oriented development	Consistent. The proposed Specific Plan would provide for infill mixed-land uses in proximity to transit and freeways.
Strategy B: Support infill housing development and redevelopment	Consistent. The proposed Specific Plan provides for infill housing development and redevelopment of the downtown area.

<p>Strategy C: Support mixed-use development and thereby improve walkability of communities</p>	<p>Consistent. The proposed Specific Plan would implement mixed-use developments and pedestrian and bicycling facilities; thereby improving the walkability of communities.</p>
<p>Strategy D: Increase regional accessibility in order to reduce vehicle miles traveled</p>	<p>Consistent. The proposed Specific Plan does not increase regional accessibility to the Specific Plan area, but does reduce vehicle miles traveled by providing housing near job opportunities, and pedestrian and bicycling facilities to facilitate non-vehicular travel.</p>
<p>Strategy E: Improve jobs to housing ratio</p>	<p>Consistent. The proposed Specific Plan would provide housing in the jobs-rich area that would improve the jobs-to-housing balance, as detailed in Section 5.7, <i>Population and Housing</i>.</p>
<p>Strategy F: Promote land use patterns that encourage the use of alternatives to single-occupant automobile use.</p>	<p>Consistent. The proposed Specific Plan provides housing near job opportunities, and pedestrian and bicycling facilities to facilitate non-vehicular or non- single-occupant automobile travel.</p>
<p>Strategy G: Support retention and/or development of affordable housing</p>	<p>Consistent. The proposed Specific Plan would develop housing within mixed-use developments and provide for higher density housing within the downtown area, which would support affordable housing.</p>

City of Tustin General Plan

Table 5.5-3, *Consistency with City of Tustin General Plan Policies*, lists the policies from the City of Tustin General that are relevant to the proposed Specific Plan. The General Plan policies focus largely on orderly infill development, facilitation of mixed-uses, improvement of aesthetics, and prevention of land use consistency conflicts.

California law (Government Code §65450-§65453) allows cities to develop and administer Specific Plans as an implementation tool for their General Plan. As a requirement of state law, Specific Plans must demonstrate consistency in regulations, guidelines and programs with the goals, objectives, policies, standards, programs and uses that are established in the General Plan. The proposed Specific Plan would implement General Plan policies related to infill development, providing a supply of non-residential development area within the City, provision of housing for employees, and increasing use of alternative methods of circulation. The proposed Specific Plan provides for infill development that would make use of the existing circulation and utility infrastructure and provide mixed-use and higher density housing opportunities that provide affordability. Appendix A of the DCCSP addresses the consistency of the DCCSP with the relevant City’s General Plan and said analysis is incorporated by reference into this EIR. As shown, the proposed Specific Plan would be consistent with the City’s General Plan. Therefore, implementation of the Specific Plan would not result in conflict with the City’s General Plan, and impacts would not occur.

City of Tustin Zoning Code

Upon adoption of the proposed Specific Plan, the development regulations and design criteria within the Specific Plan would apply to the project area, and would establish the applicable zoning regulations and development standards. The Specific Plan would become the main land use implementation tool for the project area. In the event of any conflict between the requirements of the zoning code and the standards

contained within the adopted Specific Plan, the requirements of the Specific Plan shall govern, and when the provisions of a Specific Plan are silent on a specific matter, the regulations set forth in the City's Zoning Code shall apply. As such, the proposed Specific Plan would not result in conflicts with the City of Tustin zoning code, and impacts would be less than significant.

First Street Specific Plan

As described above, the First Street Specific Plan area is located within the Specific Plan area, and implementation of the project would include a rescission of this specific plan. The proposed Specific Plan would implement similar commercial retail, service, office, and mixed-use projects, as was intended by the First Street Specific Plan; and the proposed Specific Plan would not conflict with any provisions of the First Street Specific Plan that avoid or mitigate an environmental effect. Thus, impacts related to rescission of the First Street Specific Plan and implementation of the proposed Specific Plan would not occur.

Cultural Resources District Residential and Commercial Design Guidelines

The CRD Residential Design Guidelines and CRD Commercial Design Guidelines guide new developments near cultural resources or modifications to existing historic buildings. As further described in Sections 5.1, *Aesthetics* and 5.3, *Cultural Resources*, these guidelines would be implemented with all new development, as applicable, and to any historical building in the CRD located within the Specific Plan area. As such, the proposed Specific Plan would not result in conflicts with the CRD Design Guidelines, and impacts would be less than significant.

5.5.7 CUMULATIVE IMPACTS

No Impact. The geographic context for this cumulative analysis includes the City of Tustin in relation to the City's General Plan. Cumulative development would result in intensity increases to existing land use patterns through implementation of mixed-use, infill and redevelopment. Cumulative development would also be subject to site-specific environmental and planning reviews that would address consistency with adopted General Plan goals, objectives, and policies, as well as with the City's Zoning Code. As part of environmental review, projects would be required to provide mitigation for any inconsistencies with the General Plan and environmental policies that would result in adverse physical environmental effects. The cumulative projects as a whole, would result in a more intensely developed built environment than currently exists, and would be required to be consistent with local General Plan policies.

While cumulative projects could include General Plan amendments and/or zone changes, modifications to existing land uses that require such amendments do not necessarily represent an inherent negative effect on the environment, particularly if the proposed changes involve changes in types and intensity of uses, rather than eliminating application of policies that were specifically adopted for the purpose of avoiding or mitigating environmental effects. Determining whether any future project might include such amendments and determining the cumulative effects of any such amendments would be speculative since it cannot be known what applications that are not currently filed might request. Thus, it is expected that the land uses of cumulative projects would be consistent with policies that avoid an environmental effect; therefore, cumulatively considerable impacts from cumulative projects related to policy consistency would not occur.

5.5.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- City of Tustin General Plan Land Use Element
- City of Tustin City Code
- City of Tustin Cultural Resources District Commercial Design Guidelines
- City of Tustin Cultural Resources District Residential Design Guidelines

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.5.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

No Impact. Upon implementation of regulatory requirements, Impact LU-2 impacts would not occur.

5.5.10 MITIGATION MEASURES

No mitigation measures are required.

5.5.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No Impact. No adverse impacts related to land use and planning have been identified.

REFERENCES

Tustin, City of. 2012a, *Cultural Resources District Residential Design Guidelines*. City of Tustin, California.

Tustin, City of. 2012b, *First Street Specific Plan*. City of Tustin, California.

Tustin, City of. 2013, *City of Tustin General Plan*. City of Tustin, California.

Tustin, City of. 2014, *Cultural Resources District Commercial Design Guidelines*. City of Tustin, California.

Tustin City Code. Assessed at:

https://library.municode.com/ca/tustin/codes/code_of_ordinances?nodeId=11307

5.6 Noise

5.6.1 INTRODUCTION

This EIR section evaluates the noise impacts that would result from development occurring pursuant to the proposed Specific Plan. It discusses the existing noise environment within and around the planning area, as well as the regulatory framework for regulation of noise. It also analyzes the effect of the development that would be permitted by the Specific Plan on the existing ambient noise environment during construction, demolition, and operational activities, and evaluates the Specific Plan's noise effects for consistency with relevant local agency noise policies and regulations. The analysis in this section also addresses impacts in relation to groundborne vibration. The technical noise and vibration analyses was prepared by Urban Crossroads (Urban Crossroads 2017), which is provided as Appendix D.

Noise and Vibration Terminology

Various noise descriptors are utilized in this EIR analysis, and are summarized as follows:

dB: Decibel, the standard unit of measurement for sound pressure level.

dBA: A-weighted decibel, an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Leq: The equivalent sound level, which is used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The Leq of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The Leq may also be referred to as the average sound level.

Lmax: The instantaneous maximum noise level experienced during a given period of time.

Lmin: The instantaneous minimum noise level experienced during a given period of time.

Lx: The sound level that is equaled or exceeded "x" percent of a specified time period. The "x" thus represents the percentage of time a noise level is exceeded. For instance, L50 and L90 represents the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

Ldn: Also termed the "day-night" average noise level (DNL), Ldn is a measure of the average of A-weighted sound levels occurring during a 24-hour period, accounting for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted by adding 10 dBA to take into account the greater annoyance of nighttime noises.

CNEL: The Community Noise Equivalent Level, which, similar to the Ldn, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dBA to measured noise levels between the hours of 7:00 p.m. to 10:00 p.m. and after an addition of 10 dBA to noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The "ambient noise level" is the background noise level associated with a given environment at a specified time, and is usually a composite of sound from many sources from many directions.

Effects of Noise

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects refer to interruption of daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be by those hearing it. With regard to increases in A-weighted noise levels, the following relationships generally occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3-dBA change in noise levels is considered to be a barely perceivable difference.
- A change in noise levels of 5 dBA is considered to be a readily perceivable difference.
- A change in noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

Noise Attenuation

Stationary point sources of noise, including mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 dBA per doubling of distance from the source over hard surfaces to 7.5 dBA per doubling of distance from the source over hard surfaces, depending on the topography of the area and environmental conditions (e.g., atmospheric conditions, noise barriers [either vegetative or manufactured]). Thus, a noise measured at 90 dBA 50 feet from the source would attenuate to about 84 dBA at 100 feet, 78 dBA at 200 feet, 72 dBA at 400 feet, and so forth. Widely distributed noise, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate, approximately 4 to 6 dBA per doubling of distance from the source.

Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement.

Fundamentals of Vibration

Vibration is energy transmitted in waves through the ground or man-made structures. These energy waves generally dissipate with distance from the vibration source. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak

of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings, but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal, and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. VdB serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

5.6.2 REGULATORY SETTING

Caltrans

According to the Caltrans Transportation and Construction Vibration Guidance Manual, vibration from large bulldozers, and loaded trucks can produce vibration which can potentially cause annoyance at sensitive land uses, or damage to adjacent structures. Caltrans has developed a screening tool to determine if vibration is substantial enough to result in building damage or human annoyance, which are listed in Table 5.6-1, *Vibration Standards*.

Table 5.6-1: Vibration Standards

Caltrans Guidelines	Peak Particle Velocity for Continuous Sources (PPV) (in/sec)
Building Damage	
Extremely Fragile Historic Buildings	0.08
Fragile Buildings	0.10
Historic Buildings	0.25
Older Residential Structures	0.30
New Residential Structures	0.50
Modern Industrial/Commercial Buildings	0.50
Human Annoyance	
Barely Perceptible	0.01
Distinctly Perceptible	0.04
Strongly Perceptible	0.10
Severe	0.40

Source: Caltrans Transportation and Construction Vibration Guidance Manual, September 2013, Tables 19 & 20.

Title 24, California Building Code

State regulations related to noise include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are collectively known as the California Noise Insulation Standards and are found in California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor ceiling assemblies must block or absorb sound. For limiting noise from exterior sources, the noise insulation standards set forth an interior standard of DNL 45 dBA in any habitable room and, where such units are proposed in areas subject to noise levels greater than DNL 60 dBA require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard. If the interior noise level depends upon windows being closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment. Title 24 standards are enforced through the building permit application process in the City.

City of Tustin General Plan Noise Element

The City's Noise Element includes policies related to excessive noise levels. The policies related to the proposed Specific Plan are listed below:

- Policy 2.4:** Review proposed projects in terms of compatibility with nearby noise-sensitive land uses with the intent of reducing noise impacts.
- Policy 2.5:** Require new residential developments located in proximity to existing commercial/industrial operations to control residential interior noise levels as a condition of approval.
- Policy 2.6:** Requires that commercial uses developed as part of a mixed-use project (with residential) not be noise intensive. Design mixed-use structures to prevent transfer of noise from the commercial to residential use.
- Policy 2.7:** Require new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into project design.
- Policy 3.2:** Minimize the impacts of construction noise on adjacent land uses through limiting the permitted hours of activity.

The City's Noise Element identifies noise-sensitive land uses, noise sources, and areas of potential noise impacts. The General Plan noise criteria identified in Table 5.6-2, *Noise Level Exposure and Land Use Compatibility Guidelines*, are guidelines to evaluate the land use compatibility related to noise. As shown, residential uses are normally incompatible in areas where the CNEL is above 65 dBA. In addition, the City has established exterior noise level standards (Table N-3 of General Plan Noise Element), which are listed in Table 5.6-3, *Exterior Noise Standards*.

City of Tustin City Code

Article 4, Chapter 6 Noise Control, Sections 4613 and 4614

The Tustin City Code (TCC) provides noise level standards that apply for a cumulative period of 30 minutes in any hour. As shown, the exterior noise levels for residential areas is 55 dBA L_{50} during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA L_{50} during the nighttime hours (10:00 p.m. to 7:00 a.m.); and the exterior noise level limit in mixed-use areas is 60 dBA L_{50} .

Table 5.6-2: Noise Level Exposure and Land Use Compatibility Guidelines

LAND USE CATEGORIES		COMMUNITY NOISE EQUIVALENT LEVEL CNEL						
CATEGORIES	USES	<55	60	65	70	75	80>	
RESIDENTIAL	Single Family, Duplex, Multiple Family	A	A	B	C	C	D	D
RESIDENTIAL	Mobile Home	A	A	B	C	C	D	D
COMMERCIAL Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
COMMERCIAL Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	A	A	A	A	B	B	C
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Office Building, Research and Develop- ment, Professional Offices, City Office Building	A	A	A	B	B	C	D
COMMERCIAL Recreation INSTITUTIONAL Civic Center	Amphitheater, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
COMMERCIAL Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
COMMERCIAL General, Special INDUSTRIAL, INSTITUTIONAL	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
INSTITUTIONAL General	Hospital, Church, Library, Schools' Classroom	A	A	B	C	C	D	D
OPEN SPACE	Parks	A	A	A	B	C	D	D
OPEN SPACE	Golf Course, Cemeteries, Nature Centers Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
AGRICULTURE	Agriculture	A	A	A	A	A	A	A

INTERPRETATION	
ZONE A CLEARLY COMPATIBLE	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
ZONE B NORMALLY COMPATIBLE	New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.
ZONE C NORMALLY INCOMPATIBLE	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design
ZONE D CLEARLY INCOMPATIBLE	New construction or development should generally not be undertaken.

Table 5.6-3: Exterior Noise Standards

Land Use	Noise Standards ¹	
	Interior ^{2,3}	Exterior
Residential - Single family, multifamily, duplex, mobile home	CNEL 45 dB	CNEL 65 dB ⁴
Residential - Transient lodging, hotels, motels, nursing homes, hospitals	CNEL 45 dB	CNEL 65 dB ⁴
Private offices, church sanctuaries, libraries, board rooms, conference rooms, theaters, auditoriums, concert halls, meeting halls, etc.	Leq(12) 45 dB(A)	-
Schools	Leq(12) 45 dB(A)	Leq(12) 67 dB(A) ⁵
General offices, reception, clerical, etc.	Leq(12) 50 dB(A)	-
Bank lobby, retail store, restaurant, typing pool, etc.	Leq(12) 55 dB(A)	-
Manufacturing, kitchen, warehousing, etc.	Leq(12) 65 dB(A)	-
Parks, playgrounds	-	CNEL 65 dB ⁵
Golf courses, outdoor spectator sports, amusement parks	-	CNEL 70 dB ⁵

NOTES

1. CNEL: Community Noise Equivalent Level.
Leq(12): The A-weighted equivalent sound level averaged over a 12-hour period (usually the hours of operation).
2. Noise standard with windows closed. Mechanical ventilation shall be provided per UBC requirements to provide a habitable environment.
3. Indoor environment excluding bathrooms, toilets, closets and corridors.
4. Outdoor environment limited to rear yard of single family homes, multifamily patios and balconies (with a depth of 6' or more) and common recreation areas.
5. Outdoor environment limited to playground areas, picnic areas, and other areas of frequent human use.

In addition, the TCC has standards that apply to louder noises over shorter periods of time. Table 5.6-4, *Tustin City Code Operational Noise Standards*, shows that noise 5 dBA or above the standard is not allowable for a cumulative period of more than 15 minutes in any hour; noise of 10 dBA above the standard is not allowable for a cumulative period of more than 5 minutes in any hour; noise of 15 dBA above the standard is not allowable for a cumulative period of more than 1 minute in any hour; and noise 20 dBA above the standard is not allowable for any period of time. TCC Article 4, Chapter 6, Section 4614(c) includes adjustments to the base exterior noise level limits for cases where ambient noise levels exceed the noise limits. Table 5.6-4 lists the allowable operational noise levels.

Table 5.6-4: Tustin City Code Operational Noise Standards

Noise Zone ¹	Land Use	Time Period	Exterior Noise Levels (dBA) ³				
			L ₅₀ (30 mins)	L ₂₅ (15 mins)	L ₈ (5 mins)	L ₂ (1 min)	L _{max} (Anytime)
1	Residential	Daytime	55	60	65	70	75
		Nighttime	50	55	60	65	70
2	Commercial	Any Time	60	65	70	75	80
3	Industrial	Any Time	70	75	80	85	90
4	Special ²	Any Time	55	60	65	70	75
5	Mixed-Use	Any Time	60	65	70	75	80

¹ Source: Sections 4613 & 4614 of the City of Tustin City Code

² Special land uses per the City of Tustin City Code, Section 4613: Hospitals, convalescent homes, public and institutional schools, libraries, and churches.

³ The percent noise level is the level exceeded "n" percent of the time during the measurement period. L₂₅ is the noise level exceeded 25% of the time.

Article 4, Chapter 6 Noise Control, Section 4617

The TCC indicates that construction activity is exempted from noise limit standards, as long as construction activity is limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays; with no activity allowed on Sundays and Federal holidays. Construction activities may be permitted outside of those day and time limitations in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted.

5.6.3 ENVIRONMENTAL SETTING

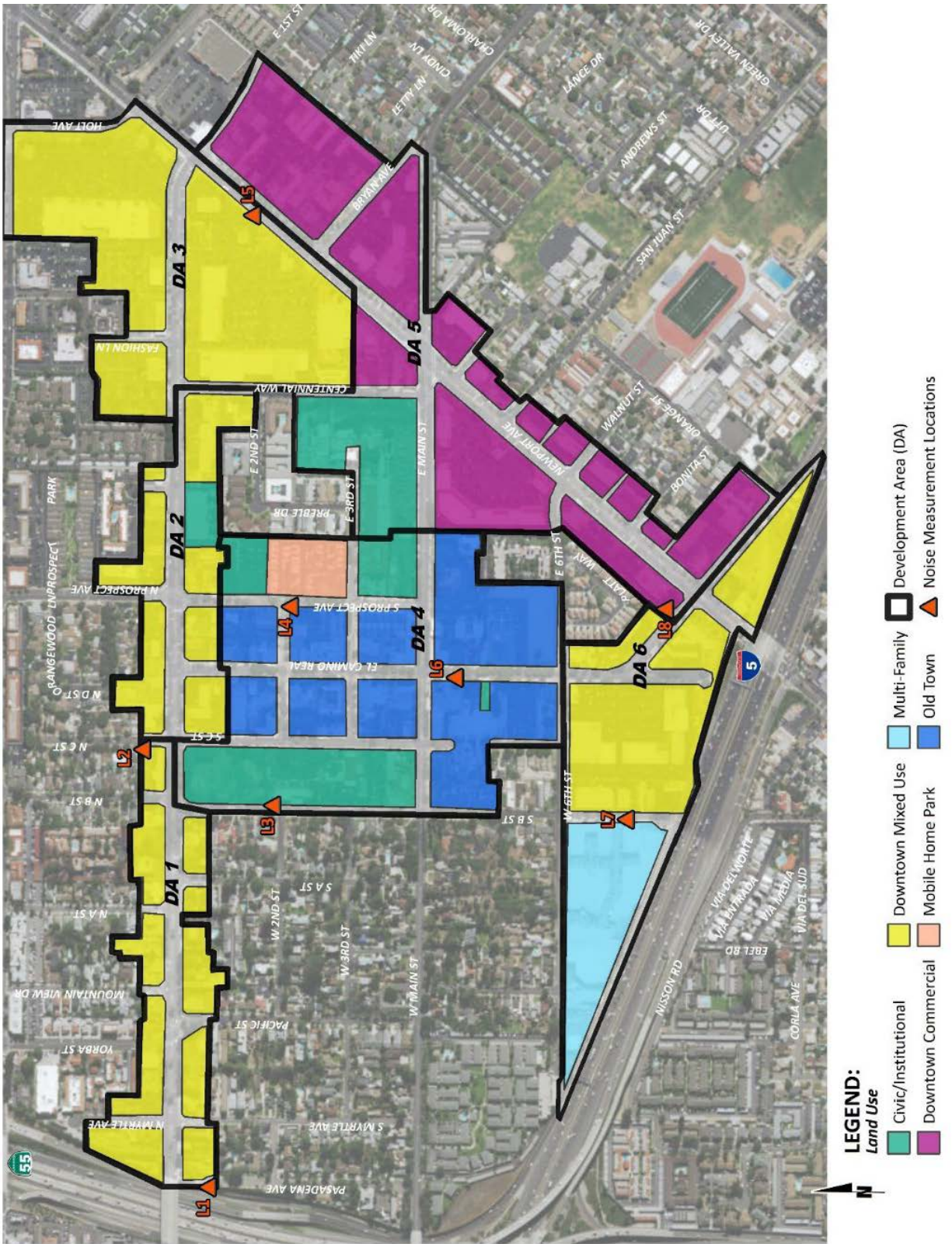
The ambient noise in the Specific Plan area is dominated by traffic noise from the I-5 and SR-55 freeways, and aircraft overflights generally to John Wayne Airport. To assess the existing noise level environment, eight 24-hour noise level measurements were taken on Thursday, April 13th and Friday, April 14th, 2017 at sensitive receiver locations in the Specific Plan area. The receiver locations were selected to describe and document the existing noise environment. The eight noise measurement locations are described below, shown in Figure 5.6-1, *Noise Measurement Locations*, and listed in Table 5.6-5, *24-Hour Ambient Noise Level Measurements*. In addition, the existing land use compatibility with the existing level of ambient noise is summarized in Table 5.6-6, *Existing Noise Ambient Noise Level and General Plan Land Use Compatibility*.

- Location L1 represents the noise levels within DA-1, and is located on Pasadena Avenue near existing residences and State Route (SR) 55. As shown on Table 5.6-5, the 24-hour exterior noise level was 73.2 dBA CNEL, which based on the General Plan Noise Element guidelines is normally incompatible with residential uses. The hourly noise levels measured at location L1 ranged from

67.7 to 69.7 dBA Leq during the daytime hours and from 59.3 to 69.7 dBA Leq during the nighttime hours.

- Location L2 represents the noise levels at the northern boundary of DA-1 near existing residences on C Street. As shown on Table 5.6-5, the 24-hour exterior noise level was 61.4 dBA CNEL, which based on the General Plan Noise Element guidelines, is normally compatible with residential uses. The hourly noise levels measured at location L2 ranged from 57.3 to 61.5 dBA Leq during the daytime hours and from 43.8 to 55.9 dBA Leq during the nighttime hours.
- Location L3 represents the noise levels on B Street adjacent to existing residences, Peppertree Park, and the Tustin Area Senior Center. As shown on Table 5.6-5, the 24-hour exterior noise level was 65.3 dBA CNEL, which based on the General Plan Noise Element guidelines, is normally compatible with park uses and normally incompatible with senior center and residential uses. At location L3 the ambient noise levels ranged from 49.7 to 64.0 dBA Leq during the daytime hours to levels of 47.2 to 63.3 dBA Leq during the nighttime hours.
- Location L4 represents the noise levels within DA-4 on Prospect Avenue near existing mobile homes and commercial/office uses. As shown on Table 5.6-5, the 24-hour exterior noise level was 63.7 dBA CNEL, which based on the General Plan Noise Element guidelines, is clearly compatible with office uses and normally compatible with mobile home park uses. The hourly noise levels measured at location L4 ranged from 58.4 to 68.1 dBA Leq during the daytime hours and from 45.7 to 57.5 dBA Leq during the nighttime hours.
- Location L5 represents the noise levels on Newport Avenue within DA-3 and across from DA-5 and near existing commercial uses. As shown on Table 5.6-5, the 24-hour exterior noise level was 74.8 dBA CNEL, which based on the General Plan Noise Element guidelines, is normally compatible with commercial uses and normally incompatible with residential uses. The hourly noise levels measured at location L5 ranged from 68.5 to 74.8 dBA Leq during the daytime hours and from 59.1 to 73.1 dBA Leq during the nighttime hours.
- Location L6 represents the noise levels on El Camino Real within DA-4 near existing commercial uses south of Main Street. As shown on Table 5.6-5, the 24-hour exterior noise level was 66.9 dBA CNEL, which based on the General Plan Noise Element guidelines, is normally incompatible with residential uses and clearly compatible with commercial uses. At location L6 the ambient noise levels ranged from 61.4 to 65.2 dBA Leq during the daytime hours to levels of 51.6 to 65.0 dBA Leq during the nighttime hours.
- Location L7 represents the noise levels within DA-6 adjacent to existing industrial uses and commercial/office uses. As shown on Table 5.6-5, the 24-hour exterior noise level was 67.4 dBA CNEL, which based on the General Plan Noise Element guidelines, is normally incompatible with residential uses and, clearly compatible with commercial uses. The hourly noise levels measured at location L7 ranged from 62.4 to 65.5 dBA Leq during the daytime hours and from 56.1 to 62.1 dBA Leq during the nighttime hours.
- Location L8 represents the noise levels in DA-5 north of the intersection of Newport Avenue and El Camino Real, and adjacent to DA-6 near the I-5 Freeway and existing commercial uses. As shown on Table 5.6-5, the 24-hour exterior noise level was 66.9 dBA CNEL, which based on the General Plan Noise Element guidelines, is normally incompatible with residential uses and clearly compatible with commercial uses. At location L8 the ambient noise levels ranged from 59.6 to 64.2 dBA Leq during the daytime hours to levels of 55.2 to 63.4 dBA Leq during the nighttime hours.

Figure 5.6-1: Noise Measurement Locations



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Table 5.6-5: 24-Hour Ambient Noise Level Measurements

Location	DA	Land Use	Description	Energy Average Hourly Noise Level (dBA Leq)		CNEL
				Daytime	Nighttime	
L1	1	Downtown Mixed-Use	Located within DA-1 on Pasadena Avenue near existing residences and State Route 55.	68.7	65.7	73.2
L2	1, 2	Downtown Mixed-Use	Located at the northern boundary of DA-1 and existing residences on C Street.	59.8	51.6	61.4
L3	4	Civic/ Institutional	Located on B Street adjacent to existing residences, Peppertree Park, and the Tustin Area Senior Center.	61.3	58.0	65.3
L4	4	Old Town, Mobile Home Park	Located within DA-4 on Prospect Avenue near existing mobile homes and commercial/office uses.	63.2	53.0	63.7
L5	3, 5	Downtown Mixed-Use	Located on Newport Avenue within DA-3 and adjacent to DA-5 and existing commercial uses.	71.6	66.8	74.8
L6	4	Old Town	Located on El Camino Real within DA-4 near existing commercial uses south of Main Street.	63.3	59.1	66.9
L7	6	Multi-Family, Downtown Mixed-Use	Located within DA-6 adjacent to existing mixed-uses and commercial/office uses.	63.9	59.4	67.4
L8	5, 6	Downtown Mixed-Use, Commercial	Located within DA-5 and adjacent to DA-6 on El Camino Real near existing commercial uses.	61.9	59.6	66.9

Source: Urban Crossroads, 2017, Appendix D.

Table 5.6-6: Existing Noise Ambient Noise Level and General Plan Land Use Compatibility

Location	DA	Land Use	CNEL	General Plan Land Use Compatibility
L1	1	Downtown Mixed-Use	73.2	Normally Incompatible
L2	1, 2	Downtown Mixed-Use	61.4	Normally Compatible
L3	4	Civic/Institutional	65.3	Normally Compatible (Park); Incompatible (Senior Center, Residential)
L4	4	Old Town, Mobile Home Park	63.7	Clearly Compatible (Office); Normally Compatible (Mobile Home)
L5	3, 5	Downtown Mixed-Use [DA-3] Downtown Commercial [DA-5]	74.8	Normally Compatible (Commercial) [DA-3 & DA-5] Normally Incompatible (Residential) [DA-3]
L6	4	Old Town	66.9	Clearly Compatible (Commercial) Normally Incompatible (Residential)
L7	6	Multi-Family, Downtown Mixed-Use	67.4	Normally Incompatible
L8	5, 6	Downtown Mixed-Use [DA-6] Downtown Commercial [DA-5]	66.9	Clearly Compatible (Commercial) Normally Incompatible (Residential) [DA-6]

Source: Urban Crossroads, 2017, Appendix D.

In addition, the existing roadway noise from the 32 roadway segments that are closest to the Specific Plan area and included in the traffic analysis are listed in Table 5.6-7, *Existing Roadway Noise Contours*, which were estimated based on the existing traffic volumes, and distance from the center of the roadways.

Table 5.6-7: Existing Roadway Noise Contours

ID	Road	Segment	Adjacent Land Use	dBA CNEL			
				@ Adj. Land Use	70	65	60
					CL to Contour Distance (Feet)		
1	B St.	s/o First St.	Residential	59.3	RW	RW	RW
2	B St.	s/o Main St.	Residential	59.3	RW	RW	RW
3	C St.	s/o First St.	Civic/Institutional	59.4	RW	RW	RW
4	C St.	s/o 2nd St.	Civic/Institutional	59.4	RW	RW	RW
5	C St.	s/o 3rd St.	Civic/Institutional	59.4	RW	RW	RW
6	El Camino Real	s/o First St.	Commercial	61.2	RW	RW	48
7	El Camino Real	s/o 2nd St.	Commercial	61.2	RW	RW	48
8	El Camino Real	s/o 3rd St.	Commercial	61.2	RW	RW	48
9	El Camino Real	s/o Main St.	Commercial	64.1	RW	RW	75
10	El Camino Real	n/o Newport Av.	Commercial	64.1	RW	RW	75
11	Prospect Av.	s/o First St.	Commercial	60.9	RW	RW	46
12	Prospect Av.	s/o 2nd St.	Mobile Home Park	60.9	RW	RW	46
13	Prospect Av.	s/o 3rd St.	Mobile Home Park	60.9	RW	RW	46
14	Newport Av.	s/o Irvine Bl.	Commercial	70.9	69	149	322
15	Newport Av.	s/o First St.	Commercial	70.9	69	149	322
16	Newport Av.	s/o Main St.	Commercial	70.9	69	149	322
17	Newport Av.	s/o El Camino Real	Commercial	69.8	RW	126	272
18	Irvine Bl.	w/o Yorba St.	Commercial	73.0	79	170	367
19	Irvine Bl.	e/o Yorba St.	Commercial	71.8	66	142	306
20	Irvine Bl.	e/o Prospect Av.	Civic/Institutional & Commercial/Office	72.0	68	146	315
21	First St.	w/o Yorba St.	Commercial	70.8	37	80	173
22	First St.	e/o Yorba St.	Commercial	70.1	33	72	155
23	First St.	w/o Prospect Av.	Commercial	70.1	33	72	155
24	First St.	e/o Prospect Av.	Commercial	69.2	RW	63	135
25	2nd St.	w/o El Camino Real	Commercial	54.0	RW	RW	RW
26	2nd St.	e/o El Camino Real	Commercial	54.0	RW	RW	RW
27	3rd St.	w/o El Camino Real	Commercial	54.5	RW	RW	RW
28	3rd St.	e/o El Camino Real	Residential & Commercial/Office & Vacant	54.5	RW	RW	RW
29	Main St.	w/o B St.	Residential	66.8	RW	43	94
30	Main St.	e/o B St.	Civil/Institutional & Commercial/Office	66.8	RW	43	94
31	Main St.	e/o El Camino Real	Commercial	66.6	RW	42	91
32	6th St.	e/o B St.	Residential & Industrial (demolished)/Permitted Residential	57.8	RW	RW	RW

Source: Urban Crossroads, 2017, Appendix D.

"RW" = Location of the respective noise contour falls within the right-of-way of the road.

Existing Airport Related Noise

The Specific Plan area is located approximately 4.5 miles northeast of the John Wayne Airport. The John Wayne Airport Environs Land Use Plan (AELUP) identifies that residential land uses are considered normally consistent with exterior noise levels approaching 60 dBA CNEL due to aircraft noise. The Specific Plan area is located outside of the 60 dBA CNEL noise contour boundaries of John Wayne airport.

Existing Vibration

Aside from periodic construction work that may occur in the vicinity of the Specific Plan area, other sources of groundborne vibration include heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on area roadways. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 in/sec PPV), and could reach 72 VdB (approximately 0.016 in/sec PPV) when trucks pass over bumps in the road (FTA, 2006).

Sensitive Receptors

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: schools, hospitals, residences, churches, libraries, and recreation areas.

The Specific Plan area is a developed urban environment that includes existing residences. Because the proposed Specific Plan provides for infill development within the existing developed area, the closest existing noise sensitive land use is likely to be, at times, immediately adjacent to a new site-specific development project.

5.6.4 THRESHOLDS OF SIGNIFICANCE

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

- N-1 Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other affected agencies;
- N-2 Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- N-3 Result in a substantial permanent increase in ambient noise levels in the project vicinity or above levels existing without the project;
- N-4 Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- N-5 For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or
- N-6 For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

The Initial Study, included as Appendix A, established that the project would result in no impact related to Thresholds N-5 and N-6; no further assessment of these topics is included in this EIR.

Based on the City's requirements described previously, noise impacts are considered significant if any of the following occur from implementation of the proposed Specific Plan.

Construction Noise and Vibration

- If project-related construction activities:
 - Occur at any time other than the permitted hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays; with no activity allowed on Sundays and Federal holidays (TCC, Article 4, Chapter 6, Section 4617);

- Create noise levels which exceed the 85 dBA Leq acceptable noise level threshold at the nearby sensitive receiver locations (NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure); or
- Generate temporary Project construction-related noise level increases which exceed the 12 dBA Leq substantial noise level increase threshold at noise-sensitive receiver locations (Caltrans, Traffic Noise Analysis Protocol).
- If short-term project generated construction source vibration levels exceed the vibration standard for building damage per structure types, and human annoyance of distinctly perceptible 0.04 PPV inch/sec at noise-sensitive receiver locations (Caltrans Transportation and Construction Vibration Guidance Manual).

Off-Site Traffic Noise

- When the noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.):
 - Are less than 60 dBA CNEL and the project creates a *readily perceptible* 5 dBA CNEL or greater project-related noise level increase; or
 - Range from 60 to 65 dBA CNEL and the project creates a *barely perceptible* 3 dBA CNEL or greater project-related noise level increase; or
 - Already exceeds 65 dBA CNEL, and the project creates a community noise level impact of greater than 1.5 dBA CNEL (FICON, 1992).

Operational Noise

- If exterior noise levels exceed 65 dBA CNEL at the outdoor environments of future residential uses within the Specific Plan area. Interior noise of residential units shall not exceed 45 dBA CNEL (General Plan Noise Element, Table N-3).
- If project-related operational (stationary-source) noise levels exceed:
 - 55 dBA L₅₀ during daytime hours (7:00 a.m. to 10:00 p.m.) or 50 dBA L₅₀ during the nighttime hours (10:00 p.m. to 7:00 a.m.) at residential uses (Noise Zone 1); or
 - 60 dBA L₅₀ for commercial uses (Noise Zone 2); or
 - 70 dBA L₅₀ for industrial uses (Noise Zone 3); or
 - 55 dBA L₅₀ for special uses (Noise Zone 4); or
 - 60 dBA L₅₀ for mixed-use (Noise Zone 5); and
 - The exterior noise level standards for each Noise Zone identified above shall apply for a cumulative period of 30 minutes in any hour, as well as plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour, or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour, or the standard plus 15 dBA for a cumulative period of more than 1 minute in any hour, or the standard plus 20 dBA for any period of time (TCC, Article 4, Chapter 6 Noise Control, Section 4614).

Table 5.6-8: Significance Criteria Summary

Analysis	Receiving Land Use	Condition	Significance Criteria	
			Daytime	Nighttime
Off-Site	Noise-Sensitive ¹	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL project increase	
		If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL project increase	
		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL project increase	
On-Site ²	Residential	Exterior Noise Level Standard	65 dBA CNEL	

Analysis	Receiving Land Use	Condition	Significance Criteria	
			Daytime	Nighttime
Operational	All ³	Interior Noise Level Standard	45 dBA CNEL	
		≥ 30 Minutes L ₅₀	See Table 5.6-4, Tustin City Code Operational Noise Standards	
		≥ 15 Minutes L ₂₅		
		≥ 5 Minutes L ₈		
		≥ 1 Minute L ₂		
Anytime L _{max}				
Construction	Noise-Sensitive	Permitted hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, 9:00 a.m. to 5:00 p.m. Saturdays; with no activity on Sundays and Federal holidays. ⁴		
		Noise Level Threshold ⁵	85 dBA Leq	n/a
		Noise Level Increase ⁶	12 dBA Leq	n/a
		Vibration Level Threshold ⁷	building damage per structure type; human annoyance: 0.04 PPV inch/sec	n/a

¹ Source: FICON, 1992.

² Source: City of Tustin General Plan Noise Element, Table N-3.

³ Source: TCC, Article 4, Chapter 6, Sections 4613 & 4614

⁴ Source: TCC, Article 4, Chapter 6, Section 4617. Construction activities may be permitted outside of those limitations identified in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted.

⁵ Source: NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure, June 1998.

⁶ Source: Caltrans Traffic Noise Analysis Protocol, May 2011.

⁷ Source: Caltrans Transportation and Construction Vibration Guidance Manual, September 2013, Tables 19 & 20.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "n/a" = No nighttime construction activity is permitted, so no nighttime construction noise level limits are identified.

5.6.5 METHODOLOGY

Construction Noise

To identify the temporary construction noise contribution to the existing ambient noise environment, the construction noise levels anticipated from usage of construction equipment needed to implement the proposed Specific Plan were combined with the existing ambient noise level measurements at the sensitive receiver locations. The difference between the Specific Plan construction and ambient noise levels are used to describe the construction noise level contributions necessary to assess the level of significance associated with temporary construction noise level impacts. A temporary noise level increase of 12 dBA Leq is considered a potentially significant impact based on the Caltrans substantial noise level increase criteria.

Operational Noise

The primary source of noise associated with the operation of the proposed Specific Plan would be from vehicular trips. The expected roadway noise level increases from vehicular traffic were calculated using the Federal Highway Administration (FHWA) traffic noise prediction model and the average daily traffic volumes from the Traffic Impact Analysis prepared for the proposed Specific Plan.

As detailed in Section 5.8, *Transportation and Circulation*, the Specific Plan is anticipated to generate approximately 8,496 daily trips, 660 a.m. peak hour trips and 719 p.m. peak hour trips. The increase in noise levels generated by the vehicular trips have been quantitatively estimated and compared to the applicable noise standards and thresholds of significance listed previously.

Secondary sources of noise would include new stationary sources (such as heating, ventilation, and air conditioning units) associated with the new site-specific development that would occur by the Specific Plan. The increase in noise levels generated by these activities have been quantitatively estimated and compared to the applicable noise standards listed previously.

Vibration

Aside from noise levels, groundborne vibration would also be generated during construction of site specific development of the Specific Plan by various construction-related activities and equipment; and could be generated by truck traffic traveling to and from the Specific Plan area. The potential ground-borne vibration levels resulting from construction activities occurring from the proposed Specific Plan were estimated by data published by the Federal Transit Administration (FTA). Thus, the groundborne vibration levels generated by these sources have also been quantitatively estimated and compared to the applicable thresholds of significance listed previously.

5.6.6 ENVIRONMENTAL IMPACTS

IMPACT N-1: EXPOSURE OF PERSONS TO, OR GENERATION OF, NOISE LEVELS IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES. [THRESHOLD N-1]

Construction

Less than Significant. Noise generated by construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Construction is expected to occur in the following stages: demolition, grading, building construction, architectural coating, paving.

Noise levels generated by heavy construction equipment can range from approximately 68 dBA to in excess of 80 dBA when measured at 50 feet, as shown on Table 5.6-9, *Construction Reference Noise Levels*. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver, and would be further reduced to 68 dBA at 200 feet from the source to the receiver.

Table 5.6-9: Construction Reference Noise Levels

ID	Noise Source	Reference Distance From Source (Feet)	Reference Noise Levels @ Reference Distance (dBA Leq)	Reference Noise Levels @ 50 Feet (dBA Leq)
1	Truck Pass-Bys & Dozer Activity	30'	63.6	59.2
2	Dozer Activity	30'	68.6	64.2
3	Construction Vehicle Maintenance Activities	30'	71.9	67.5
4	Foundation Trenching	30'	72.6	68.2
5	Rough Grading Activities	30'	77.9	73.5
6	Residential Framing	30'	66.7	62.3
7	Water Truck Pass-By & Backup Alarm	30'	76.3	71.9
8	Dozer Pass-By	30'	84.0	79.6
9	Two Scrapers & Water Truck Pass-By	30'	83.4	79.0
10	Two Scrapers Pass-By	30'	83.7	79.3
11	Scraper, Water Truck, & Dozer Activity	30'	79.7	75.3
12	Concrete Mixer Truck Movements	50'	71.2	71.2
13	Concrete Paver Activities	30'	70.0	65.6
14	Concrete Mixer Pour & Paving Activities	30'	70.3	65.9
15	Concrete Mixer Backup Alarms & Air Brakes	50'	71.6	71.6
16	Concrete Mixer Pour Activities	50'	67.7	67.7
17	Forklift, Jackhammer, & Metal Truck Bed Loading	50'	67.9	67.9

Source: Urban Crossroads, 2017, Appendix D.

Noise levels are calculated at 50 feet using a drop off rate of 6 dBA per doubling of distance (point source).

Construction of development projects pursuant to the proposed Specific Plan is anticipated to generate temporary and intermittent high noise levels at sensitive receivers. As described previously, the Criteria for Recommended Standard: Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health identifies a construction noise level threshold of 85 dBA Leq. Based on the estimated construction noise levels in Table 5.6-9 above, construction could exceed 85 dBA at a distance of 27 feet or less from peak construction activity.

However, per Article 4, Chapter 6, Section 4617 of the TCC, noise sources associated with construction are exempted from the City's established noise standards as long as they take place between the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays. Construction activities may be permitted outside of those limitations identified in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted. All new development projects in the Specific Plan area would be subject to these regulations, and the construction activities would be consistent with the TCC. Thus, the proposed Specific Plan would be in compliance with the City's construction related noise standards, and impacts would be less than significant.

Operation

Less than Significant. The Specific Plan area and surroundings are largely built out, and future development under the proposed Specific Plan would consist mostly of infill, mixed-use, and redevelopment projects. This growth that would be accommodated by the proposed Specific Plan would result in generation of various operational noise sources, such as, traffic, parking, noise from residential and commercial uses, as well as air conditioning units and other machinery. It is expected that the primary source of noise increases would be traffic-related noise from I-5, SR-55, B Street, C Street, El Camino Real, Prospect Avenue, Newport Avenue, Irvine Boulevard, First Street, 2nd Street, 3rd Street, Main Street, and 6th Street.

New Residential Units

Due to the existing ambient noise in the Specific Plan area (listed on Tables 5.6-5 and 5.6-6) and increases in traffic that would result from operation of the new uses within the Specific Plan area, residential units proposed in DAs 1, 2, 3, 4, and 6 could be exposed to exterior noise levels greater than 65 dBA CNEL, which is considered normally incompatible by the City of Tustin General Plan Noise Element. The City requires proposed developments to prepare and submit an acoustical report to demonstrate compliance with the General Plan and to identify all reasonable and feasible measures to satisfy the 65 dBA CNEL exterior noise level standard and 45 dBA CNEL interior noise level standard.

Typical building construction provides a noise reduction of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, because exterior noise levels exceed 70 dBA CNEL in areas of the Specific Plan where residential units are proposed, an interior noise analysis based on site-specific architectural floor plans and elevations would be required pursuant to PPP NOI-1, to satisfy the City of Tustin General Plan Noise Element, Table N-3, 45 dBA CNEL interior noise level standard for residential units. With implementation of existing regulations, as implemented through PPP NOI-1, impacts related to development of residential units within DAs 1, 2, 3, 4, and 6 would be less than significant. No residential units are allowed in DA-5, per the Specific Plan, and no impacts would occur.

New Commercial Uses

Development in the Specific Plan area would also generate noise from the operation of commercial uses that are included in mixed-use developments or stand-alone commercial uses. The anticipated noise

related to the commercial uses include: HVAC units and parking lot noise, which are consistent with the existing noise sources in the Specific Plan area. However, the noise levels would vary depending on the specific type of commercial use (e.g., retail or office uses), and could result in impacts to residential units within mixed-use developments. Therefore, existing regulations outlined in PPP NOI-1 are included in the mitigation monitoring program to ensure that applicants/developers prepare acoustical studies and satisfy the 65 dBA CNEL exterior noise level standard and 45 dBA CNEL interior noise level standard. PPP NOI-1 would ensure that noise standards are met and impacts to sensitive receptors, such as residential units would not occur.

IMPACT N-2: EXPOSE PERSONS TO OR GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS [THRESHOLD N-2].

Construction

Less than Significant with Mitigation Incorporated. Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Ground vibration levels associated with various types of construction equipment is provided in Table 5.6-10, *Construction Equipment Vibration Levels*.

Table 5.6-10: Construction Equipment Vibration Levels

Distance to Construction Activity (Feet)	Receiver PPV Levels (in/sec)				
	Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration
25	0.003	0.035	0.076	0.089	0.089
50	0.001	0.012	0.027	0.031	0.031
100	0.000	0.004	0.010	0.011	0.011
125	0.000	0.003	0.007	0.008	0.008

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

Based on the reference vibration levels provided by the FTA, listed in Table 5.6-10 above, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec PPV at 25 feet. At distances ranging from 25 to 125 feet from construction, vibration levels are anticipated to range from 0.008 to 0.089 in/sec PPV, as shown on Table 5.6-11, *Construction Equipment Vibration Impacts*. These vibration levels would not be sustained during the entire construction period but will occur only during the times that heavy construction equipment is operating in the vicinity of the sensitive receptor. Further, construction would typically be restricted to daytime construction hours allowed under the TCC, unless otherwise permitted by the City in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community, thereby reducing potential vibration impacts during the sensitive nighttime hours.

Table 5.6-11: Construction Equipment Vibration Impacts

Distance to Const. Activity (Feet)	Peak Vibration Levels (in/sec)	Threshold Exceeded (PPV)? ²			
		Building Damage by Type			Annoyance
		Extremely Fragile Historic (0.08 in/sec)	Fragile (0.1 in/sec)	Older Residential (0.3 in/sec)	Distinctly Perceptible (0.04 in/sec)
25'	0.089	Yes	No	No	Yes
50'	0.031	No	No	No	No
100'	0.011	No	No	No	No
125'	0.008	No	No	No	No

Source: Urban Crossroads, 2017, Appendix D.

Table 5.6-11, *Construction Equipment Vibration Levels*, shows that the building damage thresholds would only be exceeded at 25-feet from “extremely fragile historic buildings, ruins, ancient monuments” (i.e., hard structures made of stone or brick) from large bulldozers. At all other distances, the construction-related vibration levels are shown to satisfy the Caltrans building damage thresholds for fragile buildings, and older residential buildings. There are no historic buildings known to be extremely fragile in the City of Tustin, and as a result, the operation of vibration-generating equipment would not result in structural damage to the extremely historic buildings. Therefore, the potential vibration impacts to historic structures would be less than significant.

Regarding human annoyance, the construction activities would only exceed the distinctly perceptible vibration standard of 0.04 in/sec PPV at receiver locations within 25 feet of large bulldozers or jackhammers, if used during construction. Therefore, Mitigation Measure NOI-1 would be implemented to generally prohibit the use of construction equipment that generates high levels of vibration (i.e., large bulldozers, loaded trucks, caisson drills, and jackhammers) within 25 feet of sensitive land uses, and would ensure that the construction-related vibration impacts associated with human annoyance at nearby receptors would be reduced to a less than significant level. If construction within 25 feet of sensitive land uses requires the use of equipment with high levels of vibration, Mitigation Measure NOI-1 would require a site-specific analysis to ensure that vibration does not exceed Caltrans thresholds. With implementation of Mitigation Measure NOI-1, impacts related to groundborne vibration would be less than significant.

Operation

Less than Significant. Operation of new commercial and office uses within the Specific Plan area could include heavy trucks transportation of goods. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Typical vibration levels for the heavy truck activity at normal traffic speeds would be approximately 0.006 in/sec PPV, based on the FTA Transit Noise Impact and Vibration Assessment. Truck deliveries transiting on site would be travelling at very low speed, so it is expected that delivery truck vibration at nearby sensitive receptors would be less than the vibration threshold of 0.08 in/sec PPV for fragile historic buildings and 0.04 in/sec PPV for human annoyance, and therefore, would be less than significant.

IMPACT N-3: RESULT IN A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE PROJECT VICINITY OR ABOVE LEVELS EXISTING WITHOUT THE PROJECT [THRESHOLD N-3].

Less than Significant. The increase in traffic resulting from development within the Specific Plan area would increase the ambient noise levels at land uses fronting roadways. The Traffic Impact Analysis prepared for the plan estimates that the build out anticipated by the proposed Specific Plan would result

in a net increase of approximately 8,496 daily trips (Stantec, 2017). To evaluate the noise generated by these trips, the future traffic noise levels on the roadways were estimated based on future traffic volumes provided in the project's traffic study and calculated using the FHWA's Highway Traffic Noise Prediction Model (FHWA-RD-77-108). Noise contours were then used to assess the increase in noise at land uses adjacent to the roadways that would convey project traffic.

As shown on Table 5.6-12, *Existing Plus Project Traffic Noise Level Increases*, with the addition of traffic from the anticipated buildout within the Specific Plan area, ambient noise is estimated to range from 52.0 to 73.3 dBA CNEL, and a noise level increase of up to 0.4 dBA CNEL would occur. Based on the significance criteria listed in Table 5.6-8, *Significance Criteria Summary*, the increase in ambient noise would be less than significant in the existing plus project traffic conditions.

Table 5.6.12: Existing Plus Project Traffic Noise Level Increases

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA) ¹			Threshold Exceeded?
				No Project	With Project	Project Addition	
1	B St.	s/o First St.	Residential	59.3	58.0	-1.3	No
2	B St.	s/o Main St.	Residential	59.3	58.0	-1.3	No
3	C St.	s/o First St.	Civic/Institutional	59.4	58.2	-1.2	No
4	C St.	s/o 2nd St.	Civic/Institutional	59.4	58.8	-0.6	No
5	C St.	s/o 3rd St.	Civic/Institutional	59.4	59.3	-0.1	No
6	El Camino Real	s/o First St.	Commercial	61.2	59.7	-1.5	No
7	El Camino Real	s/o 2nd St.	Commercial	61.2	60.2	-1.0	No
8	El Camino Real	s/o 3rd St.	Commercial	61.2	60.2	-1.0	No
9	El Camino Real	s/o Main St.	Commercial	64.1	63.7	-0.4	No
10	El Camino Real	n/o Newport Av.	Commercial	64.1	64.3	0.2	No
11	Prospect Av.	s/o First St.	Commercial	60.9	59.4	-1.5	No
12	Prospect Av.	s/o 2nd St.	Mobile Home Park	60.9	59.4	-1.5	No
13	Prospect Av.	s/o 3rd St.	Mobile Home Park	60.9	59.4	-1.5	No
14	Newport Av.	s/o Irvine Bl.	Commercial	70.9	70.8	-0.1	No
15	Newport Av.	s/o First St.	Commercial	70.9	71.1	0.2	No
16	Newport Av.	s/o Main St.	Commercial	70.9	71.0	0.1	No
17	Newport Av.	s/o El Camino Real	Commercial	69.8	70.0	0.2	No
18	Irvine Bl.	w/o Yorba St.	Commercial	73.0	73.3	0.3	No
19	Irvine Bl.	e/o Yorba St.	Commercial	71.8	72.2	0.4	No
20	Irvine Bl.	e/o Prospect Av.	Civic/Institutional & Commercial/Office	72.0	72.1	0.1	No
21	First St.	w/o Yorba St.	Commercial	70.8	69.8	-1.0	No
22	First St.	e/o Yorba St.	Commercial	70.1	68.9	-1.2	No
23	First St.	w/o Prospect Av.	Commercial	70.1	69.4	-0.7	No
24	First St.	e/o Prospect Av.	Commercial	69.2	68.9	-0.3	No

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA) ¹			Threshold Exceeded?
				No Project	With Project	Project Addition	
25	2nd St.	w/o El Camino Real	Commercial	54.0	52.8	-1.2	No
26	2nd St.	e/o El Camino Real	Commercial	54.0	52.0	-2.0	No
27	3rd St.	w/o El Camino Real	Commercial	54.5	52.8	-1.7	No
28	3rd St.	e/o El Camino Real	Residential & Commercial/Office & Vacant	54.5	52.8	-1.7	No
29	Main St.	w/o B St.	Residential	66.8	66.8	0.0	No
30	Main St.	e/o B St.	Civil/Institutional & Commercial/Office	66.8	66.6	-0.2	No
31	Main St.	e/o El Camino Real	Commercial	66.6	66.0	-0.6	No
32	6th St.	e/o B St.	Residential & Industrial (demolished)/Permitted Residential	57.8	57.5	-0.3	No

Source: Urban Crossroads, 2017, Appendix D.

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

Table 5.6-13, *Year 2035 Plus Project Traffic Noise Impacts*, presents a comparison of the 2035 without and with project noise levels. The exterior noise levels are expected to range from 55.0 to 73.8 dBA CNEL without the development anticipated by the Specific Plan and from 53.4 to 74.0 dBA CNEL with the development anticipated by the Specific Plan. As shown on Table 5.6-13, a noise level increase of up to 0.3 dBA CNEL is anticipated to occur on the study area roadway segments, and per the significance criteria listed in Table 5.6-6, *Existing Noise Ambient Noise Level and General Plan Land Use Compatibility*, this noise level increase would be less than significant.

Table 5.6-13: Year 2035 Plus Project Traffic Noise Impacts

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA) ¹			Threshold Exceeded?
				No Project	With Project	Project Addition	
1	B St.	s/o First St.	Residential	59.7	59.3	-0.4	No
2	B St.	s/o Main St.	Residential	59.7	59.3	-0.4	No
3	C St.	s/o First St.	Civic/Institutional	59.7	59.4	-0.3	No
4	C St.	s/o 2nd St.	Civic/Institutional	61.0	60.0	-1.0	No
5	C St.	s/o 3rd St.	Civic/Institutional	61.0	60.7	-0.3	No
6	El Camino Real	s/o First St.	Commercial	62.0	60.7	-1.3	No
7	El Camino Real	s/o 2nd St.	Commercial	62.0	61.1	-0.9	No
8	El Camino Real	s/o 3rd St.	Commercial	62.0	61.1	-0.9	No
9	El Camino Real	s/o Main St.	Commercial	64.3	64.0	-0.3	No
10	El Camino Real	n/o Newport Av.	Commercial	64.3	64.6	0.3	No
11	Prospect Av.	s/o First St.	Commercial	63.8	63.1	-0.7	No

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA) ¹			Threshold Exceeded?
				No Project	With Project	Project Addition	
12	Prospect Av.	s/o 2nd St.	Mobile Home Park	63.8	63.1	-0.7	No
13	Prospect Av.	s/o 3rd St.	Mobile Home Park	63.8	63.1	-0.7	No
14	Newport Av.	s/o Irvine Bl.	Commercial	71.2	71.0	-0.2	No
15	Newport Av.	s/o First St.	Commercial	71.2	71.3	0.1	No
16	Newport Av.	s/o Main St.	Commercial	71.2	71.2	0.0	No
17	Newport Av.	s/o El Camino Real	Commercial	70.8	70.9	0.1	No
18	Irvine Bl.	w/o Yorba St.	Commercial	73.8	74.0	0.2	No
19	Irvine Bl.	e/o Yorba St.	Commercial	72.5	72.8	0.3	No
20	Irvine Bl.	e/o Prospect Av.	Civic/Institutional & Commercial/Office	73.4	73.5	0.1	No
21	First St.	w/o Yorba St.	Commercial	70.8	69.8	-1.0	No
22	First St.	e/o Yorba St.	Commercial	71.0	70.0	-1.0	No
23	First St.	w/o Prospect Av.	Commercial	71.0	70.1	-0.9	No
24	First St.	e/o Prospect Av.	Commercial	70.3	70.1	-0.2	No
25	2nd St.	w/o El Camino Real	Commercial	55.0	53.4	-1.6	No
26	2nd St.	e/o El Camino Real	Commercial	58.0	56.1	-1.9	No
27	3rd St.	w/o El Camino Real	Commercial	55.0	54.0	-1.0	No
28	3rd St.	e/o El Camino Real	Residential & Commercial/Office & Vacant	58.0	56.7	-1.3	No
29	Main St.	w/o B St.	Residential	66.9	66.9	0.0	No
30	Main St.	e/o B St.	Civil/Institutional & Commercial/Office	68.2	68.0	-0.2	No
31	Main St.	e/o El Camino Real	Commercial	67.6	67.1	-0.5	No
32	6th St.	e/o B St.	Residential & Industrial (demolished)/Permitted Residential	58.0	57.8	-0.2	No

Source: Urban Crossroads, 2017, Appendix D.

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

IMPACT N-4: RESULT IN A SUBSTANTIAL TEMPORARY OR PERIODIC INCREASE IN AMBIENT NOISE LEVELS IN THE PROJECT VICINITY ABOVE LEVELS EXISTING WITHOUT THE PROJECT [THRESHOLD N-4].

Less than Significant with Mitigation Incorporated. Construction noise would occur between the permitted hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays. Additionally, the noise increases would be temporary in nature, and the operation of each piece of construction equipment would not be constant throughout the construction day, as equipment would be turned off when they are not in use. The typical operating cycle for a piece of construction equipment

would involve one or two minutes of full power operation followed by three or four minutes at lower power settings.

Construction of individual projects within the Specific Plan area could exceed 85 dBA at a distance of 27 feet or less from peak construction activity, which as shown on Table 5.6-14, *Temporary Increase in Noise from Construction*, could result in temporary and intermittent noise level increases of up to 19.8 dBA Leq at sensitive receptors. As described above, a temporary noise level increase of 12 dBA Leq is considered a potentially significant impact based on Caltrans criteria. Therefore, Mitigation Measure NOI-2 has been included, which requires measures such as noise barriers, using sound dampening mats or blankets on engine compartments of heavy mobile equipment, and limiting haul trips. The measures included in NOI-2 would be capable of achieving a minimum of 10 dBA of attenuation to reduce impacts to below the 12 dBA Leq threshold and as a result, represent less than significant impacts with mitigation.

Table 5.6-14: Temporary Increase in Noise from Construction

Meas. Location	Proposed DCCSP Land Use(s)	Existing Land Use(s)	Existing Daytime Ambient Noise Levels	Peak Construction Noise Level (@ 50')	Combined Project and Ambient ¹	Increase in Noise Level ²	Threshold Exceeded?
L1	Downtown Mixed-Use	Residential and Office	68.7	79.6	79.9	11.2	No
L2	Downtown Mixed-Use	Residential, Commercial, Office and Park	59.8	79.6	79.6	19.8	Yes
L3	Civic/Institutional	Residential and Civic/Institutional	61.3	79.6	79.7	18.4	Yes
L4	Old Town, Mobile Home Park	Commercial, Mobile Home Park	63.2	79.6	79.7	16.5	Yes
L5	Downtown Mixed-Use & Downtown Commercial	Commercial	71.6	79.6	80.2	8.6	No
L6	Old Town	Commercial	63.3	79.6	79.7	16.4	Yes
L7	Multi-Family & Downtown Mixed Use	Office and Commercial	63.9	79.6	79.7	15.8	Yes
L8	Downtown Mixed-Use & Downtown Comm.	Commercial	61.9	79.6	79.7	17.8	Yes

Source: Urban Crossroads, 2017, Appendix D.

¹ Represents the combined ambient conditions plus the Project construction activities.

² The temporary noise level increase expected with the addition of the proposed activities.

5.6.7 CUMULATIVE IMPACTS

Less than Significant Impact. Cumulative noise assessment considers the maximum allowable development within the Specific Plan area in combination with ambient growth and other development projects within the vicinity of the Specific Plan area. As noise is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the development anticipated in the proposed Specific Plan to result in cumulative noise impacts. Regarding cumulative traffic noise, the geographic area

considered includes the roadways examined in the Traffic Impact Analysis and evaluated in Section 5.8, *Traffic and Circulation*, of this EIR. The cumulative development program assumed in the traffic forecasts used in the noise modeling effort includes cumulative growth through 2035, as well as known development projects.

Development anticipated within the Specific Plan in combination with other nearby projects would result in an increase in local construction-related and traffic-related noise and vibration. However, all development projects would be subject to the operational noise standards established in the TCC. In addition, construction noise and vibration are localized in nature and decreases substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high level of construction noise and/or vibration would need to be in close proximity to the construction noise of a development project within the Specific Plan area. However, due to the size of the Specific Plan area (220 acres) and the intermittent location of development activities, the construction noise and/or vibration would have a minimal potential to combine and become cumulatively significant. Therefore, cumulative noise and/or vibration impacts associated with construction activities would be less than significant.

As described previously, the operational noise from new residential units and commercial and office uses would be required to meet the TCC noise limits, which would ensure that noise from new uses in the Specific Plan area would not combine with other development projects to be cumulatively significant. Thus, operational noise from new land uses in the proposed Specific Plan area would result in less than significant cumulative noise impacts.

In addition, as described previously, traffic generated by developments included in the proposed Specific Plan area would range as an increase up to 0.4 dBA CNEL in the existing plus project condition, and up to 0.3 dBA CNEL in the 2035 plus project condition, which is a limited increase that is far below the 1.5 dBA CNEL threshold. As a result, operational noise from the projects within the Specific Plan would not combine with operational noise from other development projects to result in a cumulatively significant increase. Thus, the development anticipated by the proposed Specific Plan would result in a less than cumulatively significant impact on ambient noise levels from operational activities.

Also, as described above, the Specific Plan area is located outside of the 60 dBA CNEL noise contour boundaries of John Wayne airport, and developments within the proposed Specific Plan area would not result in exposure of people residing or working in the area to excessive noise levels from operation of an airport and would not result in an impact that could cumulatively combine. Similarly, each past, present, and foreseeable future project must comply with the appropriate airport land use noise contour regulations, which are in place to reduce the potential noise impacts related to John Wayne Airport operations. Hence, cumulative impacts related to airport noise would not occur.

5.6.8 EXISTING REGULATIONS, STANDARD CONDITIONS AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- City of Tustin General Plan Noise Element
- Tustin City Code Article 4, Chapter 6, Sections 4613, 4614, and 4617

Plans, Program and Policies (PPPs) and Standard Conditions

The following Plans, Programs, and Policies (PPP) and Standard Conditions (SCs) related to noise are incorporated into the project and would reduce impacts related to noise. These actions will be included in the project's mitigation monitoring and reporting program:

- **PPP NOI-1:** Development projects are required to meet or exceed the 65 dBA CNEL exterior noise level standard, as defined by Table N-3 of the City of Tustin General Plan Noise Element, and the 45 dBA CNEL interior noise level standard of the City of Tustin General Plan Noise Element, and by Title 24, Part 2, of the California Building Code.
- **PPP NOI-2:** Construction plans shall include a note that construction activities shall only occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays; with no activity allowed on Sundays and Federal holidays, unless permitted outside of those limitations in the case of urgent necessity or upon a finding that such approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted, pursuant to Article 4, Chapter 6, Section 4617 of the Tustin City Code.

5.6.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Significant. Impacts N-2 and N-4 would be significant and require mitigation. These impacts include potential exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other affected agencies; exposure of persons to or generate excessive groundborne vibration or groundborne noise levels; and generation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. However, upon implementation of regulatory requirements the other noise impacts (Impact N-1 and N-3) would be less than significant.

5.6.10 MITIGATION MEASURES

Mitigation Measure NOI-1: Prior to approval of a demolition permit, grading plans, and/or issuance of building permits for construction activities within 25 feet of existing residential structures or occupied noise sensitive uses that require the use of large bulldozers, large loaded trucks, jackhammers, pile drivers, and/or caisson drills, the City of Tustin Building Division shall ensure that construction plans and specifications state that the use of such vibratory equipment shall be prohibited within 25 feet of existing residential structures or occupied noise sensitive uses. Instead, small rubber-tired bulldozers shall be used within this area during demolition and/or grading operations to reduce vibration effects. If the use of large bulldozers, large loaded trucks, jackhammers, pile drivers, and/or caisson drills is necessary within 25 feet of existing residential structures or occupied noise sensitive uses, a site-specific analysis shall be prepared and submitted to the City of Tustin demonstrating that construction activity would not result in vibration at sensitive receptors that is more than the Caltrans thresholds for annoyance (0.04 in/sec PPV at receiver locations) and damage (per the Transportation and Construction Vibration Guidance Manual, September 2013, Tables 19 & 20 by building type).

Mitigation Measure NOI-2: Prior to approval of grading plans, the City of Tustin Building Division shall ensure that plans include the following measures to reduce construction related noise:

- Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards, and all stationary

construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive use nearest the construction activity.

- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receiver nearest to the construction activity.
- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment by TCC Article 4, Chapter 6, Section 4617. The contractor shall design delivery routes to minimize the exposure of sensitive land uses to delivery truck noise.
- If construction activity within 27 feet of occupied noise sensitive uses is proposed, the construction contractor shall ensure that construction noise levels at nearby sensitive land uses do not exceed 85 dBA Leq, and that construction-related noise level increases are less than 12 dBA Leq above the existing ambient noise levels, by implementing one or more of the following methods:
 1. Install temporary construction noise barriers within the line of site of occupied sensitive uses for the duration of construction activities that could generate noise exceeding 85 dBA Leq. The noise control barrier(s) must provide a solid face from top to bottom and shall:
 - a. Provide a minimum transmission loss of 20 dBA and be constructed with an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts;
 - b. Be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired; and
 - c. Be removed and the site appropriately restored upon the conclusion of the construction activity.
 2. Install sound dampening mats or blankets to the engine compartments of heavy mobile equipment (e.g. graders, dozers, heavy trucks). The dampening materials must be capable of a minimum 5-dBA noise reduction, must be installed prior to the use of heavy mobile construction equipment, and must remain installed for the duration of the equipment use.

5.6.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant. As described previously, construction within the proposed Specific Plan area could exceed 85 dBA at a distance of 27 feet or less from peak construction activity, and could result in temporary and intermittent noise level increases of up to 19.8 dBA Leq at sensitive receptors. Mitigation Measure NOI-2 has been included, which requires measures such as noise barriers, using sound dampening mats or blankets on engine compartments of heavy mobile equipment, and limiting haul trips. The measures included in NOI-2 would be capable of providing the needed attenuation to reduce impacts to below the respective construction noise thresholds. With mitigation, construction noise levels at nearby sensitive land uses would be reduced to below 85 dBA Leq and construction-related noise level increases would be less than 12 dBA Leq above the existing ambient noise levels. Therefore, construction related noise impacts would be mitigated to a less than significant level.

In addition, PPP NOI-1, NOI-2, and Mitigation Measure NOI-1 would be implemented to reduce construction vibration impacts to a less than significant level. Operation noise would be less than significant.

REFERENCES

Tustin Downtown Commercial Core Specific Plan Noise Impact Analysis, Prepared by Urban Crossroads, 2017, included as Appendix D.

Tustin City Code. Assessed at:

https://library.municode.com/ca/tustin/codes/code_of_ordinances?nodeId=11307

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5.7 Population and Housing

5.7.1 INTRODUCTION

This section examines the existing population, housing, and employment conditions in the City of Tustin, and assesses the project's impacts related to direct and indirect growth. Although evaluation of population, housing, and employment typically involves economic and social, rather than physical environmental issues, population, housing, and employment growth are often precursors to physical environmental impacts. According to Section 15382 of the CEQA Guidelines, “[a]n economic or social change by itself shall not be considered a significant impact on the environment.” Socioeconomic characteristics should be considered in an EIR only to the extent that they create adverse impacts on the physical environment.

5.7.2 REGULATORY SETTING

California Housing Element Law

California planning and zoning law requires each city and county to adopt a general plan for future growth (California Government Code Section 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the California Department of Housing and Community Development Department (HCD) estimates the relative share of California's projected population growth that would occur in each county based on Department of Finance (DOF) population projections and historical growth trends. These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. Where there is a regional council of governments, HCD provides the RHNA to the council. Such is the case for the City of Tustin, which is a member of SCAG. The council, in this case Southern California Association of Governments (SCAG), then assigns a share of the regional housing need to each of its cities and counties. The process of assigning shares gives cities and counties the opportunity to comment on the proposed allocations. HCD oversees the process to ensure that the council of governments distributes its share of the state's projected housing need.

Southern California Association of Governments

SCAG is a council of governments representing Orange, Imperial, Los Angeles, Riverside, San Bernardino, and Ventura counties. It is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles. SCAG actions in Orange County are partially the result of input from the Orange County Council of Governments (OCCOG), which offers recommendations regarding SCAG's initiatives.

Regional Housing Needs Allocation

The Regional Housing Needs Assessment (RHNA) is mandated by state housing law as part of the periodic process of updating housing elements of local general plans. State law requires that housing elements identify RHNA targets set by HCD to encourage each jurisdiction in the state to provide its fair share of very low, low, moderate, and upper income housing. The RHNA does not promote growth, but provides a long-term outline for housing within the context of local and regional trends and housing production goals.

SCAG determines total housing need for each community in southern California based on three general factors: 1) the number of housing units needed to accommodate future population and employment growth; 2) the number of additional units needed to allow for housing vacancies; and 3) the number of very low,

low, moderate, and above-moderate income households needed. All cities are required to ensure that sufficient sites are planned and zoned for housing, such that area would be available to accommodate the projected housing needs, and to implement proactive programs that facilitate and encourage the production of housing commensurate with its housing needs.

For the 2013–2021 planning period, SCAG determined that Tustin’s RHNA allocation was 1,227 units; as shown in Table 5.7-1, 478 of the units (39 percent) are allocated to extremely low through low income housing needs.

Table 5.7-1: City of Tustin Regional Housing Needs Allocation, 2013-2021

Income Category	Definition	RHNA	
		Number of Units	Percentage
Extremely Low & Very Low	50% or Less of MFI	283	23.1
Low	51-80% of MFI	195	15.9
Moderate	81-120% of MFI	224	18.3
Above Moderate	Above 120% of MFI	525	42.8
Total		1,227	100.1

Source: City of Tustin 2013.
MFI = median family income

City of Tustin General Plan

Housing Element

The City of Tustin Housing Element was adopted by the Tustin City Council on October 1, 2013, and was determined by the HCD as complying with state housing law on November 6, 2013. The Housing Element provides a thorough discussion of housing conditions and issues in the City and provides goals and policies that address the City’s overall housing needs. The goals and policies relevant to the proposed Specific Plan include:

Goal 1: Provide an adequate supply of housing to meet the need for a variety of housing types and the diverse socio-economic needs of all community residents.

Policy 1.1: Promote the construction of additional dwelling units to accommodate Tustin's share of regional housing needs identified by the Southern California Association of Governments (SCAG), in accordance with adopted land use policies.

Policy 1.2: Pursue smart growth principles by supporting the construction of higher density housing, affordable housing, and mixed-use development (the vertical and horizontal integration of commercial and residential uses) in proximity to transit, services, shopping, schools, senior centers and recreational facilities, where possible.

Goal 6: Ensure that new housing is sensitive to the existing natural and built environment.

Policy 6.1: Attempt to locate new housing facilities in proximity to services and employment centers thereby enabling walking or bicycling to places of employment.

Policy 6.2: Promote energy conservation measures in the design of new housing units and the redevelopment of older housing units.

Policy 6.3: Require design review of lot placement in subdivisions to maximize passive solar energy and solar access.

Policy 6.4: Promote water efficient landscapes, efficient irrigation, and use of permeable paving materials.

Growth Management Element

The Growth Management Element contains goals and policies to ensure that growth and development is based upon the City's availability to provide an adequate circulation system. This element also guides the City's participation in interjurisdictional planning efforts and establishes a goal that the provision of jobs and housing be balanced. The goal relevant to the proposed Specific Plan includes:

Goal 4: Strive to develop and maintain a balance between jobs and housing in Tustin.

5.7.3 ENVIRONMENTAL SETTING

Population

The California Department of Finance (DOF) estimates the City of Tustin 2017 population to be 82,372, representing approximately 2.6 percent of Orange County's total population. The City's population increased by 9.0 percent over the 2010 total of 75,540; this was greater than the countywide population growth rate of 5.7 percent over the same period. Table 5.7-2 provides population figures for the City of Tustin and Orange County in 2000, 2010, and 2017, and SCAG projections for 2035.

Table 5.7-2: Population Estimates and Projections, 2000–2035

	2000 ¹	2010 ¹	2000–2010 Change	2017 ¹	2010–2017 Change	2035 ² Projection	2017-2035 Change
City of Tustin	67,504	75,540	11.9%	82,372	9.0%	83,100	0.9%
Orange County	2,846,289	3,010,232	5.8%	3,194,024	6.0%	3,431,200	7.4%

¹ California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2010 - 2017.

² SCAG 2016 Growth Forecasts.

Housing & Households

The DOF estimates that there were 27,836 housing units in Tustin in 2017, 2.7 percent of the County total. The number of housing units in the City increased by 1,360, or 5.1 percent, from 2010 to 2017. During that time, the vacancy rate declined from 4.8 percent to 3.2 percent. The City's housing stock is split almost evenly between single-family detached/attached units and multi-family units; and has a small percentage of mobile homes.

The average household size is estimated to be 3.04 persons in Tustin and 3.05 persons in Orange County in 2017 (DOF 2017). Table 5.7-3 shows the number of housing units and households and the vacancy rate in 2010 and 2017.

Table 5.7-3: Housing Units and Households, 2010 and 2017

	2010	2017
City of Tustin		
Housing Units	26,476	27,836
Households	25,203	26,956
Vacant Housing Units	1,273	880
Vacancy Rate	4.8%	3.2%
County of Orange		
Housing Units	1,046,118	1,083,563
Households	990,019	1,030,164
Vacant Housing Units	56,099	53,399
Vacancy Rate	5.4%	4.9%

Source: California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2010 - 2017.

As shown in Table 5.7-4 SCAG 2035 estimates the number of households within the City will increase by 3.1 percent and the County will increase by 10.2 percent between 2017 and 2035.

Table 5.7-4: SCAG Household Projections through 2035

	2017 California Department of Finance Estimate	2035 SCAG Projection	2017-2035 Change
City of Tustin	26,956	27,800	3.1%
County of Orange	1,030,164	1,135,300	10.2%

Sources: California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2010 – 2017; SCAG 2016 Growth Forecasts.

Employment

The California Employment Development Department identified a total of 41,100 jobs in Tustin in 2017, an increase of 4,300 from the 2010 total of 36,800. Countywide, there are approximately 1,532,100 jobs in the County (DOF 2017). Hence, the 2017 employment figure for Tustin represents 2.7 percent of countywide employment.

SCAG's 2016 growth projections show that employment in the City is anticipated to be 51,800 in 2020 and 64,600 in 2035, which in 2020 would be a 25.7 percent increase, and in 2035 would be a 56.8 percent increase in employment.

In addition, 43,814 of the City's residents were in the labor force in 2015 and the City had an unemployment rate of 5.5 percent (Census Factfinder 2015). Tustin residents that work have an average 24.2-minute commute, and 77.4 percent of employees drove alone, 10.9 percent carpooled, and 2.4 percent used public transportation (Census Factfinder 2015). This is similar to Orange County as a whole, where the average commute time was 26.8 minutes; unemployment was 5.0 percent; 78.4 percent of employees drove to work alone, 9.8 percent of employees carpooled, and 2.5 percent used public transportation (Census Factfinder 2015).

Jobs-Housing Balance

The jobs-housing ratio is a general measure of the “balance” between the number of jobs and number of housing units within a geographic area, without regard to economic constraints or individual preferences. The ratio expresses quantitatively the relationship between the number of people working and number of dwelling units housing the people living in a given area. Additionally, a well-balanced ratio of jobs and housing reduces commuting trips because more employment opportunities are closer to residential areas. Such a reduction in vehicle trips lowers air pollutant emissions (including lower greenhouse gas emissions) and causes less congestion on area roadways and intersections.

As described above and shown in Table 5.7-5, the City has approximately 26,956 households and approximately 41,100 jobs, which results in a jobs-to-housing ratio of 1.5 jobs per household; however, based on the number of City residents in the labor force (43,814) and the number of jobs within the City (41,100), the City of Tustin is generally balanced with 1.1 ratio of employees to jobs within the City.

As shown in Table 5.7-5 SCAG projects a jobs-to-housing ratio of 2.32 in 2035, which indicates that employees would be commuting into the City for employment, and that additional housing would improve the jobs to housing balance within the City.

Table 5.7-5: SCAG Household Projections through 2035

	Year	Employment	Households	Jobs-Housing Ratio
City of Tustin	2017	41,100	26,956	1.52
	2035	64,600	27,800	2.32
Orange County	2017	1,532,100	1,030,164	1.49
	2036	1,870,500	1,135,300	1.65

Sources: California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2010 – 2017; and SCAG 2016

5.7.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project could have a significant effect on the environment if the project would:

- P-1 Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- P-2 Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- P-3 Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Initial Study, included as Appendix A, established that the project would result in less than significant impacts related to Thresholds P-2 and P-3; no further assessment of these impacts is included in this EIR.

5.7.5 METHODOLOGY

CEQA Guidelines Section 15064(e) states that a social or economic change generally is not considered a significant effect on the environment unless the changes can be directly linked to a physical adverse change. CEQA Guidelines Appendix G nevertheless indicates that a project could have a significant effect if it would induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). As a result, the analysis of impacts in relation to Threshold P-1 focuses on population growth itself, rather than on the physical manifestations of population and employment growth, which are analyzed throughout this EIR.

The methodology used to determine population, housing and employment impacts began with data collection regarding existing population and housing trends, which was obtained from the DOF, SCAG, the California Employment Development Department, and the 2017 Census Factfinder.

Population impacts are based on an analysis of the number of residents anticipated at build out of the proposed Specific Plan. The scale of population at build out is then compared with official population growth forecasts for the project area. Population growth is considered in the context of local and regional plans that include population projections. The population and growth that would result from implementation of the Specific Plan was examined in the context of existing and projected population for Orange County and the City of Tustin. If projected growth within the Specific Plan area would exceed SCAG growth projections, the resulting growth would be considered “substantial,” and a significant impact would result.

5.7.6 ENVIRONMENTAL IMPACTS

IMPACT P-1: THE PROJECT WOULD NOT INDUCE SUBSTANTIAL POPULATION GROWTH IN AN AREA, EITHER DIRECTLY (FOR EXAMPLE, BY PROPOSING NEW HOMES AND BUSINESSES) OR INDIRECTLY (FOR EXAMPLE, THROUGH EXTENSION OF ROADS OR OTHER INFRASTRUCTURE) [THRESHOLD P-1].

Less than Significant Impact.

Residential Development

Build out of the proposed Specific Plan would result in an increase of up to 887 dwelling units (inclusive of the Vintage Planned Community that includes 140 multi-family residential units). Using an average household size of 3.04 persons per unit (the DOF 2017 estimate for the City), buildout of the proposed Specific Plan would result in a population increase of 2,696 residents, which is a citywide increase of 3.3 percent over the 2017 estimated population of 82,372.

As listed previously in Table 5.7-2, SCAG forecasts that Tustin’s population will increase by 0.9 percent between 2017 and 2035. The additional 2,696 residents that would be generated by buildout of the proposed Specific Plan would exceed the amount of growth anticipated to occur within the City. However, the SCAG projections are based on the built-out nature of the City, and do not account for the various underutilized parcels (that account for approximately 10 percent of the developable area within the Specific Plan area). In addition, the SCAG population projections for the City are inconsistent with the projected growth in the County as a whole, which is anticipated to be 7.4 percent between 2017 and 2035 (Table 5.7-2).

Further, as shown in Table 5.7-4, SCAG household growth projections estimate that by 2035 the number of households within the City will grow by 3.1 percent, and that growth within the County will be higher at 10.2 percent. Assuming that the maximum number of residential units in the proposed Specific Plan are developed and occupied (no vacancy), the 887 additional households that would be generated by the proposed Specific Plan would result in an increase of 3.3 percent.

While the growth at buildout of the proposed Specific Plan would exceed the City's estimated population and household growth, the Specific Plan area is urban and largely developed; thus, limited growth was anticipated in regional projections. Future development pursuant to the Specific Plan would consist mostly of infill, mixed-use, and redevelopment projects that are market and need dependent. Development that would occur under the proposed Specific Plan would help the City accommodate and balance the land use of anticipated growth as opposed to substantially increasing growth.

The residential development that would occur under the proposed project would help to meet housing demands from projected employment growth in the City while maintaining a healthy vacancy rate. As further described below, implementation of the proposed Specific Plan would assist to balance the need for additional housing related to employment growth and to improve the future jobs-to-housing balance.

Non-Residential Development

As described in Section 3.0, *Project Description*, the proposed Specific Plan anticipates development of 300,000 square feet of non-residential (commercial/office) space from build out of the properties designated for non-residential uses in the General Plan and Zoning Map in the Specific Plan area. The Traffic Study (included as Appendix E) that was prepared for the proposed Specific Plan identified the number of employees that would be generated from development of 300,000 square feet of non-residential uses using socio-economic data (SED) conversion factors from the Irvine Traffic Analysis Model (ITAM), which is a subarea model of OCTAM and is consistent with OCTAM. Table 5.7-6 summarizes the non-residential land use to SED conversion and shows that approximately 840 employees would be generated from development of 300,000 square feet of non-residential (commercial/office) space.

Table 5.7-6: Employees from Specific Plan Buildout

Description	Retail Employees	Service Employees	Other Employees	Total
SED Conversion Factors ¹	0.74	0.94	1.12	
Total Employees	223	282	335	840

Source: Stantec, 2017. Appendix E.

SED = socio-economic data

¹ SED Conversion factors were derived from a mix of land use to SED conversion factors from the Irvine Traffic Analysis Model (ITAM). Land Use to SED conversion factors for Commercial Retail, Office, and Community Facilities land uses were used.

The commercial/office uses are anticipated to result in jobs which would be filled by people who would already be living within Tustin and surrounding communities, and would not induce an unanticipated influx of new labor into the region. In addition, as described above, the SCAG projections anticipate a 56.8 percent increase in employment in the City by 2035 (an increase of 23,500 over 2017 employment). The 840 jobs anticipated by build out of the proposed Specific Plan would be approximately 3.6 percent of the anticipated job growth. The Specific Plan provides a land use plan for accommodating a portion of the SCAG projected employment increase, and therefore, would not substantially induce growth. Overall, the job growth from build out of the proposed Specific Plan would be less than significant.

Jobs-Housing Ratio

As described above, the City of Tustin currently has a jobs-to-housing ratio of 1.5 jobs per household; however, SCAG projects a jobs-to-housing ratio of 2.32 in 2035, which indicates that more employees would be commuting into the City for employment. Build out of the proposed Specific Plan would result in 887 housing units that would assist in improving the jobs to housing ratio. These 840 jobs expected in the Specific Plan area are included in SCAG projections because the non-residential designated properties in the Specific Plan area are included in the General Plan, and are not changing with implementation of the Specific Plan.

Table 5.7-7 compares housing and employment for the City of Tustin, build out of the proposed Specific Plan, and SCAG's projections for the City. When combined with existing jobs and housing units, the residential units generated from the proposed project would result in a more balanced ratio of jobs and housing (1.41) than the existing condition (1.52) and projected condition (2.32). Thus, the housing that would be accommodated by the proposed Specific Plan would result in a beneficial impact related to the balance of jobs and housing; and impacts related to the jobs-housing balance from implementation of the proposed Specific Plan would be less than significant.

Table 5.7-7: City of Tustin Jobs-Housing Balance

Scenario	Employment	Households	Jobs-Housing Ratio
2017	41,100	26,956	1.52
2017 Conditions plus Project	41,940	29,652	1.41
SCAG 2035 Estimate	64,600	27,800	2.32

Source: DOF 2016, SCAG 2016.
MFI = median family income

Construction of projects that would occur as a result of the proposed Specific Plan would include a need for construction labor. Due to the employment patterns of construction workers in Southern California, and the large market for construction labor in Orange County, construction workers are not likely to relocate their households as a consequence of the job opportunities presented by construction projects in the Specific Plan area. The construction industry differs from most other industry sectors in several important ways that are relevant to potential impacts on housing:

- There is no regular place of work. Construction workers commute to job sites that change many times in the course of a year. These often-lengthy daily commutes are made possible by the off-peak starting and ending times of the typical construction work day.
- Many construction workers are specialized (e.g., crane operators, steel workers, masons), and move from job site to job site as dictated by the demand for their skills.
- The work requirements of most construction projects are also specialized and workers are employed on a job site only as long as their skills are needed to complete a particular phase of the construction process.

It is reasonable to assume that construction workers for developments that would occur pursuant to the proposed Specific Plan would be drawn from the existing labor force in the surrounding area, and, because a typical construction worker would be employed at several different construction sites during any given year, would not relocate their households' places of residence as a consequence of working at a

particular construction site in the city of Tustin. Therefore, construction related employment that would be generated from implementation of the proposed Specific Plan would be less than significant.

5.7.7 CUMULATIVE IMPACTS

Less than Significant Impact. The geographic context for an analysis of cumulative impacts would be Orange County. The proposed Specific Plan would result in development of new land uses that would, in combination with other cumulative development in the area, increase population, housing, and employment in Orange County. However, SCAG's population, housing, and employment forecasts take into account all past, present, and reasonably foreseeable future development projects. Because the proposed Specific Plan is within SCAG growth forecasts for the County, cumulative development would not result in a significant cumulative impact to which the proposed Specific Plan might contribute. Thus, cumulatively considerable impacts related to inducement of substantial growth would not occur.

5.7.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

There are no existing Standard Conditions or Plans, Programs, or Policies related to population and housing.

5.7.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less than Significant Impact. Impacts related to population and housing would be less than significant and no mitigation is required.

5.7.10 MITIGATION MEASURES

No mitigation measures are required.

5.7.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant Impact. No significant unavoidable adverse impacts related to population and housing have been identified and impacts would be less than significant.

REFERENCES

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<http://www.tustinca.org/departments/commdev/housingElementUpdate.html>.

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5.8 Recreation

5.8.1 INTRODUCTION

This EIR Section describes the availability of and anticipated demand on parks and recreation opportunities proximate to the Specific Plan area and identifies and addresses potential impacts from implementation of the Specific Plan related to recreational facilities.

5.8.2 REGULATORY SETTING

City of Tustin General Plan

The following goals and policies contained in the Open Space/Conservation/Recreation Element are relevant to the proposed project:

Goal 14: Encourage the development and maintenance of a balanced system of public and private parks, recreation facilities, and open spaces that serves the needs of existing and future residents in the City of Tustin.

Policy 14.1: Provide Tustin with a full range of recreational and leisure opportunities that reflect the community's current and future population size and demographic character

Policy 14.8: Encourage and, where appropriate, require the inclusion of recreation facilities and open space within future residential, industrial and commercial developments.

Policy 14.12: Ensure that the City's laws and related implementation tools relating to park dedication and development (e.g., ordinances, regulations, in-lieu fee schedules, etc.) reflect current land and construction costs, and are, in fact, providing adequate park land and facilities concurrent with population growth.

Tustin City Code

Article 9, Chapter 3, Part 3, Section 9331(d) discusses parkland dedications and development fees for subdivisions. To adhere to the policies and standards for parks and recreational facilities set forth in the General Plan Open Space/Conservation/Recreation Element, project proponents may dedicate land or pay a fee in lieu or a combination of both. A park fee is required when: 1. there is no public park or recreational facility required within the proposed subdivision; 2. the subdivision is less than 50 parcels; or 3. the project is a conversion of an existing apartment complex to multiple-owner occupancy. For subdivisions of 50 parcels or less, a project proponent may pay a fee in lieu of land dedication. The Tustin City Code permits the voluntary dedication of land for park and recreation purposes in subdivisions of 50 parcels or less. Dedication of land may be required by the City for a condominium, stock cooperative, or community apartment project which exceeds 50 dwelling units, regardless of the number of parcels. The land and fees must be used "only for the purpose of providing park and recreational facilities to serve the area from which received, and the location of the land and amount of fees shall bear a reasonable relationship to the use of the park and recreational facilities by the future inhabitants of the subdivision, the community, and the general area from which it is received."

5.8.3 ENVIRONMENTAL SETTING

Regional

The Orange County Parks and Recreation Department (OC Parks) operates and maintains 39,000 acres of regional park facilities and open space. The Orange County Parks Strategic Plan (October 2007) notes that regional resources include 32,000 acres in 25 urban and wilderness parks, 7 miles of beaches and coastal facilities, 7 regional historic sites and parks, archeological and paleontological collections, 7,000 acres of open space lands, and 230 miles of regional riding and hiking trails. Regional County recreational facilities near the Specific Plan area include Peters Canyon Regional Park, located approximately 2.5 miles to the northeast, and Mason Regional Park, approximately 5.5 miles to the south.

Local

The City of Tustin Parks and Recreation Department operates and maintains approximately 113.5 acres of park and recreation facilities, inclusive of approximately 106.7-acres of existing public park, as identified in Table 5.8-1, *City of Tustin Parks*. One 5.5-acre community park, Peppertree Park, is located within the Specific Plan area. Additionally, the Tustin Legacy Linear Park is under construction, and the Veterans Sports Park at Tustin Legacy is expected to start construction in 2018. The Tustin Legacy Specific Plan identifies 33 acres of existing parks and an additional 230 acres of future parks to be developed within its boundaries (Tustin Legacy Specific Plan, 2017). Typical of older communities that were established prior to the establishment of parkland requirements, the Open Space/ Conservation/ Recreation Element of the General Plan has identified a parkland deficiency.

The City's General Plan categorizes the different types of parks based on size and amenities. The General Plan identifies the following types of parks:

Parkettes: Parkettes are small, passive, local parks, generally less than one acre in size. They usually feature play apparatus, paved areas, benches, and landscape treatment. They may also feature children's play areas, quiet game areas, and sports activities such as multi-purpose courts, if space allows.

Neighborhood Park: All neighborhood parks should contain some area for active recreation depending on the size of the park. A neighborhood park site also needs to include amenities such as trees, shrubs, groundcover, turf areas, benches, trash receptacles, picnic tables, shade structures, and paved or decomposed-granite trails. The standard minimum size is three acres.

Community Park: Community parks are intended to serve an approximate population of 10,000 persons. Community parks should contain space for active recreational facilities such as game fields, game courts, swimming pools or aquatic center, and play areas as well as community centers, on-site parking, restrooms, and picnic areas.

School Playgrounds/Joint Agreements: The City includes school recreational facilities in which the City has a joint use agreement with the School District to meet the overall standard of 3 acres per 1,000 population.

Table 5.8-1: City of Tustin Parks

Name	Location	Approximate Distance from Specific Plan Area ¹	Size (acre)	Amenities
Pine Tree Park	1402 Bryan Ave.	.7 mile	4.2	Picnic Shelter, Sand Volleyball Pit, Playground Equipment, Restrooms
Frontier Park	1400 Mitchell Ave.	1 mile	4.5	Shaded Picnic Area, Frisbee Golf Course, Outdoor Fitness Equipment, Playground Equipment, Water Feature Play Area, Restrooms
Camino Real Park	13602 Parkcenter Ln.	1.6 miles	4.3	Picnic Shelter, Stage, Basketball Court (unlit), Playground Equipment, Restrooms
Centennial Park	14722 Devonshire Ave.	1.8 miles	8.0	Shaded Picnic Area, Sand Volleyball Pit, 2 Half-Court Basketball Courts (unlit), Horseshoe Pit, Playground Equipment, Restrooms
McFadden — Pasadena Parkette	17092 Medallion Ave.	1.1 mile	0.4	Playground and Climbing Structure
Magnolia Tree Park	2274 Fig Tree Dr.	2.3 miles	4.2	Picnic Shelter, 3 Tennis Courts (lighted), Half-Court Basketball Court, Playground Equipment, Restrooms
Peppertree Park	230 W. 1st St.	Within Specific Plan area.	5.5	Picnic Shelter, Horseshoe Pit, Youth Softball Diamond, On-site Parking, Restrooms
Heritage Park	2350 Kinsman Circle	1.8 miles	5.0	Shaded Group Picnic Areas, Youth Roller Hockey Rink, Basketball Courts, Playground Equipment, Restrooms
Columbus Tustin Park	14712 Prospect Ave.	.5 mile	13.0	Picnic Shelter, 4 Softball Diamonds (lighted), Universally Accessible Playground Equipment, 4 Tennis Courts (lighted), On-site Parking, Restrooms
Laurel Glen Park	13301 Myford Rd.	2.1 miles	3.0	Playground Equipment, Fitness Stations, ¼-mile Walking/Running Path, Minimal On-street Parking, Restrooms
Tustin Sports Park	12850 Robinson Dr.	2.6 miles	20.0	Picnic Shelter, 6 Tennis Courts (lighted), 2 Basketball Courts (lighted), Playground Equipment, Food Concession, Multi-use Trail, 3 Ball Diamonds (lighted), 2 Multi-use Play Fields, On-site Parking, Restrooms
Victory Park	3300 Park Ave.	3.9 miles	4.8	Picnic Shelter, Playgrounds, Reflection Area, Large Turf Area, On-site Parking, Restrooms
Citrus Ranch Park	2910 Portola Pkwy.	3.4 miles	17.0	Picnic Shelter, Playground Equipment, Walking Trail, Hilltop Gazebo, Lemon Tree Orchard, Plaza Area, 8 Picnic Pods with Barbeques, On-Site Park, Restrooms

Name	Location	Approximate Distance from Specific Plan Area ¹	Size (acre)	Amenities
Cedar Grove Park	11385 Pioneer Rd.	3.8 miles	9.7	Picnic Shelter, Nature Trail and Regional Trail Access, 2 Half-Court Basketball Courts (lighted), Interpretive Displays, Outdoor Fitness and Playground Equipment, Amphitheater, On-site Parking, Restrooms
Pioneer Road Park	10250 Pioneer Rd.	5.1 miles	3.1	Picnic Shelter, Playground Equipment, Half-Court Basketball Courts, Grass Volleyball Court, Barbeque, Walking Trail, Water Feature Play Area, Restrooms

1. From the intersection of Prospect Ave. and Main Street, the approximate mid-point of the Specific Plan area (shortest walking/driving distance).
Source: <http://www.tustinca.org/depts/parks/info/default.asp>, 2018.

5.1.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of the State CEQA Guidelines indicates that a project could have a significant effect if the project would:

- REC-1 Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- REC-2 Include recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The Initial Study, included as Appendix A, substantiated that Thresholds REC-1 and REC-2 would have less than significant impacts, however, these impact areas have been carried forward from the Initial Study for further analysis in this EIR.

5.1.5 METHODOLOGY

This analysis is based on a review of public information about Orange County and City of Tustin parks and recreational facilities. The analysis considers the increase in use of parks and recreation facilities that would result from the increased development intensity from the proposed project, along with the ability of existing park and recreation facilities to accommodate the increased use. The analysis considers whether an increase in use would result in the substantial physical deterioration of existing recreational facilities, such as accelerated wear on sports facilities and fields, or in the need for new or expanded facilities.

5.1.6 ENVIRONMENTAL IMPACTS

IMPACT REC-1: IMPLEMENTATION OF THE SPECIFIC PLAN COULD INCREASE THE USE OF EXISTING NEIGHBORHOOD AND REGIONAL PARKS OR OTHER RECREATIONAL FACILITIES SUCH THAT SUBSTANTIAL PHYSICAL DETERIORATION OF THE FACILITY WOULD OCCUR OR BE ACCELERATED [THRESHOLD REC-1].

IMPACT REC-2: IMPLEMENTATION OF THE SPECIFIC PLAN COULD INCLUDE RECREATIONAL FACILITIES OR REQUIRE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES WHICH MIGHT HAVE AN ADVERSE PHYSICAL EFFECT ON THE ENVIRONMENT [THRESHOLD REC-2].

Less than Significant with Mitigation.

Existing and future residents and employees within the Specific Plan area are within a 10-minute walking distance of 18.5 acres of community parks (Peppertree Park and Columbus Tustin Park). As described in Chapter 3, *Project Description*, the Specific Plan includes conceptual plans to install public parklets within the rights-of-way along El Camino Real, and on Main Street at the northern entrance to Tustin Plaza, that would consist of bulb-outs with enhanced paving and low walls to create public gathering or seating areas adjacent to the sidewalk. Although the current focus is to implement parklets on El Camino Real and Main Street within the heart of Old Town, expansion of the network of parklets to other areas within the Downtown Commercial Core is envisioned and encouraged. In addition, pocket parks that would contain pedestrian amenities such as seating, shade, trash/recycle receptacles, and lighting are opportunities through public-private partnerships that the Specific Plan encourages.

The Specific Plan area would have an estimated buildout of approximately 887 additional residential units (primarily integrated mixed-use development) and 300,000 additional square feet of non-residential uses. At buildout, the Specific Plan could generate approximately 2,696 new residents (based on 3.04 persons per unit) and 840 new employees (See Table 5.7-6: *Employees from Specific Plan Buildout*) within the boundaries of the proposed Specific Plan area. This population increase would result in an increased use of existing and planned City parks and recreational facilities.

In accordance with the Quimby Act, a jurisdiction may establish a parkland dedication standard based on its existing parkland ratio, provided required dedications do not exceed 5 acres per 1,000 persons. The City's parkland dedication requirements of 3 acres per 1,000 residents is the same as the Quimby Act.

For purposes of assessing impacts related to parkland dedication, the City does not use the 3.04 persons per unit metric used in other sections of this EIR. Instead, the City identifies parkland acreage requirements by multiplying the number of dwelling units by the parkland acres per unit based on the established density categories, as outlined in the Tustin City Code (Article 9, Chapter 3, Part 3, Section 9331[d]). The Specific Plan does not establish density ranges. Because the Project proposes multi-family residential development and encourages it to be provided in a mixed-use setting, this EIR Section uses the 15.1 to 25 dwelling units per gross acre category in the Tustin City Code which assumes 2.24 persons per unit or 0.0067 acre of parkland per unit. If future residential units were subject to the Quimby Act (because of a subdivision), the total amount of new parkland would be approximately 5.01 acres¹. The Tustin City Code also notes that dedication of land may be required by the City for a condominium, stock cooperative, or community apartment project which exceeds 50 dwelling units, regardless of the number of parcels. Therefore, the City may require the dedication of land regardless of where the future residential development is located within the Specific Plan area.

General Plan Conservation/Open Space/Recreation Policies 14.6 and 18.4 encourage future parks to be designed as joint-use facilities with public schools to reduce overall operations and maintenance costs. A source of additional funding for the maintenance and construction of new parks and recreation facilities is the City's General Fund, including property taxes collected from residents.

Because future residential development within the Specific Plan area may not be subject to the Quimby Act or the parkland dedication or in lieu fee payment requirements in the subdivision provisions of the Tustin City Code, future development projects could cumulatively contribute to the parkland deficiency identified

¹ Excluding the parkland provided by the 140 multi-family dwelling unit Vintage Planned Community project.

in the City's General Plan. Mitigation Measure REC-1 requires new residential dwelling units within the Specific Plan area that would not be subject to Tustin City Code Article 9, Chapter 3, Part 3, Section 9331(d) (Parkland Dedication) pay the parkland dedication and development fee provisions set forth in the Tustin City Code. Implementation of the Tustin City Code and Mitigation Measure REC-1 would result in fees that will be used to acquire land for and/or construct park and recreational facilities to serve future residents within the Specific Plan area and fully mitigate potential significant impacts.

5.8.7 CUMULATIVE IMPACTS

Less than Significant with Mitigation. The geographic area in which cumulative impacts to recreation could occur are the nearby locations within portions of the City of Tustin and Orange County that the residents from the project would recreate a majority of the time. Recreational needs of the future residents within the proposed project area and other cumulative development within the City of Tustin would add to local and regional demand for parks and recreation opportunities. However, each project within the City is required to comply with the City's parkland dedication requirements as contained in the Tustin City Code Article 9, Chapter 3, Part 3, Section 9331(d) (Parkland Dedication). As a result, new parks and trails would be developed as residential development occurs. PPP REC-1 and Mitigation Measure REC-1 would mitigate potential cumulative impacts and the proposed project would not contribute to a cumulatively considerable impact related to recreation. Cumulative impacts related to recreation would be less than significant.

5.8.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- City of Tustin General Plan Open Space/Conservation/Recreation Element
- City of Tustin City Code
 - Article 9, Chapter 3, Part 3, Section 9331

Plans, Program and Policies (PPPs) and Standard Conditions

The following Plans, Programs, and Policies (PPP) related to recreation are incorporated into the project and would reduce impacts related to recreation. These actions will be included in the project's mitigation monitoring and reporting program:

- **PPP REC-1:** Prior to the approval of the final map for subdivisions under the Specific Plan, applicants shall comply with the City of Tustin Subdivision Code (Article 9, Chapter 3, Part 3, Section 9331 of the Tustin City Code). Developers may dedicate land or pay a fee in lieu or a combination of both. The value of the amount of such fee shall be based upon the fair market value of the amount of land which would otherwise be required for dedication. Dedication of land may be required by the City for a condominium, stock cooperative, or community apartment project which exceeds 50 dwelling units.

5.8.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Significant Impact. Upon implementation of regulatory requirements, Impacts REC-1 and REC-2 would be significant.

5.8.10 MITIGATION MEASURES

Mitigation Measure REC-1: For residential projects not subject to City of Tustin Subdivision Code (Article 9, Chapter 3, Part 3, Section 9331 of the Tustin City Code), applicants shall pay a parkland development fee to the City of Tustin prior to the issuance of building permits. The value of the amount of such fee shall be based upon the fair market value of the amount of land which would otherwise be required for dedication.

5.8.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant. To reduce impacts associated with Impact REC-1 and REC-2, Mitigation Measure REC-1 is included and PPP REC-1 is identified to ensure that parkland dedication and development fee provisions set forth in the Tustin City Code apply to all new residential dwelling units within the Specific Plan area. Implementation of mitigation measure REC-1 and PPP REC-1 would reduce potential impacts related to recreation to a less than significant level.

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5.9 Transportation and Circulation

5.9.1 INTRODUCTION

This section describes the existing transportation and circulation conditions, criteria for the level of service, and impacts from implementation of the proposed Specific Plan. As necessary, mitigation measures for significant transportation and circulation impacts resulting from the construction and operation of the proposed Specific Plan are also included. The proposed Specific Plan's impacts are analyzed in the context of existing (2016) and future buildout (2035) conditions. This analysis is based on information contained in the Traffic Study by Stantec in 2017, which is included as Appendix E.

5.9.2 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 Level of Service (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

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, 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, “automobile delay, as described solely by level of service of 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 Tustin continues to use the established LOS criteria.

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 relevant to the proposed Specific Plan 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

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.

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 that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMPHS. Per the CMP guidelines, this number is based on the desire to analyze any impacts that comprise 3 percent or more of the existing CMP highway system facilities’ capacity. Therefore, the CMP traffic impact analysis requirements relate only to the designated CMP highway system. Within the defined CMP highway network, CMPHS intersections are not allowed to deteriorate to a condition which is worse than LOS E or the base year LOS, if worse than E, without mitigation being prescribed in an acceptable deficiency plan. None of the intersections in the traffic study area for the proposed Specific Plan are designated as a CMP intersection.

City of Tustin General Plan Circulation Element

The City of Tustin Circulation Element governs the long-term mobility system in the City, and includes goals and policies that are intended to balance the City’s future growth and land use development, roadway

size, traffic service levels, and community character. Applicable Circulation Element policies that are relevant to the proposed Specific Plan include the following.

- Goal 1:** Provide a system of streets that meets the needs of current and future inhabitants and facilitates the safe and efficient movement of people and goods throughout the City consistent with the City's ability to finance and maintain such a system.
- Policy 1.10:** Require that proposals for major new developments include a future traffic impact analysis which identifies measures to mitigate any identified project impacts.
- Policy 1.11:** Encourage new development which facilitates transit services, provides for non-vehicular circulation and minimizes vehicle miles traveled.
- Policy 1.12:** Minimize pedestrian and vehicular conflicts through street design and well-marked pedestrian crossings.
- Goal 6:** Increase the use of non-motorized modes of transportation.
- Policy 6.1:** Promote the safety of pedestrians and bicyclists by adhering to uniform standards and practices, including designation of bicycle lanes, off-road bicycle trails, proper signage, and adequate sidewalk, bicycle lane, and off-road bicycle trail widths.
- Policy 6.12:** Provide for a non-vehicular circulation system that encourages bicycle transportation and pedestrian circulation.

5.9.3 ENVIRONMENTAL SETTING

Existing Roadway Network

The Specific Plan area is generally bounded by Interstate 5 (I-5), State Route 55 (SR-55), Newport Avenue and First Street. It is bisected by Main Street and First Street as the primary east-west streets and B Street and El Camino Real as the primary north-south streets. As shown in Figure 5.9-1, *Traffic Study Area Map*, the traffic study area for the proposed Specific Plan includes 24 intersections; 22 of which are under the City of Tustin's jurisdiction and 2 are under California Department of Transportation (Caltrans) jurisdiction. As shown on Table 5.9.1 below, only one location (Newport at I-5 NB On-Ramp) currently operates at an unacceptable LOS, which occurs in the a.m. peak hour.

Table 5.9.1: Existing Conditions Intersection LOS Summary

Intersection	Jurisdiction	AM Peak Hour		PM Peak Hour	
		ICU/Delay (s)	LOS	ICU/Delay (s)	LOS
1. Tustin at 4th	Tustin	0.59	A	0.75	C
2. Yorba at Irvine	Tustin	0.58	A	0.57	A
3. B at Irvine	Tustin	0.55	A	0.43	A
4. Prospect at Irvine	Tustin	0.64	B	0.70	B
5. Newport at Irvine	Tustin	0.71	C	0.69	B
6. Tustin at 1st	Tustin	0.39	A	0.48	A
7. Yorba/Pacific at 1st	Tustin	0.40	A	0.51	A
8. B at 1st	Tustin	0.37	A	0.45	A
9. C at 1st	Tustin	0.34	A	0.41	A
10. El Camino Real at 1st	Tustin	0.37	A	0.45	A
11. Prospect at 1st	Tustin	0.45	A	0.54	A
12. Newport at 1st	Tustin	0.55	A	0.58	A
13. C at 2nd	Tustin	0.11	A	0.12	A
14. Prospect at 2nd	Tustin	0.17	A	0.23	A

Intersection	Jurisdiction	AM Peak Hour		PM Peak Hour	
		ICU/Delay (s)	LOS	ICU/Delay (s)	LOS
15. C at 3rd	Tustin	0.08	A	0.22	A
16. Prospect at 3rd	Tustin	0.19	A	0.25	A
17. El Camino Real at Main	Tustin	0.57	A	0.61	B
18. Prospect at Main	Tustin	0.42	A	0.56	A
19. Newport at Main	Tustin	0.60	A	0.55	A
20. El Camino Real at 6th	Tustin	0.43	A	0.48	A
21. Newport at 6th	Tustin	0.49	A	0.37	A
22. Newport at El Camino Real	Tustin	0.72	C	0.60	A
23. Newport at I-5 NB On-Ramp	Caltrans	124.8	F	20.2	C
24. Newport at Nissan	Caltrans	17.3	B	19.9	B

Sources: Stantec, 2017, Appendix E.
ICU – intersection capacity utilization; (s) – seconds
Bold denotes a peak hour deficiency.

Transit Services

The Orange County Transportation Authority (OCTA) provides bus service within Orange County including the City of Tustin. The following routes serve the Specific Plan area: Route 60, Route 64, Route 71, Route and 79, as shown on Figure 5.9-2, *Transit Stop Locations*. These routes primarily serve stops on First Street and Newport Avenue, although there are several bus stops on Centennial Way near City Hall. The most heavily utilized bus stops are located near the intersection of First Street and Newport Avenue.

Pedestrian and Bicycle Facilities

The Specific Plan currently only includes one Class I bicycle facility on Newport Avenue. However; there are extensive pedestrian facilities proposed throughout the Specific Plan area. The majority of intersections have designated crosswalks on more than one leg of the intersection, and bulb-outs are recommended to reduce pedestrian crossing distance and time at intersections along Main Street, First Street, Second Street and Third Street within the Specific Plan area. .

5.9.4 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 an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- TR-2 Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- TR-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks;
- TR-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- TR-5 Result in inadequate emergency access; or

- TR-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The Initial Study, included as Appendix A, established that the project would not result in impacts related to Thresholds TR-3, TR-4, and TR-5. These impacts will not be addressed in the following analysis.

Intersection Thresholds

Per the City General Plan, the City seeks to achieve or maintain a LOS D standard at all intersections. For a LOS worse than LOS D (i.e., ICU greater than an 0.90), mitigation of the project contribution is required to bring the intersection back to no-project conditions or better if the project contribution to the ICU is 0.02 or greater.

For ramp intersections maintained by Caltrans, no specific performance criterion has been set by Caltrans. The “Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002)” states that “Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities;” however, Caltrans acknowledges that it may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. The Caltrans guidelines state that if an existing State highway facility is operating worse than the appropriate target LOS, the existing measure of effectiveness (MOE) should be maintained. For this analysis, the City’s LOS D threshold is applied to the Caltrans intersections for consistency with the City’s threshold. Table 5.9-2 details the delays that define each LOS.

Table 5.9-2: Intersection Level of Service Ranges (ICU and HCM Delay)

Level of Service (LOS)	Intersection Capacity Utilization (ICU)	Highway Capacity Manual (HCM) Average Delay for Signalized Intersections	HCM Average Delay for Unsignalized Intersections
A	0.00 – 0.60	0.00 – 10.0 seconds	0.00 – 10.0 seconds
B	0.61 – 0.70	10.1 – 20.0 seconds	10.1 – 15.0 seconds
C	0.71 – 0.80	20.1 – 35.0 seconds	15.1 – 25.0 seconds
D	0.81 – 0.90	35.1 – 55.0 seconds	25.1 – 35.0 seconds
E	0.91 – 1.00	55.1 – 80.0 seconds	35.1 – 50.0 seconds
F	Above 1.00	Above 80.0 seconds	Above 50.0 seconds

Sources: Stantec, 2017, Appendix E.

5.9.5 METHODOLOGY

This analysis focuses on the nature and magnitude of the change in the transportation and circulation environment due to implementation of the proposed Specific Plan, based on the maximum development assumptions outlined in Section 3.4.1, *Project Description*. This evaluation of the significance of potential impacts related to transportation and circulation has been prepared in accordance with the CMP and the Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002). Trips generated by the Specific Plan’s proposed land uses have been estimated using the Orange County Transportation Analysis Model (OCTAM).

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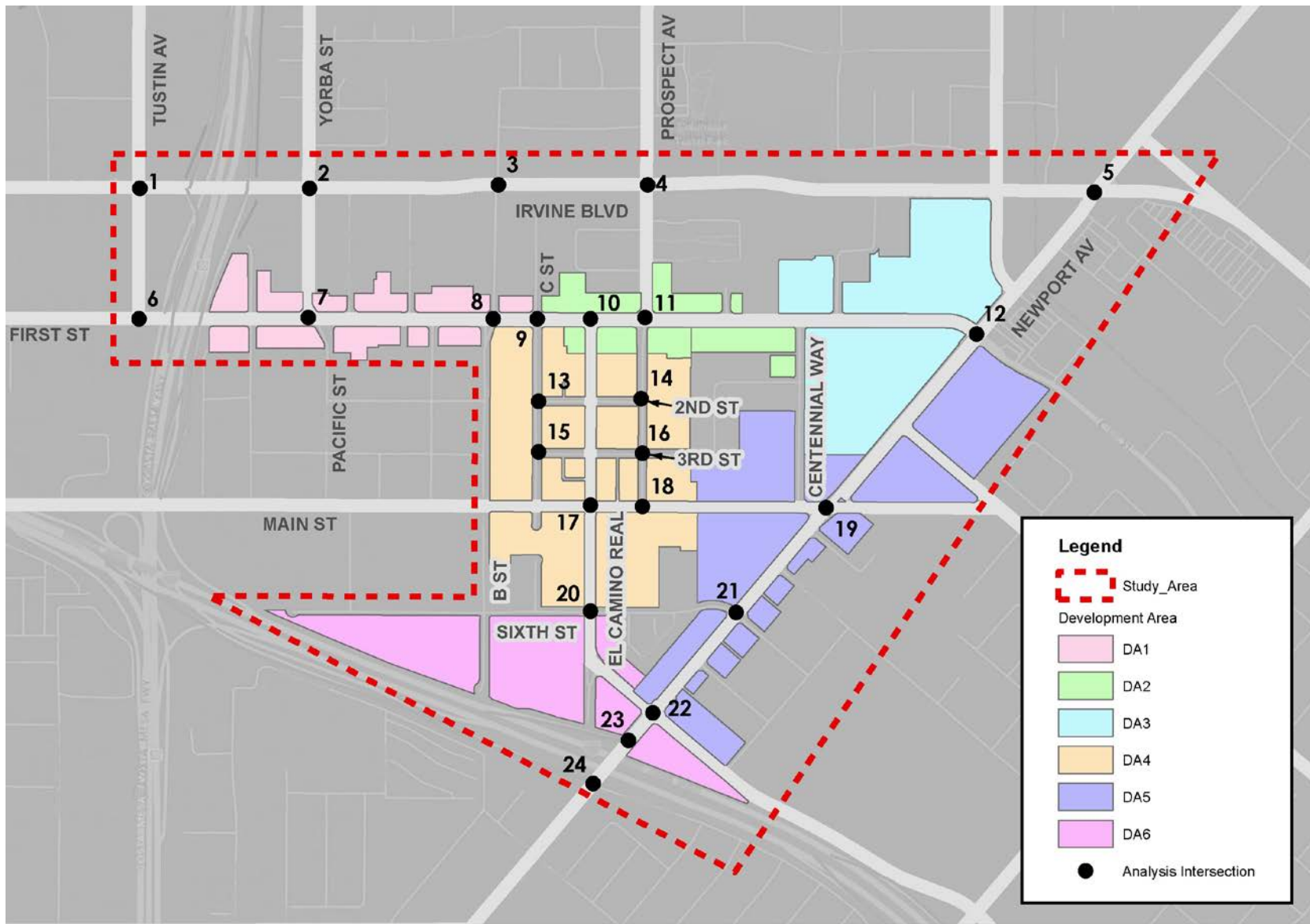
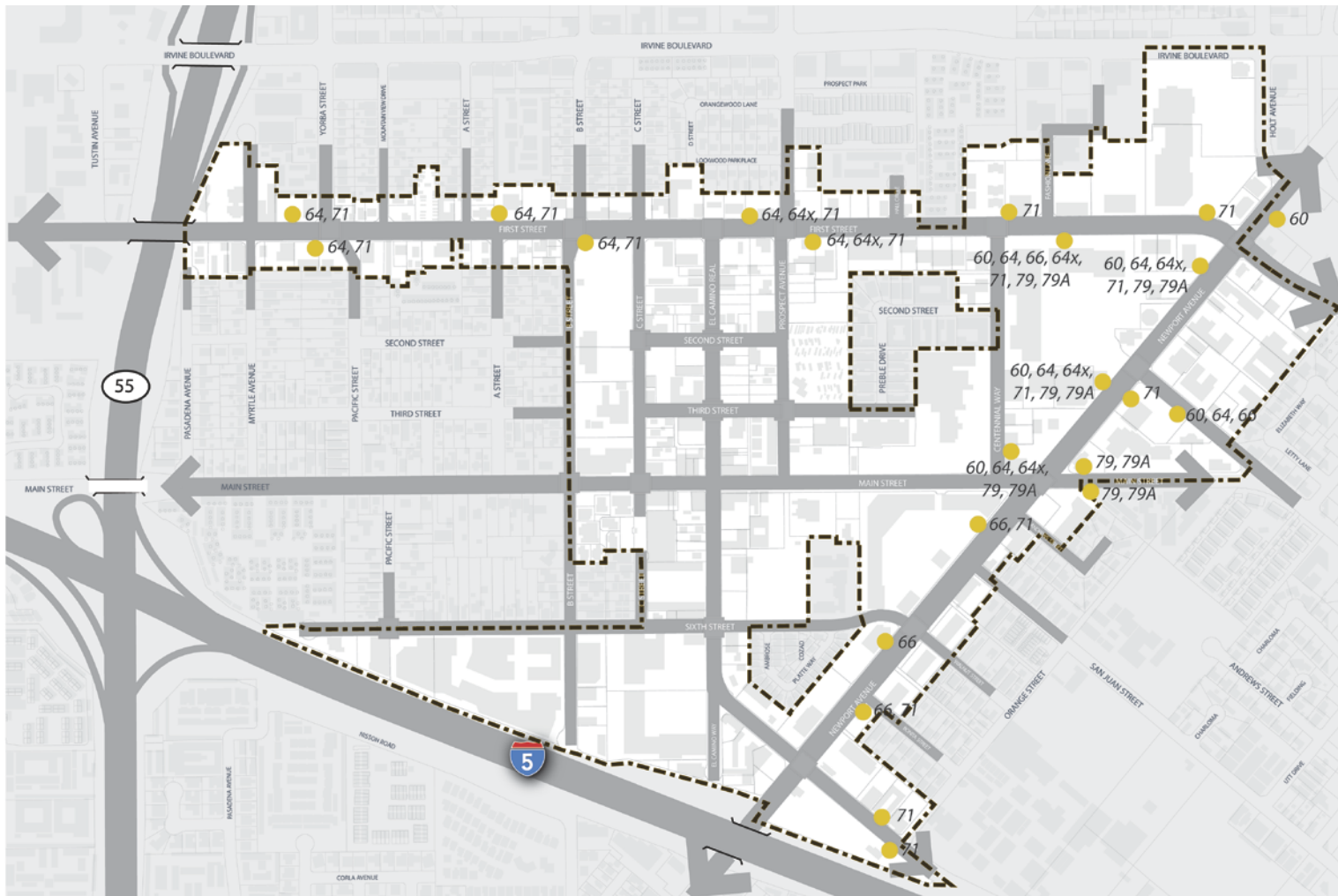


Figure 5.9-1: Traffic Study Area Map

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Legend

▭ Project Area

● Bus Stop

60, 64 OCTA Bus Routes Serving Stop

Figure 5.9-2: Transit Stop Locations

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5.9.6 ENVIRONMENTAL IMPACTS

IMPACT TR-1: THE PROJECT WOULD CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE OR POLICY ESTABLISHING MEASURES OF EFFECTIVENESS FOR THE PERFORMANCE OF THE CIRCULATION SYSTEM, TAKING INTO ACCOUNT ALL MODES OF TRANSPORTATION INCLUDING MASS TRANSIT AND NON-MOTORIZED TRAVEL AND RELEVANT COMPONENTS OF THE CIRCULATION SYSTEM, INCLUDING BUT NOT LIMITED TO INTERSECTIONS, STREETS, HIGHWAYS AND FREEWAYS, PEDESTRIAN AND BICYCLE PATHS, AND MASS TRANSIT [THRESHOLD TR-1]; AND

IMPACT TR-2: THE PROJECT WOULD CONFLICT WITH AN APPLICABLE CONGESTION MANAGEMENT PROGRAM, INCLUDING, BUT NOT LIMITED TO, LEVEL OF SERVICE STANDARDS AND TRAVEL DEMAND MEASURES, OR OTHER STANDARDS ESTABLISHED BY THE COUNTY CONGESTION MANAGEMENT AGENCY FOR DESIGNATED ROADS OR HIGHWAYS [THRESHOLD TR-2].

Significant and Unavoidable Impact. The proposed Specific Plan anticipates development of up to 887 dwelling units and 300,000 square feet of non-residential development through the year 2035. The Specific Plan has identified the anticipated number of dwelling units within each Development Area (DA) identified by the Specific Plan, but also allows for a shift of units between DA's up to a maximum increase of 25 percent. The traffic analysis below evaluates the maximum anticipated impact; and therefore, evaluates the maximum allowable unit increase that could occur with a transfer of units within each DA.

As detailed further in Section 3.0, *Project Description*, the proposed Specific Plan includes conceptual changes to Main Street, First Street, Second Street, and Third Street, as summarized below.

- First Street – Newport Avenue to just east of State Route 55 (SR-55) freeway bridge: Change from four travel lanes with on-street parking to two travel lanes with a median turn lane, diagonal parking and bike lanes. The City General Plan Circulation Element would need to be revised to reflect this change.
- Second Street – C Street to Prospect Avenue: Change from a two-lane/two-way street with parallel parking to a single lane/one-way street (eastbound) with diagonal parking.
- Third Street – C Street to Prospect Avenue: Change from a two-lane/two-way street with parallel parking to a single lane/one-way street (westbound) with diagonal parking.
- Main Street – Newport Avenue to just west of Williams Street: Change from a two-lane street (west of Library) and a four-lane street (east of Library) with parallel parking to two travel lanes with a median, bike lanes and parallel and diagonal parking. The City General Plan Circulation Element would need to be revised to reflect this change.

Project Trip Generation

Trip generation estimates and trip distribution for build out of the proposed Specific Plan were based on an OCTAM model run, which identified that the proposed project would result in:

- 8,496 daily trips;
- 660 a.m. peak hour trips; and
- 719 p.m. peak hour trips.

The distribution of these trips as derived by the travel demand model include the following:

- 5 percent to/from the north on Newport Avenue
- 10 percent to/from the north on Prospect Avenue
- 30 percent to/from the south on Newport Avenue
- 10 percent to/from the east on Main Street
- 10 percent to/from the east on Irvine Boulevard
- 15 percent to/from the north via SR-55
- 5 percent to/from the west on Main Street
- 5 percent to/from the west on First Street
- 10 percent to/from the west on Irvine Boulevard

Existing Plus Project

Table 5.9.3 provides a comparison of Existing and Existing Plus Project intersection operations. The existing setting is based on the existing traffic counts collected in December 2016 and represents the conditions present throughout the study area at the time of the preparation of the traffic impact analysis. As shown on Table 5.9.3, the City locations in the traffic study area currently operate at an acceptable LOS. However, the uncontrolled Caltrans freeway ramp intersection at Newport Avenue and the I-5 northbound on-ramp is currently operating at LOS F during the a.m. peak hour for the northbound left-turning vehicles trying to access the I-5 northbound on-ramp from Newport Avenue. These left-turning vehicles have to yield to the Newport Avenue southbound traffic, which does not have to stop and results in extended delays to the turning vehicles.

The Existing Plus Project scenario includes trips that would be generated by the proposed 887 dwelling units. As noted in the project description, the Specific Plan allows each development area to transfer in dwelling units up to 25 percent of that areas allowable units. The Existing Plus Project with Transfers scenario assumes a 25 percent increase in dwelling units in each development area to account for allowed transfers. With implementation of the anticipated development in the existing plus project and the existing plus project with the 25 percent dwelling unit allowable increase transfer within each DA conditions, all City of Tustin intersections are forecast to operate at LOS C or better, and impact to the City of Tustin intersections would not occur, as shown on Table 5.9.3. Of note, DA-5 does not allow dwelling units nor transfers into the DA.

However, the Caltrans intersection of Newport Avenue at I-5 northbound on-ramp is forecast to operate at LOS F under existing, existing plus project, and existing plus project maximum transfer conditions during the a.m. peak hour, and the average delay for the minor street movement is higher under the existing plus project and the existing plus project maximum transfer conditions than under the existing conditions. Therefore, the Caltrans ramp intersection at Newport Avenue at the I-5 northbound on-ramp would be impacted by the project in the existing plus project conditions.

Table 5.9-3: Existing Plus Project Intersection Level of Service

Intersection	Existing Count (2016)				Existing Plus Project				Existing Plus Project with Transfers ¹			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
1. Tustin at 4th	0.59	A	0.75	C	0.56	A	0.79	C	0.56	A	0.80	C
2. Yorba at Irvine	0.58	A	0.57	A	0.60	A	0.58	A	0.62	B	0.61	B

Intersection	Existing Count (2016)				Existing Plus Project				Existing Plus Project with Transfers ¹			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
3. B at Irvine	0.55	A	0.43	A	0.57	A	0.44	A	0.57	A	0.44	A
4. Prospect at Irvine	0.64	B	0.70	B	0.68	B	0.72	C	0.69	B	0.73	C
5. Newport at Irvine	0.71	C	0.69	B	0.69	B	0.70	B	0.71	C	0.71	C
6. Tustin at 1st	0.39	A	0.48	A	0.35	A	0.39	A	0.36	A	0.40	A
7. Yorba/Pacific at 1st	0.40	A	0.51	A	0.51	A	0.59	A	0.52	A	0.60	A
8. B at 1st	0.37	A	0.45	A	0.51	A	0.62	B	0.52	A	0.64	B
9. C at 1st	0.34	A	0.41	A	0.48	A	0.61	B	0.49	A	0.63	B
10. El Camino Real at 1st	0.37	A	0.45	A	0.45	A	0.60	A	0.46	A	0.63	B
11. Prospect at 1st	0.45	A	0.54	A	0.57	A	0.68	B	0.59	A	0.69	B
12. Newport at 1st	0.55	A	0.58	A	0.58	A	0.58	A	0.58	A	0.58	A
13. C at 2nd	0.11	A	0.12	A	0.11	A	0.12	A	0.12	A	0.13	A
14. Prospect at 2nd	0.17	A	0.23	A	0.16	A	0.22	A	0.16	A	0.23	A
15. C at 3rd	0.08	A	0.22	A	0.08	A	0.20	A	0.08	A	0.21	A
16. Prospect at 3rd	0.19	A	0.25	A	0.18	A	0.22	A	0.19	A	0.24	A
17. El Camino Real at Main	0.57	A	0.61	B	0.56	A	0.58	A	0.61	B	0.62	B
18. Prospect at Main	0.42	A	0.56	A	0.38	A	0.49	A	0.39	A	0.50	A
19. Newport at Main	0.60	A	0.55	A	0.61	B	0.57	A	0.61	B	0.57	A
20. El Camino Real at 6th	0.43	A	0.48	A	0.44	A	0.50	A	0.45	A	0.54	A
21. Newport at 6th	0.49	A	0.37	A	0.53	A	0.40	A	0.53	A	0.40	A
22. Newport at El Camino Real	0.72	C	0.60	A	0.76	C	0.63	B	0.77	C	0.65	B
23. Newport at I-5 NB On-Ramp (Caltrans)	124.8	F	20.2	C	191.8	F	20.6	C	208.4	F	21.0	C
24. Newport at Nisson (Caltrans)	17.3	B	19.9	B	17.6	B	19.9	B	14.2	B	20.6	C

Note: 1. Existing plus project with the 25 percent dwelling unit allowable increase transfer within each DA.
 Source: Stantec 2017, Appendix E.
 ICU – intersection capacity utilization; Delay in seconds.
 Bold denotes a peak hour deficiency.

Installation of a traffic signal at the intersection of Newport Avenue at the I-5 northbound on-ramp would allow this location to operate at an LOS A and B in the peak hours, and is included as Mitigation Measure TR-1. However, the intersection is under Caltrans jurisdiction, and the City does not have the sole authority to install a signal at this location. Therefore, the impact at this intersection is considered significant and unavoidable. A traffic signal at this location is also recommended in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015. Unless and until Caltrans implements the traffic signal at this location, impacts would remain significant and unavoidable. The LOS for the Newport Avenue at I-5 northbound on-ramp intersection with the recommended traffic signal installed is shown in Table 5.9-4.

Table 5.9-4: Existing Plus Project Level of Service at Newport Avenue and I-5 NB On-Ramp with Traffic Signal

Intersection	Existing Plus Project w/Traffic Signal				Existing Plus Project with Transfers w/Traffic Signal			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
23. Newport at I-5 NB on-ramp	11.6	B	7.7	A	11.9	B	7.6	A

Source: Stantec 2017, Appendix E.
 Delay in seconds.

Horizon Year (2035)

Traffic projections for horizon year (2035) conditions were derived from the OCTAM model, which reflects the growth anticipated by the 2016 SCAG RTP. As described in Section 3.0, *Project Description*, build out anticipated by the proposed Specific Plan is based on the year 2035. Therefore, the following analysis includes vehicular trips from build out of the DCCSP in 2035.

With implementation of the 25 percent dwelling unit allowable increase transfer within each DA conditions, the City of Tustin intersection of Newport Avenue at El Camino Real would operate at an unacceptable LOS. As a result, Mitigation Measure TR-2 has been included to mitigate the project impacts. Table 5.9-5 provides the cumulative no project and with project traffic conditions in 2035.

Table 5.9-5: Cumulative 2035 Plus Project Intersection Level of Service

Intersection	2035 No-Project				2035 With-Project				2035 With-Project With Transfers			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
1. Tustin at 4th	0.67	B	0.83	D	0.63	B	0.87	D	0.63	B	0.87	D
2. Yorba at Irvine	0.71	C	0.70	B	0.71	C	0.71	C	0.74	C	0.73	C
3. B at Irvine	0.63	B	0.51	A	0.65	B	0.55	A	0.66	B	0.55	A
4. Prospect at Irvine	0.82	D	0.86	D	0.85	D	0.89	D	0.85	D	0.89	D
5. Newport at Irvine	0.91	E	0.90	D	0.89	D	0.89	D	0.90	D	0.89	D
6. Tustin at 1st	0.44	A	0.65	B	0.38	A	0.53	A	0.39	A	0.53	A
7. Yorba/Pacific at 1st	0.45	A	0.61	B	0.60	A	0.76	C	0.61	B	0.78	C
8. B at 1st	0.43	A	0.53	A	0.59	A	0.74	C	0.60	A	0.76	C
9. C at 1st	0.39	A	0.46	A	0.56	A	0.72	C	0.58	A	0.74	C
10. El Camino Real at 1st	0.36	A	0.55	A	0.46	A	0.70	B	0.48	A	0.72	C
11. Prospect at 1st	0.52	A	0.67	B	0.67	B	0.88	D	0.68	B	0.89	D
12. Newport at 1st	0.64	B	0.67	B	0.69	B	0.67	B	0.69	B	0.69	B
13. C at 2nd	0.14	A	0.15	A	0.12	A	0.16	A	0.13	A	0.16	A
14. Prospect at 2nd	0.21	A	0.28	A	0.21	A	0.27	A	0.22	A	0.28	A
15. C at 3rd	0.12	A	0.27	A	0.12	A	0.25	A	0.12	A	0.27	A
16. Prospect at 3rd	0.25	A	0.29	A	0.22	A	0.28	A	0.23	A	0.29	A
17. El Camino Real at Main	0.82	D	0.85	D	0.82	D	0.79	C	0.86	D	0.82	D
18. Prospect at Main	0.63	B	0.81	D	0.58	A	0.74	C	0.60	A	0.75	C
19. Newport at Main	0.77	C	0.70	B	0.78	C	0.72	C	0.78	C	0.72	C
20. El Camino Real at 6th	0.47	A	0.55	A	0.50	A	0.58	A	0.51	A	0.61	B
21. Newport at 6th	0.53	A	0.39	A	0.57	A	0.41	A	0.57	A	0.41	A
22. Newport at El Camino Real	0.87	D	0.72	C	0.90	D	0.76	C	0.92	E	0.76	C
23. Newport at I-5 NB On-Ramp (Caltrans)	218.1	F	30.0	D	312.7	F	38.3	E	337.0	F	39.7	E
24. Newport at Nisson (Caltrans)	16.8	B	24.6	C	17.7	B	25.2	C	17.7	B	25.3	C

Note: 1. Cumulative 2035 plus project with the 25 percent dwelling unit allowable increase transfer within each DA.

Source: Stantec 2017, Appendix E.

ICU – intersection capacity utilization; Delay in seconds.

Bold denotes a peak hour deficiency.

Mitigation Measure TR-2 would improve the intersection of Newport Avenue at El Camino Real through restriping of the eastbound through lane to a shared through/right-turn lane so the eastbound approach would consist of one left-turn lane, one shared through/right-turn lane, and one right-turn lane. As shown on Table 5.9-6, implementation of Mitigation Measure TR-2 would reduce the impact to a less than significant level.

Table 5.9-6: Level of Service at Newport Avenue and El Camino Real with Mitigation

Intersection	2035 With Project With Transfers With Mitigation			
	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
22. Newport Avenue & El Camino Real	0.88	D	0.76	C

Source: Stantec 2017, Appendix E.
Delay in seconds

The 25 percent dwelling unit allowable transfer is a hypothetical worst-case scenario. Since the Newport Avenue and El Camino Real intersection is significantly impacted only in this worst-case scenario under the cumulative conditions, Mitigation Measure TR-2 requires monitoring this intersection and requiring the improvement only when necessary.

In addition, the Caltrans ramp intersection at Newport Avenue and the I-5 northbound on-ramp is forecast to operate at LOS F under cumulative no-project, with-project, and with the maximum transfer conditions during the a.m. peak hour; and would operate at LOS E in the p.m. peak hour in the with-project and with the maximum unit transfer conditions. Additionally, the average delay for the minor street movement is higher under the cumulative with-project and the cumulative with-project with maximum transfer conditions than in the cumulative no-project condition. Therefore, an impact would occur at the Caltrans ramp intersection at Newport Avenue and the I-5 northbound on-ramp.

Installing a traffic signal at the intersection of Newport Avenue at the I-5 northbound on-ramp, as included by Mitigation Measure TR-1, would reduce the delay at this location to operate at an acceptable LOS as shown in Table 5.9-7. As described previously, a traffic signal at this location has already been recommended by Caltrans in October 2015. However, this intersection is under Caltrans jurisdiction and the City does not have the authority to install a traffic signal. As a result, the impact at this intersection would be significant and unavoidable until Caltrans completes installation of a traffic signal at this location.

Table 5.9-7: Cumulative Plus Project LOS at Newport Avenue and I-5 NB On-Ramp with Traffic Signal

Intersection	2035 With Project w/Traffic Signal				2035 With Project, With Transfers, w/Traffic Signal			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
23. Newport at I-5 NB On-Ramp	13.4	B	8.7	A	13.7	B	8.6	A

Source: Stantec 2017, Appendix E.
Delay in seconds

IMPACT TR-3: THE PROJECT WOULD NOT CONFLICT WITH ADOPTED POLICIES, PLANS, OR PROGRAMS REGARDING PUBLIC TRANSIT, BICYCLE, OR PEDESTRIAN FACILITIES, OR

OTHERWISE DECREASE THE PERFORMANCE OR SAFETY OF SUCH FACILITIES [THRESHOLD TR-6].

No Impact. As described previously, the Specific Plan area is currently served by a network of pedestrian facilities and OCTA bus routes. Additionally, there is one existing bicycle facility in the traffic study area. Implementation of the proposed Specific Plan would include improvements to the circulation network to create “complete streets” in which the roadway design gives pedestrians and bicyclists greater emphasis and vehicles less dominance. As detailed in Section 3.0, *Project Description*, conceptual improvements on Main Street include installation of a Class 2 on-street bicycle lane on the north side of the street that would connect to the existing Class 1 bicycle lane on the west side of Newport Avenue. On the south side of Main Street, the pedestrian sidewalk would be expanded to provide an integrated Class 1 bicycle lane that would be enhanced with decorative pavement.

Conceptual project improvements to First Street include expanding the existing sidewalk, and installation of a Class 2 bicycle lane on both the north and south sides of the street that would connect to the Class 1 bicycle lane on Newport Avenue. In addition, “Sharrow” bicycle lanes (Class 3), marked with on-street symbols but not striped, are conceptually proposed for the following 6 street segments:

- Main Street from B Street to Prospect Avenue.
- El Camino Real from First Street to Newport Avenue
- B Street between First Street and Sixth Street
- Prospect Avenue between First Street and Main Street
- Centennial Way between First Street and Main Street
- Sixth Street between B Street and Newport Avenue

The DCCSP Design Criteria also encourages installation of bicycle racks within the public right-of-way and within private development.

Additionally, the DCCSP recommends installation of additional bus shelters along existing OCTA routes. New development along transit routes is encouraged and should be sited for easy access to transit stops and should provide connecting pedestrian walkways to promote transit use.

Implementation of the DCCSP would enhance the bicycling environment and maximize bicycle accessibility; in addition, it would improve pedestrian mobility and provide shelters to promote the use of transit facilities. Implementation of the proposed project would not disrupt or conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Conversely, the DCCSP would implement such plans and facilities. Therefore, implementation of the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

5.9.7 CUMULATIVE IMPACTS

Significant and Unavoidable.

Traffic

As described previously, the impacts of proposed cumulative development in relation to roadway levels of service would result in the intersection of Newport Avenue at the I-5 northbound on-ramp operating at unsatisfactory peak period levels of service in the 2035 cumulative traffic conditions. As detailed above,

level of service standards would be exceeded without the proposed Specific Plan, and the addition of traffic from development of the proposed Specific Plan would be cumulatively considerable due to the existing condition and volume of vehicular trips that would be generated from build out of the DCCSP.

However, the intersection of Newport Avenue at the I-5 northbound on-ramp is under the jurisdiction of Caltrans, and Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects. As noted previously, a traffic signal at this location is also recommended in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015. Unless and until Caltrans implements the traffic signal at this location, impacts would remain significant and unavoidable. Therefore, no feasible mitigation is available to reduce these potential impacts. Additionally, the City of Tustin cannot guarantee installation of a traffic signal that is in a location under Caltrans jurisdiction. Therefore, traffic impacts from implementation of the DCCSP would be cumulatively significant and remain significant and unavoidable.

Alternative Transportation

As described previously, the proposed Specific Plan would provide additional pedestrian and bicycle facilities in the area, and would not alter any existing bicycle or pedestrian facilities. The DCCSP would also promote the use of OCTA transit services by provision of bus shelters. Cumulative development would be subject to site-specific environmental and planning reviews that would address consistency with adopted policies, plans and provisions related to public transit, bicycle facilities and pedestrian facilities. Because the project implements the adopted plans for bicycle and pedestrian facilities, and future development would be required to be consistent with these plans, the proposed Specific Plan would not contribute to a cumulative impact. Thus, the proposed Specific Plan would not result in cumulative impacts related to alternative transportation.

5.9.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- Congestion Management Program
- Senate Bill 743
- SCAG 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy
- City of Tustin General Plan Circulation Element

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.9.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Significant. Impacts TR-1 and TR-2 would be significant and would require mitigation. These impacts are related to conflicts with applicable plans (including the congestion management program), ordinances, or policies establishing measures of effectiveness for the performance of the circulation system. However, impacts related to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities (Impact TR-3) would be less than significant.

5.9.10 MITIGATION MEASURES

Mitigation Measure TR-1: The City of Tustin will cooperate with Caltrans when Caltrans moves forward with its planned improvements to the intersection of Newport Avenue at the I-5 northbound on-ramp. Caltrans' improvements include installation of a traffic signal per the recommendations in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015.

Mitigation Measure TR-2: The City of Tustin shall monitor the intersection operation at Newport Avenue and El Camino Real as development applications are received and shall provide the following improvements, or equivalent, once the intersection LOS becomes deficient: Restripe the eastbound through lane to a shared through/right-turn lane so the eastbound approach would consist of one left-turn lane, one shared through/right-turn lane, and one right-turn lane.

5.9.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable. As described previously, to reduce impacts associated with Impact TR-1 and TR-2, Mitigation Measure TR-1 would need to be implemented for the Newport Avenue at I-5 northbound on-ramp intersection, which require coordination and implementation from Caltrans that cannot be guaranteed by the City of Tustin. As a result, traffic impacts at the intersection of Newport Avenue at I-5 northbound on-ramp would be significant and unavoidable.

However, to reduce impacts associated with the intersection of Newport Avenue and El Camino Real, Mitigation Measure TR-2 would be implemented, which would reduce the potential traffic impacts to a less than significant level.

REFERENCES

Tustin Downtown Commercial Core Specific Plan Traffic Study, Prepared by Stantec, 2017, Appendix E.

5.10 Tribal Cultural Resources

5.10.1 INTRODUCTION

This section addresses potential environmental effects of the proposed Specific Plan related to tribal cultural resources. Information within this section includes data from the Cultural Resource Assessment for the Tustin Downtown Commercial Core Specific Plan that was prepared by Cogstone, May 2017, which is provided as Appendix C; and the project specific Native American Consultation that occurred, as described herein.

5.10.2 REGULATORY SETTING

California Senate Bill 18

Senate Bill 18 (SB 18) (California Government Code Section 65352.3) sets forth requirements for local governments to consult with Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning for the purpose of protecting, or mitigating impacts on, cultural places. The Tribal Consultation Guidelines: Supplement to General Plan Guidelines (OPR, 2005), identifies the following contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Because the project consists of a Specific Plan, it is subject to the statutory requirements of SB 18 Tribal Consultation Guidelines.

California Assembly Bill 52

Assembly Bill 52 (AB 52), which became effective in January 2016 as Public Resource Code Section 21080.3.1, established a new requirement under CEQA to consider "tribal cultural values, as well as scientific and archaeological values when determining impacts and mitigation." Tribal Cultural Resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in

the California Register of Historical Resources or local registers of historical resources. In addition, AB 52 implemented a new consultation process, in which lead agencies are required to offer Native American tribes that have submitted written requests to participate in consultations to protect tribal cultural resources and that Native American tribes have the opportunity to consult on CEQA documents prior to submitting an EIR. Pursuant to AB 52, lead agencies are required to provide formal notice to the tribes requesting to participate within 14-days of the lead agency's determination that an application package is complete. Tribes have 30-days to respond to request consultation on the project.

California Health and Safety Code, Section 7050.5

This code requires that if human remains are discovered on the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

5.10.3 ENVIRONMENTAL SETTING

The City of Tustin area was populated by the Tongva, later known as the Gabrielino (derived from association with the San Gabriel Mission). The Tongva speak a language that is part of the Takic branch of the Uto-Aztecan language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands. At European contact, the tribe consisted of more than 5,000 people living in between 50 and 100 settlements throughout the area. Some of the villages were considered quite large, with up to 150 people.

The Tongva are considered to have been one of the wealthiest and most populous tribes, second only to the Chumash who occupied territories to the north. Houses were domed, circular structures thatched with tule or similar materials. The Tongva utilized a hunting and gathering economy and plant foods were, by far, the greatest part of the traditional diet. Acorns were an important food source harvested in the many of the areas and villages were located near the water sources necessary for the leaching of acorns.

There are no known Native American resources within the Specific Plan area. As discussed in Section 5.3, *Cultural Resources*, four sites are located within one mile to the southeast, which are listed in Table 5.3-1, *Recorded Prehistoric Cultural Resources*.

5.10.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of state CEQA Guidelines indicates that a project could have a significant effect if it were to cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

TCR-1 Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or

TCR-2 A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, that considers the significance of the resource to a California Native American tribe.

5.10.5 METHODOLOGY

The analysis within this EIR section is based on the Cultural Resource Assessment for the Tustin Downtown Commercial Core Specific Plan that was prepared by Cogstone, May 2017, and information compiled through Native American Consultation. The City requested a sacred lands record search from the Native American Heritage Commission (NAHC) on February 2, 2017. The NAHC responded that there were no known sacred lands within a half mile of the Specific Plan boundaries.

In compliance with SB 18, on June 26, 2017, the City sent letters to Native American groups or individuals that may have knowledge regarding tribal cultural places in the project area.

- Campo Band of Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Gabrieleño Band of Mission Indians – Kizh Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrieliño/Tongva Nation
- Gabrieliño-Tongva Indians of California Tribal Council
- Gabrieliño-Tongva Tribe
- Jamul Indian Village
- Juaneno Band of Mission Indians Acjachemen Nation - Belardes
- Juaneno Band of Mission Indians Acjachemen Nation – Romero
- Juaneno Band of Mission Indians
- La Posta Band of Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- San Fernando Band of Mission Indians
- San Pasqual Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

Responses were received from two tribes, the Gabrieleño Band of Mission Indians – Kizh Nation and the Viejas Band of Kumeyaay Indians. An SB 18 consultation was requested by the Gabrieleño Band of Mission Indians – Kizh Nation and held on October 11, 2017.

In compliance with AB 52, the following five Native American contacts were sent letters on August 3, 2017, requesting any information related to cultural resources or heritage sites within or adjacent to the Specific Plan area:

- Gabrieleño Band of Mission Indians – Kizh Nation

- Juaneno Band of Mission Indians
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- San Gabriel Band of Mission Indians

One response was received from the Gabrieleño Band of Mission Indians – Kizh Nation and an AB 52 consultation was held on October 11, 2017.

5.10.6 ENVIRONMENTAL IMPACTS

IMPACT TCR-1: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE THAT IS LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN A LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(K). [THRESHOLD TCR-1].

Less than Significant with Mitigation Incorporated. There are no tribal cultural resources (TCRs) within the Specific Plan area that are listed on the California Register of Historical Resources and the National Register of Historic Places. (Cogstone 2017)

SB 18 and AB 52 require meaningful consultation between lead agencies and California Native American tribes regarding potential impacts on TCRs. As described above, TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (PRC Section 21074). As outlined above, no sites were identified by the NAHC's Sacred Lands File search, and the City sent letters to Native American Tribes notifying them of the proposed project in accordance with SB 18 and AB 52. In response, Gabrieleño Band of Mission Indians – Kizh Nation, a California Native American tribe, requested consultation and the City of Tustin met with representatives of Gabrieleño Band of Mission Indians – Kizh Nation. No tribal cultural places or TCRs were identified during the consultation. However, the representatives stated the importance of the historic El Camino Real, which was a footpath and used by Native Californians as a traditional pathway and trade route.

Although no TCRs were identified in the Specific Plan area through record searches and the tribal consultation, development and redevelopment projects pursuant to the Specific Plan could involve grading and excavation to greater depths than previously undertaken that could disturb unknown buried TCRs, including shells, funerary objects, and human remains due to previous use of the area as a traditional trade route. Thus, Mitigation Measures CUL-1 would reduce the potential for tribal cultural resources to be impacted during earthmoving activities and provides for preservation of any identified resources.

With implementation of Mitigation Measure CUL-1, impacts related to a substantial adverse change in the significance of a tribal cultural resource would be less than significant.

IMPACT TCR-2: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A RESOURCE DETERMINED BY THE LEAD AGENCY, IN ITS DISCRETION AND SUPPORTED BY SUBSTANTIAL EVIDENCE, TO BE SIGNIFICANT PURSUANT TO CRITERIA SET FORTH IN SUBDIVISION (C) OF PUBLIC RESOURCES CODE SECTION 5024.1, THAT CONSIDERS THE SIGNIFICANCE OF THE RESOURCE TO A CALIFORNIA NATIVE AMERICAN TRIBE [THRESHOLD TCR-2].

Less than Significant with Mitigation Incorporated. As described in Section 5.3, *Cultural Resources*, the Specific Plan is located in an urbanized area; however, future site-specific development projects pursuant to the Specific Plan could involve grading and excavation to greater depths than previously undertaken that could disturb buried archaeological resources. Thus, Mitigation Measure CUL-1 is included to reduce the potential for archaeological resources, which include tribal cultural resources, to be impacted during earthmoving activities and provides for preservation of any identified resources. With implementation of Mitigation Measure CUL-1, impacts related to a substantial adverse change in the significance of a tribal cultural resource would be less than significant.

5.10.7 CUMULATIVE IMPACTS

Less than Significant with Mitigation Incorporated. As described above, there is a possibility that ground-disturbing activities in native soils may uncover or disturb unknown archaeological resources. However, the project has included Mitigation Measure CUL-1 that would reduce the potential impact to unknown resources, and cumulative development would be required to undergo environmental review, which would establish requirements for avoidance or mitigation of impacts potential resources. Thus, the cumulative effects of development on tribal cultural resources from implementation of the proposed Specific Plan in combination with other projects would be less than significant.

5.10.8 EXISTING STANDARD CONDITIONS AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- California Government Code Sections 7050.5 (human remains)
- California Government Code Section 65352.3 (SB 18)
- California Public Resources Code Sections 21080.3.1 et seq. (AB 52)

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.10.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Significant. As described previously, without mitigation impacts TCR-1 and TCR-2 would be potentially significant.

5.10.10 MITIGATION MEASURE

Mitigation Measure CUL-1: See Section 5.3, *Cultural Resources* for mitigation measure's text.

5.10.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant. As described previously, Mitigation Measure CUL-1 would reduce potential impacts to tribal cultural resources (Impacts TCR-1 and TCR-2) for during earthmoving activities. Implementation of

this mitigation measure would reduce potential impacts related to tribal cultural resources to a less than significant level.

REFERENCES

Cultural Resource Assessment for the Tustin Downtown Commercial Core Specific Plan. Prepared by Cogstone, May 2017, Appendix C.

5.11 Utilities and Service Systems

This section describes the existing utility infrastructure and provisions in the Specific Plan area and evaluates the potential for implementation of the project to impact utilities and services systems. Utilities and service systems include water supply and distribution systems, wastewater (sewage) conveyance and treatment, storm drainage systems, and solid waste collection and disposal. The Initial Study, included as Appendix A, established that the project would result in less than significant impacts related to solid waste disposal and compliance with federal, state, and local statutes and regulations related to solid waste. The Initial Study also established that the project would have less than significant impacts related to storm water drainage facilities, as well as to overall hydrology and water quality. As discussed in the Initial Study, the Orange County Drainage Area Management Plan (DAMP) is the primary stormwater control regulation for development projects. The DAMP requires implementation of Water Quality Management Plans based on the anticipated pollutants that could result from individual projects. Each future development project would be required to provide onsite stormwater drainage features, such as catch basins, that have been sized to meet the drainage requirements of that particular project. The Orange County DAMP requires projects to infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event. All future development within the Specific Plan area will be subject to the provisions of the National Pollution Discharge Elimination System (NPDES) to protect downstream water quality pursuant to the Clean Water Act and the City implements NPDES requirements through Tustin City Code Article 4 (Health and Sanitation), Chapter 9 (Water Quality Control). Therefore, no further assessment of these impacts is required in this EIR.

5.11.1 WASTEWATER TREATMENT AND COLLECTION

5.11.1.1 INTRODUCTION

This section evaluates the potential for implementation of the project to impact wastewater (sewage) conveyance and treatment. Wastewater collection is provided by the East Orange County Water District (EOCWD), and wastewater treatment is provided by the Orange County Sanitation District (OCSD).

5.11.1.2 REGULATORY SETTING

Clean Water Act

The federal Clean Water Act, United States Code, Title 33, Sections 1251 et seq. establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters. Under the Clean Water Act, the U.S. Environment Protection Agency is authorized to set wastewater standards for industry and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that generate discharges that go directly into Waters of the United States. Additionally, Sections 1251 et seq. of the CWA requires wastewater treatment of all effluent before it is discharged into surface waters.

National Pollution Discharge Elimination System Permit

The NPDES permit system was established in the federal Clean Water Act to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge.

The Specific Plan is located within the Santa Ana Regional Water Quality Control Board (RWQCB), and the wastewater generated in the area is subject to the Waste Discharge Requirements and NPDES Permit CA0110604, which controls effluent content, monitoring of receiving water quality, and best management practices for pollution prevention.

State Water Resources Control Board Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No 2006-0003-DWQ) applies to sanitary sewer systems that are greater than one-mile-long and collect or convey untreated or partially treated wastewater to a publicly owned treatment facility. The goal of Order No. 2006-0003 is to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs), accidental releases of untreated or partially treated wastewater from sanitary sewer systems, by requiring that:

1. In the event of an SSO, all feasible steps be taken to control the released volume and prevent untreated wastewater from entering storm drains, creeks, etc.
2. If an SSO occurs, it must be reported to the SWRCB using an online reporting system developed by the SWRCB.
3. All publicly owned collection system agencies with more than one mile of sewer pipe in the State must develop a Sewer System Management Plan, which must be updated every five years.

The East Orange County Water District updated its Sewer System Master Plan in compliance with these requirements in 2017.

City of Tustin General Plan

Conservation, Open Space, and Recreation Element

The following goals and policies of the City's Conservation, Open Space, and Recreation Element that are relevant to the proposed Specific plan area listed below:

GOAL 5: Protect water quality and conserve water supply

Policy 5.2: Protect groundwater resources from depletion and sources of pollution.

Policy 5.3: Conserve imported water by requiring water conservation techniques, water conserving appliances, and drought-resistant landscaping.

5.11.1.3 ENVIRONMENTAL SETTING

Wastewater Collection and Conveyance

The Specific Plan area contains a network of sewer lines that range from 6-inch to 27-inches in diameter and operate well within capacity. In 2016, management of local sewers within the project area was transferred from OCSD to the EOCWD. From 2004-2006, OCSD conducted a series of sewer improvement projects within the Specific Plan area. Specifically, sewer lines were upsized along the south end of Newport Avenue and El Camino Way, along the west end of Sixth Street, along Holt Avenue, and along the north-most end of Prospect. These lines were upsized to either 18-inch lines (Holt Avenue) or 27-inch lines (Newport Avenue, El Camino Way, Sixth Street, and Prospect). These improvements, as well as all other lines within the Specific Plan area, were implemented to accommodate future growth projections and have sufficient capacity to handle the increased flows resulting from future development. The City's local system generally discharges to larger OCSD trunk pipelines that ranging in size from 12 to 96 inches in diameter, to convey wastewater to the reclamation plants. Given the growth within OCSD's service area, OCSD is currently upsizing a number of collection system pipelines to provide additional capacity (OCSD 2017).

Wastewater Treatment

The wastewater from the Specific Plan area flows to the OCSD Reclamation Plant No. 1 in Fountain Valley, which has a treatment capacity of 204 million gallons per day (mgd) and an average daily flow of 117 mgd; and Treatment Plant No. 2 in Huntington Beach, which has a treatment capacity of 258 mgd, and an average daily flow of 67 mgd (OCSD 2017).

5.11.1.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project could have a significant effect on the environment if the project would:

- WW-1 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- WW-2 Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- WW-3 Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.11.1.5 METHODOLOGY

The analysis related to wastewater treatment requirements identifies the types of wastewater that is anticipated to be generated by implementation of the proposed Specific Plan, and regulations related to wastewater. Impacts would be considered significant if implementation of the Specific Plan would not comply, would be in conflict with, or would exceed regulations related to wastewater, such that an impact on the environment could result.

The analysis of the proposed Specific Plan's impact on wastewater facilities identifies the increased amount of wastewater that would be generated by buildout of the Specific Plan and the capacity of the wastewater infrastructure serving the Specific Plan area. The resulting increase in wastewater generation was compared with the available capacity of the infrastructure serving the Specific Plan areas. If infrastructure capacity would be exceeded, the physical impacts of constructing needed wastewater system improvements would be evaluated in relation to the physical environmental effects analyzed in this EIR to determine whether construction of wastewater system improvements would have significant environmental effects. In addition, impacts would be significant if buildout of the Specific Plan would result in inadequate capacity to serve increased wastewater service demands in addition to existing service commitments.

5.11.1.6 ENVIRONMENTAL IMPACTS

IMPACT WW-1: EXCEEDS WASTEWATER TREATMENT REQUIREMENTS OF THE APPLICABLE REGIONAL WATER QUALITY CONTROL BOARD [THRESHOLD WW-1].

Less than Significant Impact. Buildout of the proposed Specific plan would result in an increase of 887 residential units and approximately 300,000 square feet of non-residential uses, which would result in increased generation of wastewater. Wastewater generated by future development pursuant to the proposed Specific Plan would be treated at the OCSD reclamation facilities. The quality of wastewater treated at OCSD is overseen by two agencies, the Santa Ana RWQCB and the California Department of Public Health (CDPH). The Santa Ana RWQCB has regional permitting authority over water quality issues and the CDPH oversees standards and health concerns. The regulatory program of the Santa Ana RWQCB is designed to minimize and control discharges to surface and groundwater, largely through permitting, such that water quality standards are effectively attained.

Title 22 of the California Code of Regulations provides the regulatory setting for drinking water quality in California and is followed by these agencies when they assess water quality. The wastewater treated at OCSD is subject to treatment requirements established by the Santa Ana RWQCB NPDES Permit CA0110604, which controls effluent content, monitoring of receiving water quality, and best management practices for pollution prevention. Waste discharge from OCSD meets or exceeds the standards of water quality set by Title 22 of the California Code of Regulation. Waste discharge requirements for OCSD facilities are based on all applicable state and federal regulations, policies and guidelines, and include limitations on effluent discharge and receiving water. In general, waste effluent discharge requirements include specifications for adequate disinfection treatment and limitations on radioactivity, pollutant concentrations, sediments, pH, temperature, and toxicity. Receiving water requirements include limitations related to temperature, sediments, pH, dissolved oxygen, fecal coliform and other pollutant concentrations, water clarity and color, turbidity, and toxicity.

The land uses proposed by the Specific Plan include retail, residential, office, and mixed-use would be typical municipal wastewater discharges and are not the type of uses that generate wastewater that

contains harmful levels of toxins that are regulated by the Santa Ana RWQCB (such as large quantities of pesticides, herbicides, oil, grease, and other chemicals that are more typical in agricultural and industrial uses) and that would cause OCSB to exceed wastewater treatment requirements. By operation of law, all effluent would comply with the wastewater treatment standards of the Santa Ana RWQCB. Therefore, the Specific Plan would result in less than significant impacts related to the wastewater treatment requirements of the RWQCB.

IMPACT WW-2: REQUIRES OR RESULTS IN THE CONSTRUCTION OF NEW WATER OR WASTEWATER TREATMENT FACILITIES OR EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS [THRESHOLD WW-2].

Less than Significant Impact. As described previously, the Specific Plan area contains a network of sewer lines that range from 6-inch to 27-inches in diameter and operate well within capacity; and recent sewer line improvements have been completed to accommodate future growth projections and have sufficient capacity to handle the increased flows resulting from future development.

Implementation of development projects pursuant to the Specific Plan would increase the intensity of land uses within the Specific Plan area, and future site-specific development projects would install onsite sewer infrastructure and new connections to the sewer system that could include improvements to aged sewer pipelines and other connecting infrastructure. Such improvements would be required to be sized to accommodate the wastewater generation of such new development.

Under the City's development review procedures for site-specific development projects, the City determines sewer system design requirements and the needs for any improvements to existing infrastructure that would be required by the City's construction permit and referenced directly in the design plans for the proposed development to assure adequate capacity. The sewer design specifications for each site-specific development project would be required to comply with City standards (per the California Building Code) regarding requirements for design and operation of sewer collection facilities.

The construction of any needed wastewater system improvements as part of future site-specific development projects under the proposed Specific Plan would generally occur from project sites to existing connection points in roadway rights-of-way, and would be required to comply with all Tustin City Code standards and EIR mitigation measures regarding construction noise, air quality and dust suppression, erosion control (through the required SWPPP), and temporary construction traffic controls. These requirements would ensure that construction related impacts remain less than significant. As a result, potential impacts related to build out of the proposed Specific Plan would not result in construction of new or expanded wastewater facilities that could result in a significant environmental effect, and impacts would be less than significant.

IMPACT WW-3: RESULT IN A DETERMINATION BY THE WASTEWATER TREATMENT PROVIDER WHICH SERVES OR MAY SERVE THE PROJECT THAT IT HAS INADEQUATE CAPACITY TO SERVE THE PROJECT'S PROJECTED DEMAND IN ADDITION TO THE PROVIDER'S EXISTING COMMITMENTS [THRESHOLD WW-3].

Less than Significant Impact. The proposed Specific Plan would result in an increase of 887 residential units and anticipated to include 300,000 square feet of non-residential uses. Based on the City's water use per day in 2015 of 122 gallons per capita, the estimated 2,696 residents and 840 employees would generate an additional water demand of 431,392 gallons per day. To evaluate the maximum potential

impact on wastewater facilities, it has been conservatively assumed that all of the water would be converted to wastewater and need treatment.

As noted above, the existing sewer system consists of pipelines ranging in size from 6 to 27-inches in diameter, and they operate within capacity. These local sewers connect to OCSD trunk pipelines that range in size from 12 to 96 inches in diameter, which convey wastewater to the OCSD Reclamation Plant No. 1 in Fountain Valley, which has a treatment capacity of 204 mgd and an average daily flow of 117 mgd; and Treatment Plant No. 2 in Huntington Beach, which has a treatment capacity of 258 mgd, and an average daily flow of 67 mgd. Due to the OCSD plants' excess capacity, the existing facilities would be available to accommodate the increase in wastewater flow from buildout of the proposed Specific Plan (0.44 mgd), which represents 0.16 percent of the remaining treatment plant capacity. As a result, implementation of the proposed Specific Plan would not result in inadequate capacity of the wastewater treatment plant to serve the Specific Plan's projected demand in addition to existing service commitments, and impacts would not occur.

5.11.1.7 CUMULATIVE IMPACTS

Less than Significant Impact. Cumulative wastewater infrastructure impacts are considered on a systemwide basis, and are associated with the overall capacity of existing and planned infrastructure. The cumulative system evaluated includes the sewer system and the conveyance system through wastewater disposal at the OCSD Reclamation Plants.

As described previously, the existing sewer system has been improved to accommodate future growth projections and has sufficient capacity to handle the increased flows resulting from future development under the Specific Plan. The continued regular assessment, maintenance, and upgrades of the sewer system by EOCWD and OCSD would reduce the potential of development projects to result in a cumulatively substantial increase in wastewater such that new or expanded facilities would be required. Thus, increases in wastewater in the sewer system would result in a less than significant cumulative impact.

Additionally, the OCSD reclamation facilities have an average flow of 184 mgd and a treatment capacity of 462 mgd (OCSD, 2017). Due to this volume of excess capacity that is designed by OCSD to accommodate future regional growth, the increase in wastewater flow from cumulative projects would not significantly impact the OCSD reclamation facilities. As a result, impacts related to cumulative projects wastewater treatment and conveyance capacity would be less than significant.

5.11.1.8 EXISTING STANDARD CONDITIONS AND PLANS, PROGRAMS, OR POLICIES

There are no existing Standard Conditions or Plans, Programs, or Policies related to wastewater.

5.11.1.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less than Significant Impact. Upon implementation of regulatory requirements Impact WW-1 through WW-3 would be less than significant.

5.11.1.10 MITIGATION MEASURES

No mitigation measures are required.

5.11.1.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant Impact. No significant unavoidable adverse impacts related to wastewater infrastructure or services have been identified and impacts would be less than significant.

5.11.2 WATER SUPPLY

5.11.2.1 INTRODUCTION

This section evaluates the potential for implementation of the project to impact water supply and water delivery systems. Water service is provided to the Specific Plan area by the City of Tustin. Analysis within this section is based upon the City's 2015 Urban Water Management Plan (UWMP) and the Water Supply Memo (WSM 2017) prepared for the proposed Specific Plan, which is included as Appendix F.

5.11.2.2 REGULATORY SETTING

Safe Drinking Water Act

The United States Environmental Protection Agency administers the Safe Drinking Water Act, which is the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the requirements of the Act and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminants that could threaten public health.

California Urban Water Management Planning Act

Section 10610 of the California Water Code established the California Urban Water Management Planning Act (CUWMPA), requires urban water suppliers to initiate planning strategies to ensure an appropriate level of reliability in its water service. CUWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that annually provides more than 3,000 acre-feet of water service, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The CUWMPA describes the contents of UWMP's as well as methods for urban water suppliers to adopt and implement the plans. As described below, the City of Tustin has an updated 2015 UWMP that addresses water supply through build out of the proposed Specific Plan in 2035.

Senate Bill 610

Senate Bill (SB) 610 requires public urban water suppliers with 3,000 or more service connections to identify existing and planned sources of water for planned developments of a certain size. It further requires the public water system to prepare a specified water supply assessment (WSA) for projects that meet the following criteria:

- a) A proposed residential development of more than 500 dwelling units;
- b) A proposed shopping center employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- c) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- d) A hotel or motel, or both, with more than 500 rooms;

- e) An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area; and
- f) A mixed-use project that includes one or more of the projects above.

The components of a WSA include existing water demand, future water demand by the project, and must ensure that water is available for the project during normal years, a single dry year, and multiple dry years during a 20-year future projection period. The WSA must also describe whether the project's water demand is accounted for in the water supplier's UWMP. Supplies of water for future water supply must be documented in the WSA.

Senate Bill 221

SB 221 requires the local water provider to provide "written verification" of "sufficient water supplies" to serve the project. SB 221 applies only to residential projects of 500 units or more (infill or low-income or very-low-income housing subdivisions are exempt) and requires the land use planning agency to include as a condition of approval of a tentative map, parcel map, or development agreement a requirement that "sufficient water supply" be available. Sufficiency under SB 221 differs from SB 610 in that it is determined by considering the availability of water over the past 20 years; the applicability of any urban water shortage contingency analysis prepared per Water Code Section 10632; the reduction in water supply allocated to a specific use by an adopted ordinance; and the amount of water that can be reasonably relied upon from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer. In most cases, the WSA prepared under SB 610 meets the requirement for proof of water supply under SB 221.

CalGreen Building Code

California Code of Regulations Title 24, Part 11, establishes the California Green Building Code or CALGreen. The CALGreen Code was recently updated in 2016 and went into effect January 1, 2017. CALGreen sets forth water efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures.

City of Tustin City Code

Article 4, Chapter 10, Section 4954. The Tustin City Code details the City's Water Conservation Program that consists of four stages of increasing restrictions on water use. Compliance with Stage 1 is voluntary, while compliance with stages 2 through 4 is mandatory. Stages 1 and 2 consist largely of restrictions on outdoor water use; while stages 3 and 4 also include restrictions on commercial, industrial, institutional, manufacturing or processing use.

5.11.2.3 ENVIRONMENTAL SETTING

The City delivers water supplies through 172 miles of 1.5-inch to 20-inch water mains and three booster stations. The City pumps its groundwater from 13 wells. Eight of the wells produce untreated or "clear" groundwater that pump directly into the distribution system. The other five wells produce water that is treated for nitrate and total dissolved solids (TDS) removal at the City's two water treatment facilities. The City also has six reservoirs with a combined storage capacity of approximately 13.83 million gallons (MG) (UWMP 2015).

In 2015 the City delivered 11,113 acre-feet (AF) of water. The City receives 26 percent of its water supply from EOCWD, who imports it from the Metropolitan Water District (UWMP 2015). The City currently has a minimum available imported water supply of 12,401 AFY from MWDOC; however, it only utilizes 2,914 AFY annually of these imported supplies (UWMP 2015).

The other 74 percent of the City's water is obtained from the underlying Lower Santa Ana Groundwater Basin, which is managed by the Orange County Water District (OCWD). Each year, OCWD sets a Basin Production Percentage (BPP) that targets the amount of groundwater to be pumped from the basin. This, along with the City's water supply demands, sets the City's allowable groundwater pumping allocation. As discussed in detail in the City's UWMP, groundwater levels are managed within a safe basin operating range to protect the long-term sustainability of the Basin (UWMP 2015).

The City's 2015 UWMP estimates that water demands will grow to 12,221 AF per year by 2035, an increase of 1,108 AF over 2015 water needs. This is planned to be met by an increase in groundwater pumping and a reduction in reliance on imported supplies (UWMP 2015). The UWMP states that future water supply will change to approximately 95 percent groundwater and 5 percent imported (UWMP 2015).

5.11.2.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project could have a significant effect on the environment if the project:

- W-1 Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- W-2 Would result in insufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

5.11.2.5 METHODOLOGY

The analysis in this section focuses on the nature and magnitude of the change in levels of water use from build out of the Specific Plan. To determine whether a significant impact would exist, the projected increase in water demand from build out of the Specific Plan was compared to future available supplies from existing entitlements and resources as identified in the City's 2015 UWMP. If the projected water demand that would result from buildout of the Specific Plan would exceed existing water entitlements and resources, new or expanded water supply entitlements would be required, and a significant impact would occur.

From the estimated increase in water demand, an analysis of any infrastructure improvements that could be necessary to provide water service to the developments that would occur from build out of the proposed Specific Plan was conducted. Based on that analysis, if construction or expansion of water facilities would be necessary, an evaluation of the physical environmental effects of such improvements would be undertaken to determine whether those effects would be considered significant in relation to the physical environmental effects being analyzed in this EIR.

5.11.2.6 ENVIRONMENTAL IMPACTS

IMPACT W-1: REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW WATER FACILITIES OR EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS [THRESHOLD W-1].

Less than Significant Impact. The existing water lines within the City range from 1.5 to 20-inches in diameter, and the system is currently adequate for both domestic water consumption and fire flow needs. However, implementation of development projects pursuant to the Specific Plan would include installation of onsite water infrastructure and new connections to the water distribution system that could include improvements to the water distribution lines and other connecting infrastructure that would be sized to accommodate the increased water demand of new development. The increased density of new development could result in the need to improve existing water distribution lines within street rights-of-way that connect to these new developments. Water supply design specifications for each future site-specific development project would comply with the City of Tustin standards (per the California Building Code) regarding requirements for design and operation of water distribution facilities.

Under the City's normal development review procedure for individual projects, the City determines the actual water system design requirements of each site-specific development project, and the needs for any improvements to the existing water supply infrastructure would be identified and required by the City construction permit. The temporary construction of needed water system improvements would occur along existing pipeline alignments and within existing street rights-of-way, and construction sites and would be required to comply with all City standards regarding construction noise, air quality and dust suppression mitigation requirements, erosion control (through the required SWPPP) and temporary construction traffic controls. These standard requirements would ensure that potential construction impacts related to any needed water line improvements remain less than significant. As a result, potential impacts related to build out of the proposed Specific Plan would not result in construction of new or expanded water facilities that would result in a significant environmental effect. Therefore, impacts would be less than significant.

IMPACT W-2: WOULD RESULT IN INSUFFICIENT WATER SUPPLIES AVAILABLE TO SERVE THE PROJECT FROM EXISTING ENTITLEMENTS AND RESOURCES, AND NEW AND/OR EXPANDED ENTITLEMENTS WOULD BE NEEDED [THRESHOLD W-2].

Less than Significant Impact. The proposed Specific Plan would result in an increase of 887 residential units and anticipated to include 300,000 square feet of non-residential uses, which would result in increased generation of water demand. As described in Section 5.7, *Population and Housing*, the 887 additional residential units would generate 2,696 residents at build out and full occupancy; and the 300,000 square feet of non-residential uses is estimated to generate 840 new employees.

Based on the City's water use per day in 2015 of 122 gallons per capita, the estimated 2,696 residents and 840 employees would generate an additional water demand of 431,392 gallons per day or 483.2 acre-feet per year (AFY). As described above, the City's water demand and supply is estimated to grow from 11,113 AFY to 12,221 AFY by 2035, which is an increase of 1,108 AFY. As build out and full occupancy of the proposed Specific Plan would generate a demand of 483.2 AFY, which would be within the anticipated increase in demand and supply of water, build out of the proposed Specific Plan would be served from existing entitlements and new or expanded water entitlements would not be needed (WSM 2017). Therefore, implementation of the proposed Specific Plan would result in a less than significant impact related to water supplies.

5.11.2.7 CUMULATIVE IMPACTS

Less than Significant Impact. Cumulative water supply impacts are considered on a citywide basis and are associated with the adequacy of the City's primary sources of water that include groundwater pumped through City wells, imported water deliveries. As described above, water supplies have been planned through the City's 2015 UWMP, which identifies the ability to meet a majority of future water demands through groundwater pumping, and a reduction in reliance in imported supplies. The City's UWMP provides projections for water supply and demand through 2035, and shows that in "Multiple Dry Water Years" (three-year) conditions with anticipated growth in the City, the City would be able to meet water demand. Furthermore, all development is required to meet water conservation goals including a 20 percent reduction in per capita demand statewide by 2020. As a result, cumulative impacts would be less than significant.

5.11.2.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- Clean Water Act
- National Pollutant Discharge Elimination System
- Assembly Bill 341 (Chapter 476, Statutes of 2011)
- California Green Building Standards Code
- City of Tustin General Plan, Conservation, Open Space, and Recreation Element
- City of Tustin 2015 Urban Water Management Plan

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.11.2.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less than Significant Impact. Impacts related to water would be less than significant and no mitigation is required.

5.11.2.10 MITIGATION MEASURES

No mitigation measures are required.

5.11.2.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant Impact. No significant unavoidable adverse impacts related to water supplies, infrastructure, or services has been identified and impacts would be less than significant.

REFERENCES

City of Tustin 2015 Urban Water Management Plan, June 2016 (UWMP 2015). Accessed at:

www.tustinca.org/depts/pw/water/reports.asp

Downtown Commercial Core Specific Plan Water Supply Memo (WSM 2017), City of Tustin, Appendix F.

Orange County Sanitation District Current Projects (OCSD 2017). Accessed at:
<https://www.ocsd.com/residents/current-construction>

Orange County Sanitation District Sewer Services (OCSD 2017). Accessed at:
<https://www.ocsd.com/services/regional-sewer-service>

Orange County Sanitation District Engineering Design and Construction Requirements for Sanitary Sewers.
Accessed at: <https://www.ocsd.com/Home/ShowDocument?id=14363>

5.12 Energy Resources

5.12.1 INTRODUCTION

This section assesses the significance of the use of energy, including electricity, natural gas and gasoline and diesel fuels that would result from the proposed Specific Plan. It discusses existing energy use patterns, and examines whether the Specific Plan would result in the consumption of large amounts of fuel or energy, or use of such resources in a wasteful manner.

Refer to Section 5.4, *Greenhouse Gas Emissions*, for a discussion of the relationship between energy consumption and greenhouse gas (GHG) emissions. Refer to Section 5.11, *Utilities and Service Systems* for a discussion of water consumption.

5.12.2 REGULATORY SETTING

Energy Independence and Security Act, Corporate Average Fuel Efficiency Standards

In response to the *Massachusetts et al. vs. Environmental Protection Agency et al.* ruling, the Bush Administration issued an executive order on May 14, 2007, directing the U.S. Environmental Protection Agency (EPA) and Department of Transportation (US DOT) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law, requiring an increased Corporate Average Fuel Economy (CAFE) standard of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by the 2020 model year.

In addition to setting increased CAFE standards for motor vehicles, the Energy Independence and Security Act includes the following additional provisions:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

Additional provisions of the Act address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

California Public Utilities Commission Plans and Programs

The California Public Utilities Commission (CPUC) has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability. The CPUC has established rules for the planning and construction of new transmission facilities, distribution facilities, and substations. Utility companies are required to obtain permits to construct certain power line facilities or substations. The CPUC also has jurisdiction over the siting of natural gas transmission lines.

The CPUC regulates distributed energy generation policies and programs for both customers and utilities. This includes incentive programs (e.g., California Solar Initiative) and net energy metering policies. Net energy metering allows customers to receive a financial credit for power generated by their on-site system

and fed back to the utility. The CPUC is involved with utilities through a variety of energy procurement programs, including the Renewable Portfolio Standards (RPS) program.

In 2008, the CPUC adopted the Long-Term Energy Efficiency Strategic Plan, which is a road map to achieving maximum energy savings in California through 2020. Consistent with California's energy policy and electricity "loading order," the Energy Efficiency Strategic Plan indicates that energy efficiency is the highest priority resource in meeting California's energy needs. The CPUC also adopted energy goals that require all new residential construction in California to be zero net energy by 2020. The zero-net energy goal means new buildings must use a combination of improved efficiency and distributed renewable energy generation to meet 100 percent of their annual energy need. In addition to the zero net energy goals for residential buildings by 2020, the CPUC has adopted goals that all new commercial construction in California will be zero net energy by 2030 and 50 percent of existing commercial buildings will be retrofit to zero net energy by 2030.

Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030, thereby doubling energy efficiency within the state. SB 350 makes revisions to the RPS Program and to certain other requirements on public utilities and publicly owned electric utilities. SB 350 also requires local publicly owned electric utilities to establish annual targets for energy efficiency savings and demand reduction consistent with a statewide goal established by the CPUC, and provides incentives for electrification of rail facilities. Local utilities would be required to develop more detailed strategies and incentives for use of renewable energy sources, resulting in an increased demand for renewable energy generation.

SB 350 emphasizes the important role of electric vehicles in California's overall scheme to combat climate change, declaring that "[d]eploying electric vehicles should assist in grid management, integrating generation from eligible renewable energy resources, and reducing fuel costs for vehicle drivers...." The bill promotes the development of additional electric vehicle charging infrastructure to encourage greater use of electric cars, and requires electrical utilities to include expansion of electrical vehicle charging facilities as part of their strategies and incentives for reducing overall energy consumption.

Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005)

Assembly Bill 1007 required the California Energy Commission (CEC) to prepare a state plan (State Alternative Fuels Plan) to increase the use of alternative fuels in California. The Commission prepared the State Alternative Fuels Plan in partnership with the California Air Resources Board (CARB) and in consultation with other state, federal, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80-percent reduction in greenhouse gas emissions associated with personal transportation, even as California's population increases. Measures proposed that would reduce petroleum fuel use include:

1. Lowering the energy needed for personal transportation by tripling the energy efficiency of on-road vehicles by 2050 through:
 - a. Conventional gas, diesel, and flexible fuel vehicles (FFVs) averaging more than 40 miles per gallon (mpg).
 - b. Hybrid gas, diesel, and FFVs averaging almost 60 mpg.
 - c. All electric and plug-in hybrid electric vehicles (PHEVs) averaging well over 100 mpg (on a greenhouse gas equivalent [GGE] basis) on the electricity cycle.

- d. Fuel cell vehicles (FCVs) averaging over 80 mpg (on a GGE basis).
2. Moderating growth in per capita driving, reducing today's average per capita driving miles by about 5 percent or back to 1990 levels.
3. Changing the energy sources for transportation fuels from the current 96 percent petroleum-based to approximately:
 - a. 30 percent from gasoline and diesel from traditional petroleum sources or lower GHG emission fossil fuels such as natural gas.
 - b. 30 percent from transportation biofuels.
 - c. 40 percent from a mix of electricity and hydrogen.
4. Producing transportation biofuels, electricity, and hydrogen from renewable or very low carbon-emitting technologies that result in, on average, at least 80 percent lower life cycle GHG emissions than conventional fuels.
5. Encouraging more efficient land uses and greater use of mass transit, public transportation, and other means of moving goods and people.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations Title 24 Part 6: The newest version of Title 24 was adopted by the CEC in June 2015 and became effective on January 1, 2017. The CEC indicates that these Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above that achieved by the 2013 Title 24.

City of Tustin General Plan

The City of Tustin Conservation, Open Space, and Recreation Element includes energy related goals and policies. The goals and policies relevant to the proposed Specific Plan include:

Policy 4.1: Promote energy conservation in all sectors of the City including residential, commercial, and industrial.

Goal 11: Conserve energy resources through use of available energy technology and conservation practices.

Policy 11.1: Encourage the use of new technologies and innovative building design, site design and orientation techniques which minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping, and building materials.

5.12.3 ENVIRONMENTAL SETTING

Electricity

The Southern California Edison Company (SCE) is the electrical purveyor in the City of Tustin. SCE provides electricity service to more than 14 million people in a 50,000 square-mile area of central, coastal and Southern California. SCE is in the process of implementing infrastructure upgrades to ensure the ability to meet future demands. In the Orange County region, SCE is implementing the Preferred Resources Pilot Program that uses solar, wind, energy storage, energy efficiency and energy conservation programs to offset the increasing customer demand for electricity in central Orange County, including the Specific Plan area (SCE, 2017).

Natural Gas

The Southern California Gas Company (SoCalGas) is the natural gas purveyor in the City of Tustin, and is the principal distributor of natural gas in Southern California. SoCalGas projects that gas demand will decline at an annual rate of 0.6 percent from 2016 to 2035 due to modest economic growth, mandated energy efficiency standards and programs, renewable electricity goals, and conservation savings linked to advanced metering infrastructure (CGEU 2016). The gas supply available to SoCalGas from California sources averaged 122 million cubic feet/day in 2015; however, southwestern U.S. sources of natural gas will continue to supply most of Southern California's natural gas demand, which are provided by interstate pipeline deliveries (CGEU 2016). SoCalGas designs its facilities and supplies to provide continuous service during extreme peak demands, and has identified the ability to meet peak demands through 2035 in its 2016 report (CGEU 2016).

5.12.4 THRESHOLDS OF SIGNIFICANCE

Appendix F of the CEQA Guidelines provides guidance for assessing energy impacts of projects. The appendix provides three goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on natural gas and oil; and
- Increasing reliance on renewable energy sources.

Consistent with Appendix F goals, the significance criteria used to evaluate environmental impacts in this analysis focus on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Thus, the proposed Specific Plan could have a significant effect on the environment if it were to:

E-1 Use large amounts of energy or fuel, or consume energy or fuel in a wasteful manner:

- During construction as the result of construction activities, or by resulting in the construction or expansion of energy infrastructure that would cause significant environmental effects, or
- Following construction, during project operations, by using large amounts of energy or use energy for fuel in a wasteful manner either:
 - Within buildings or other onsite operations (stationary source consumption), or
 - As the result of vehicle trips associated with project site development (mobile source consumption).

5.12.5 METHODOLOGY

A number of factors are considered when weighing whether a project would use a proportionately large amount of energy or whether the use of energy would be wasteful in comparison to other projects. Factors such as the use of on-site renewable energy features, energy conservation features or programs, and relative use of transit are considered.

According to Appendix F of the CEQA Guidelines, conserving energy is defined as: decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. Neither Appendix F of the CEQA Guidelines nor Public Resources Code Section 21100(b)(3) offer a numerical threshold of significance that might be used to evaluate the potential

significance of energy consumption of a project. Rather, the emphasis is on reducing “the wasteful, inefficient, and unnecessary consumption of energy.”

Construction activities would result in wasteful, inefficient, or unnecessary use of energy if construction equipment is old or not well maintained, if equipment is left to idle when not in use, if travel routes are not planned to minimize vehicle miles traveled, or if excess lighting or water is used during construction activities. Energy usage during project operation would be considered “wasteful, inefficient, and unnecessary” if the project were to violate federal, state, and/or local energy standards, including Title 24 of the California Code of Regulations; preclude use of onsite renewable energy systems; inhibit pedestrian or bicycle mobility; inhibit access to transit; or inhibit feasible opportunities to use alternative energy sources, such as solar energy, or otherwise conserve energy.

5.12.6 ENVIRONMENTAL IMPACTS

IMPACT E-1: USE LARGE AMOUNTS OF ENERGY OR FUEL IN A WASTEFUL MANNER [THRESHOLD E-1].

Construction

Less than Significant Impact. Buildout of the proposed Specific Plan would result in an increase of up to 887 dwelling units and up to 300,000 square feet of non-residential space within the Specific Plan area by 2035.

During construction of each site-specific development project pursuant to the Specific Plan, energy would be consumed in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the project sites, construction worker travel to and from the project sites, as well as delivery truck trips;
2. Electricity associated with providing temporary power for lighting and electric equipment; and
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction activities pursuant to the Specific Plan would not be expected to result in greater demand for fuel on a per-unit-of-development basis than other development projects in Southern California, with the exception that because the Specific Plan area is generally developed currently, demolition of existing development would be undertaken. While such demolition is typical for infill urban development, demolition activities would result in energy consumption that would not occur on sites where demolition is unnecessary. Because demolition is required and not optional to provide for the type of mixed-use development that is an integral element of long-term energy conservation and GHG reduction programs, the energy consumed during site demolition to make way for re-development is not considered to be wasteful. Additionally, construction and development would occur over the lifetime of the plan, and demand for construction-related electricity and fuels would be spread out over that timeframe.

In addition, construction contractors are required to demonstrate compliance with applicable CARB regulations governing the accelerated retrofitting, repowering, or replacement of heavy duty diesel on- and off-road equipment. Also, compliance with existing CARB idling restrictions and the use of newer engines and equipment would reduce fuel combustion and energy consumption. Overall, construction

activities would require limited energy consumption, would comply with all existing regulations, and would therefore not be expected to use large amounts of energy or fuel in a wasteful manner.

Operation

Less than Significant Impact. Once operational, site-specific developments that would occur pursuant to the Specific Plan would include residential, retail, office, and mixed-uses that generate demand for electricity, natural gas, as well as gasoline for motor vehicle trips. However, these types of land uses would involve energy consumption quantities that are typical for urban infill development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

Operational use of energy includes the heating, cooling, and lighting of buildings; water heating; operation of electrical systems and plug-in appliances within buildings; parking lot and outdoor lighting; and the transport of electricity, natural gas, and water to the areas where they would be consumed. New development that would be facilitated by the proposed Specific Plan would be required to meet Title 24 energy efficiency standards. In complying with these standards, impacts to peak energy usage periods would be minimized, and impacts on statewide and regional energy needs would be reduced.

In addition, as shown in Tables 5.12-1, *Estimated Annual Operational Automobile Fuel Consumption*, vehicular trips generated from operation of the proposed Specific Plan are estimated to result in the annual use of approximately 1,842,775 gallons of fuel.

Table 5.12-1: Estimated Annual Operational Automobile Fuel Consumption

	Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
Passenger Cars (Light Duty Autos)	39,037,232	26.77	1,458,246
Light Heavy-Duty Trucks	756,373	12.94	58,452
Medium Heavy-Duty Trucks	1,176,580	8.17	144,012
Heavy Heavy-Duty Trucks	1,050,518	5.77	182,065
Total	42,020,703		1,842,775

Source: Urban Crossroads, 2017.

However, the infill development that would occur as a result of the proposed Specific Plan would be within an urbanized area where existing infrastructure provides for efficient delivery of electricity and natural gas to the project area. Implementation of the Specific Plan would also improve existing pedestrian and bicycle routes, access to transit, and would locate homes in an urban environment close to job opportunities and services, which generally results in a reduction of vehicle miles travelled from development within the Specific Plan area and would, in-turn reduce vehicular related energy use. Thus, the proposed Specific Plan would not use large amounts of energy or fuel in a wasteful manner related to vehicle trips.

In addition, other existing regulations are likely to result in more efficient use of all types of energy, and reduction in reliance on non-renewable sources of energy within the Specific Plan area through 2035. These include the federal Energy Independence and Security Act, the State Long Term Energy Efficiency Strategic Plan, and the State Title 24 regulations (all described above), which are designed to reduce reliance on non-renewable energy resources and reduces demand by providing federal tax credits for purchasing fuel-efficient items, and providing goals for developing energy efficient buildings, and improving the renewable fuel, appliance, and lighting standards.

The overall energy usage that would result from build out of the proposed Specific Plan would increase incrementally as each future each site-specific development project is built. However, the levels would be typical for the proposed land uses, and no aspect of the proposed project or land use would involve higher than typical energy demands. Further, the Specific Plan would comply with all Title 24 standards. Therefore, the energy demand from the proposed project would not result in “wasteful, inefficient, and unnecessary” energy usage and impacts would be less than significant.

5.12.7 CUMULATIVE IMPACTS

Less than Significant Impact. The geographic context for analysis of cumulative impacts regarding energy includes past, present, and future development within southern California because energy supplies (including electricity, natural gas, and petroleum) are generated and distributed throughout the southern California region.

All development projects throughout the region would be required to comply with the energy efficiency standards in the Title 24 requirements; additionally, some of the developments could provide for additional reductions in energy consumption by use of solar panels, sky lights, or other Leadership in Energy and Environmental Design (LEED) type energy efficiency infrastructure. With implementation of the existing energy conservation regulations, cumulative electricity and natural gas consumption would not be cumulatively wasteful.

Petroleum consumption associated with the new development from the proposed Specific Plan would be primarily attributable to transportation, especially vehicular use. However, pursuant to Southern California Association of Governments’ Regional Transportation Plan/Sustainable Communities Strategy, development patterns throughout the region would provide for greater use of transit and alternative modes of transportation from development of new mixed-uses that allow residents to work, shop, and live within a small area, reducing average trip lengths, which would in turn result in lower consumption of fuels. These considerations would reduce wasteful petroleum consumption associated with unnecessary automobile trips and long commutes. Also, State fuel efficiency standards and alternative fuels policies (per AB 1007 Pavely) would also contribute to a reduction in fuel use. For these reasons, the consumption of petroleum would not occur in a wasteful manner and would be less than cumulatively considerable. Overall, impacts from cumulative projects associated with energy would be less than significant.

5.12.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- California Energy Code (Code of Regulations, Title 24 Part 6).

Plans, Program and Policies (PPPs) and Standard Conditions

None.

5.12.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less than Significant Impact. Upon implementation of regulatory requirements Impact E-1 would be less than significant.

5.12.10 MITIGATION MEASURES

No mitigation measures are required.

5.12.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant Impact. No significant unavoidable adverse impacts related to energy have been identified and impacts would be less than significant

REFERENCES

Southern California Edison. SCE.com Circle City Substation and Mira Loma-Jefferson Sub-transmission Project (SCE 2017). Accessed at: sce.com/wps/portal/home/about-us/reliability

California Gas and Electric Utilities 2016 California Gas Report (CGEU 2016). Accessed at: <https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf>

5.13 Mandatory Findings of Significance

5.13.1 GROWTH INDUCEMENT

This section analyzes the growth inducement potential of the proposed Specific Plan and the associated secondary effects of growth the Specific Plan might permit. As required by CEQA Guidelines Section 15126.2(d), an EIR must:

“Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

A project can have a direct effect on population growth, for example, if it would involve construction of substantial new housing. A project could also have indirect growth-inducement potential if it would:

- Establish substantial new permanent employment opportunities (e.g., commercial, industrial, governmental, or other employment-generating enterprises) or otherwise stimulate economic activity;
- Remove a physical or regulatory obstacle to additional growth and development, such as removing a constraint to or increasing the capacity of a required public service (physical obstacle). For example, an increase in the capacity of utility or road infrastructure could allow either new or additional development in the surrounding area. A project could also include growth by removing a regulatory obstacle, such as by increasing allowable development intensity; or
- Stimulate economic activity within an area such that it would result in the need for additional housing, businesses, and services to support increased economic activities.

CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, to reach the conclusion that the project is growth inducing as defined by CEQA, the EIR must find that it would foster (i.e., promote or encourage) additional growth in economic activity, population, or housing, regardless of whether the growth is consistent with local plans or is beyond the level of growth that is anticipated by local plans. The conclusions set forth in this EIR regarding growth inducement do not address or imply whether such induced growth is beneficial or detrimental, consistent with CEQA Guidelines Section 15126.2(d).

If the analysis contained in this section determines that the Specific Plan has growth inducing effects, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth (i.e., growth-induced effects) fit the CEQA definition of “indirect” effects in

Section 15358(a)(2) of the State CEQA Guidelines. These indirect or secondary effects of growth may result in significant environmental impacts. While CEQA Guidelines require an EIR to “discuss the ways” a project could induce growth, and to discuss project characteristics that may “encourage... activities that could significantly affect the environment,” CEQA Guidelines do not require an EIR to attempt to predict where, when, or in what form induced growth might occur. The answers to such questions require substantial speculation, which CEQA discourages (CEQA Guidelines Section 15145).

Thus, any decision whether to allow projects that might result from induced growth is the subject of separate decision making by the lead agency responsible for considering such projects. Because the decision to allow growth is subject to separate discretionary decision making, and such decision making is itself subject to CEQA, the analysis of growth-inducing effects is not intended to determine site-specific environmental impacts or mitigation for the potentially induced growth. Rather, the discussion is intended to disclose the potential for environmental effects to occur more generally, such that decision makers are aware that additional environmental effects are a possibility if growth-inducing projects are approved. The decision of whether impacts do occur, their extent, and the ability to mitigate them is appropriately left to consideration by the agency responsible for approving such projects at such times as complete applications for development are submitted.

Establish Substantial New Permanent Employment Opportunities or Otherwise Stimulate Economic Activity

The proposed Specific Plan project would result in development of up to 300,000 square feet of non-residential employment generating uses by 2035.

SCAG estimates that employment in the City will increase from 41,100 jobs in 2017 to 64,600 in 2035, which is an increase of 23,500 jobs or a 58 percent increase (SCAG 2016 growth forecast). The employment anticipated by the proposed Specific Plan would generate approximately 840 new employees (per the OCTAM model see Section 5.7, *Population and Housing*), which represents a small portion (3.6 percent) of the estimated job growth. The 840 jobs expected in the Specific Plan area are included in SCAG projections because the employment land in the Specific Plan area are included in the General Plan, and are not changing with implementation of the Specific Plan. Thus, the employment that would occur within the Specific Plan area would be less than significant.

Additionally, the new jobs would accommodate the forecasted employment in an environmentally sustainable manner by improving the jobs to housing balance, that would reduce vehicle miles traveled. Furthermore, as listed below, the City of Tustin has had recent unemployment rates ranging between 3.1 and 9.1 percent (EDD, 2017).

- April 2017: 3.1 percent unemployment rate
- April 2016: 3.7 percent unemployment rate
- Annual Average 2015: 4.2 percent unemployment rate
- Annual Average 2014: 5.1 percent unemployment rate
- Annual Average 2013: 6.1 percent unemployment rate
- Annual Average 2012: 7.4 percent unemployment rate
- Annual Average 2011: 8.5 percent unemployment rate
- Annual Average 2010: 9.1 percent unemployment rate

The jobs would provide new employment opportunities to employees that are already living in Tustin and the surrounding cities. Most of the new commercial and office jobs that would be created by the proposed

Specific Plan would be positions that are anticipated to be filled by people who would already be living within Tustin and surrounding communities, and would not induce an unanticipated influx of new labor into the region. As described in Section 5.7, *Population and Housing*, build out of the Specific Plan would result in an improvement in the jobs-household ratio from an existing ratio of 1.52 jobs per household to 1.41 jobs per household, which is a benefit of the proposed Specific Plan because a more balanced jobs-to-housing ratio could improve the environment by reducing vehicle miles traveled and emissions from motor vehicles. Overall, the proposed Specific Plan would accommodate forecasted employment growth consistent with SCAG's regional forecasts. Thus, impacts related to increased growth through the provision of employment opportunities would be less than significant.

Remove a Physical or Regulatory Obstacle to Additional Growth and Development

The elimination of a physical obstacle to growth is considered to be a growth inducing impact. A physical obstacle to growth typically involves the lack of public service infrastructure. The proposed Specific Plan would induce growth if it would provide public services or infrastructure with excess capacity to serve lands that would otherwise not be developable, except for the infrastructure capacity provided by the proposed Plan.

The Specific Plan area is a developed urban area that is connected to the City's existing infrastructure system. Water, sewer, drainage, and roadways provide service to all of the areas within the Specific Plan. As described in Section 5.10, *Utilities and Service Systems*, development projects pursuant to the Specific Plan would include installation of onsite infrastructure and new connections to the existing infrastructure systems, which could include improvements to existing aged infrastructure. However, these potential improvements would be sized to accommodate new development, and not provide excess capacity. As described above, the Specific Plan area is urban and developed and the projects implemented by the Specific Plan would consist of infill and redevelopment of existing uses, not development in undeveloped areas, or extension of infrastructure into an unserved, or underserved area. Because the anticipated infrastructure improvements would only enhance services to proposed developments and not provide an extension of service to areas that are currently not served, or provide excess capacity, infrastructure improvements would not result in significant growth inducing impacts.

The Specific Plan would also implement circulation improvements, such as pedestrian and bicycle facilities, which would enhance local circulation and use of transit. The circulation improvements provided by the proposed Plan would not extend circulation into a new area or provide excess circulation capacity that could induce growth. The improvements proposed by the Specific Plan would enhance circulation to provide for multi-modal transportation. As a result, the circulation improvements would result in less than significant growth inducing impacts

Stimulate Economic Activity Within an Area Such That It Would Result in the Need for Additional Housing, Businesses, and Services to Support Increased Economic Activities

Induced growth can occur outside of a project site as the result of direct and indirect investment and spending by residents, employees, and businesses. Such growth stems from the "induced" employment generated by a project's economic activity. Indirect employment growth generated by a direct increase in economic activity can be due to the increases in spending that would occur on the part of the businesses, employees, and employee households. It could also be due to the additional spending that would occur on the part of suppliers of goods and services demanded by a project's direct economic activity (households, businesses and employees). As described previously, the proposed Specific Plan would implement economic activity that would result in an improvement in the jobs-household ratio, which is a benefit of the proposed

Specific Plan. The City of Tustin has had recent unemployment rates ranging between 3.1 and 9.1 percent (EDD, 2017), and most of the new jobs that would be created by the Specific Plan would be positions that do not require a specialized workforce, and this type of workforce exists in the City and surrounding areas. Thus, it is anticipated that new jobs that would be generated from implementation of the Specific Plan would be filled by people within Tustin and surrounding communities, and would not induce an unanticipated influx of new labor into the region. Therefore, job growth from build out of the proposed Specific Plan would result in new permanent employment opportunities and stimulate economic activity; however, the Specific Plan would meet future employment demands per SCAG's 2016 projections. Overall, the proposed Specific Plan would not remove any obstacles that would result in increased levels of growth that would not otherwise occur. Therefore, impacts would be less than significant.

Environmental Impacts of Induced Growth

As described above, implementation of the proposed Specific Plan and its 887 residential units would provide development to accommodate SCAG's forecasted employment demands. All physical environmental effects from construction of development has been analyzed in all technical sections of this EIR. For example, activities such as excavation, grading, and construction as required for the proposed residential and commercial uses would result in impacts that are analyzed in the Air Quality, Greenhouse Gas Emissions, Noise, and Transportation and Circulation sections. Therefore, construction of the proposed Specific Plan has been analyzed in this EIR and would be adequately mitigated either through implementation of plans, policies, and programs and/or mitigation measures contained within Chapter 5 of this EIR.

5.13.2 SIGNIFICANT IRREVERSIBLE EFFECTS

State *CEQA Guidelines* require the EIR to consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Also, irreversible damage can result from environmental accidents associated with the project. Irrecoverable commitments of resources should be evaluated to assure that such current consumption is justified." (*CEQA Guidelines* Section 15126.2(c)). "Nonrenewable resource" refers to the physical features of the natural environment, such as land, waterways, mineral resources, etc. These irreversible environmental changes may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed irretrievable commitments of nonrenewable resources is not justified (e.g., the project involves the wasteful use of energy).

The proposed Specific Plan would result in or contribute to the following irreversible environmental changes:

- Lands in the Specific Plan area would be committed to new uses once site-specific development projects are approved and constructed. Secondary effects associated with this irreversible commitment of land resources include:
 - Changes in views associated with construction of the new buildings and associated development (see Section 5.1, *Aesthetics*).
 - Increased traffic on area roadways (see Section 5.9, *Transportation and Circulation*).
 - Emissions of air pollutants associated with project construction and operation (see Section 5.2, *Air Quality*).
 - Consumption of non-renewable energy associated with construction and operation of the Specific Plan due to the use of automobiles, lighting, heating and cooling systems, appliances, etc. (see Section 5.12, *Energy Resources*).
 - Increased ambient noise associated with an increase in activities and traffic associated with future site-specific development projects (see Section 5.6, *Noise*).
- Construction of the proposed Specific Plan as described in Section 3.0, *Project Description*, would require the use of energy produced from non-renewable resources and construction materials.

Regarding energy usage from the proposed Specific Plan, as demonstrated in the analyses contained in Section 5.12, *Energy Resources*, the proposed Specific Plan would not involve wasteful or unjustifiable use of non-renewable resources, and conservation efforts would be enforced during construction and operation of proposed development. The future developments pursuant to the Specific Plan would incorporate energy-conserving project features, pursuant to the California Building Code, California Energy Code Title 24, which specify green building standards for new developments. In addition, project specific information related to energy consumption is provided in Section 5.12, *Energy Resources*, of this EIR.

5.13.3 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe “any significant impacts, including those which can be mitigated but not reduced to a level of insignificance.” Potential environmental effects of the proposed Specific Plan and mitigation measures are discussed in detail throughout in Section 5 of this EIR. As summarized below and detailed in Section 5.2, *Air Quality*, Section 5.4, *Greenhouse Gas Emissions*, and Section 5.9, *Transportation and Circulation*, impacts in the following areas would remain significant and unavoidable, even with the incorporation of standard conditions; plans, programs, policies; and feasible mitigation measures.

Air Quality

- As detailed in Section 5.2, *Air Quality*, due to the uncertainty of the timing and methods of construction activities related to Specific Plan development projects, a significant impact could occur related to construction emissions of ROG_s and NO_x, with implementation of South Coast Air Quality Management District (SCAQMD) Rules and mitigation measures. In addition, operation of the proposed Specific Plan would result in exceedance of the applicable SCAQMD thresholds for ROG_s, NO_x, and CO after implementation of mitigation. Therefore, emissions generated from implementation of the proposed Specific Plan would be significant and unavoidable.

- **Cumulative Air Quality Impacts:** As described in Section 5.2, *Air Quality*, per SCAQMD's methodology, if an individual project results in air emissions of criteria pollutants (including ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}) that exceed the SCAQMD's thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the region is in non-attainment under an applicable federal or state ambient air quality standard.

As described previously, emissions from construction of projects pursuant to the proposed Specific Plan would exceed SCAQMD's threshold for ROGs and NO_x after implementation of SCAQMD Rules and mitigation measures. In addition, emissions from buildout of the proposed Specific Plan would exceed the applicable SCAQMD thresholds for ROGs, NO_x, and CO after implementation of mitigation. Therefore, operational-source emissions from implementation of the proposed Specific Plan would be cumulatively considerable, and cumulative air quality impacts would be significant and unavoidable.

Greenhouse Gas Emissions

- As detailed in Section 5.4, *Greenhouse Gas Emissions*, the GHG emissions that would be generated from the increase in population and the resulting vehicular trips and use of electricity, water, and fuels from construction and operation of the proposed Specific Plan at buildout would be in excess of both the SCAQMD screening threshold and 2035 efficiency level threshold. Mitigation Measures are included to require Specific Plan development projects to be designed to achieve a 5 percent efficiency beyond the incumbent California Building Code Title 24 requirements, and to be designed to reduce water usage by a minimum of 30 percent when compared to baseline water demand. However, even with implementation of these mitigation measures the GHG emissions generated by the proposed Specific Plan would remain significant and unavoidable.
- **Cumulative Greenhouse Gas Emissions Impacts:** GHG emissions impacts are assessed in a cumulative context, since no single project can cause a discernible change to climate. The analysis of greenhouse gas emission impacts under CEQA contained in this EIR effectively constitutes an analysis of a project's contribution to the significant statewide cumulative impact of GHG emissions. Because the estimated GHG emissions from development and operation of the proposed Specific Plan at buildout would exceed the AQMD screening threshold and exceed the SCAQMD 2035 efficiency level threshold after implementation of mitigation measures, the contribution of the Specific Plan to significant cumulative GHG impacts is significant and unavoidable and cumulatively considerable.

Transportation and Circulation

- As detailed in Section 5.9, *Transportation and Circulation*, the proposed Specific Plan would result in traffic impacts. The Caltrans intersection of Newport Avenue at I-5 northbound on-ramp is forecast to operate at LOS F under existing, future, and with all project conditions. Installation of a traffic signal at the intersection would allow this location to operate at an LOS A and B in the peak hours. However, the intersection is under Caltrans jurisdiction, and the City does not have the sole authority to install a signal at this location. Therefore, the impact at this intersection is considered significant and unavoidable. A traffic signal at this location is recommended in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015. The City of Tustin will cooperate with Caltrans when Caltrans proceeds with this traffic signal improvement, as

included in Mitigation Measure TR-1. Unless and until Caltrans implements the traffic signal at this location, impacts would remain significant and unavoidable.

- **Cumulative Traffic Impacts:** The impacts of the proposed Specific Plan and the anticipated cumulative development would result in an impact at the intersection of Newport Avenue at the I-5 northbound on-ramp, which is under the jurisdiction of Caltrans. The addition of traffic from the proposed Specific Plan would be cumulatively considerable due to the existing conditions. The City of Tustin cannot guarantee installation of a traffic signal that is in a location under Caltrans jurisdiction. Therefore, traffic impacts from implementation of the DCCSP would be cumulatively significant and remain significant and unavoidable.

REFERENCES

California Employment Development Department Labor Force and Unemployment Rate for Cities and Census Designated Places. Accessed at: <http://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>

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6. Alternatives

This section addresses alternatives to the proposed Specific Plan and describes the rationale for including them in the EIR. The section also discusses the environmental impacts associated with each alternative and compares the relative impacts of each alternative to those of the proposed Specific Plan.

6.1 INTRODUCTION

The identification and analysis of alternatives to a project is a fundamental part of the environmental review process pursuant to CEQA. Public Resources Code (PRC) Section 21002.1(a) establishes the need to address alternatives in an EIR by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is . . . to identify alternatives to the project."

Pursuant to *CEQA Guidelines* Section 15126.6(a), an EIR must describe a reasonable range of alternatives to the proposed project or to the project's location that would feasibly avoid or lessen its significant environmental impacts while attaining most of the proposed project's objectives. *CEQA Guidelines* Section 15126.6(b) emphasizes that the selection of project alternatives be based primarily on the ability to reduce impacts relative to the proposed project. In addition, *CEQA Guidelines* Section 15126.6(e)(2) requires the identification and evaluation of an "Environmentally Superior Alternative."

Pursuant to *CEQA Guidelines* Section 15126.6(d), discussion of each alternative presented in this EIR Section is intended "to allow meaningful evaluation, analysis, and comparison with the proposed project." As permitted by CEQA, the significant effects of each alternative are discussed in less detail than those of the proposed Specific Plan, but in enough detail to provide perspective and allow for a reasoned choice among alternatives to the proposed project.

In addition, the "range of alternatives" to be evaluated is governed by the "rule of reason" and feasibility, which requires the EIR to set forth only those alternatives that are feasible and necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (*CEQA Guidelines* Section 15126.6(f)). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors and other considerations (*CEQA Guidelines* Sections 15091(a)(3), 15364).

Based on the CEQA requirements described above, the alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative could avoid or substantially lessen any of the identified significant environmental effects of the proposed Specific Plan project;
- The extent to which the alternative could accomplish the objectives of the proposed Specific Plan;
- The potential feasibility of the alternative;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives that would allow an informed comparison of relative advantages and disadvantages of the proposed Specific Plan project and potential alternatives to it; and

- The requirement of the *CEQA Guidelines* to consider a “no project” alternative; and to identify an “environmentally superior” alternative in addition to the no project alternative (*CEQA Guidelines* Section 15126.6(e)).

Neither the CEQA statute, the *CEQA Guidelines*, nor recent court cases specify a specific number of alternatives to be evaluated in an EIR. Rather, “the range of alternatives required in an EIR is governed by the rule of reason that sets forth only those alternatives necessary to permit a reasoned choice” (*CEQA Guidelines* 15126(f)).

6.2 SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA requires the alternatives selected for comparison in an EIR to avoid or substantially lessen one or more significant effects of the project being evaluated. In order to identify alternatives that would avoid or substantially lessen any of the identified significant environmental effects of implementation of the proposed Specific Plan, the significant impacts must be considered, although it is recognized that alternatives aimed at reducing the significant and unavoidable impacts would also avoid or reduce impacts that were found to be less than significant or reduced to below a level of significance with implementation of mitigation measures. The analysis in Chapter 5 of this EIR determined that buildout of the proposed Specific Plan would result in the following significant and unavoidable impacts.

Air Quality

- As detailed in Section 5.2, *Air Quality*, due to the uncertainty of the timing and methods of construction activities related to Specific Plan development projects, a significant impact could occur related to construction emissions of ROG_s and NO_x, with implementation of South Coast Air Quality Management District (SCAQMD) Rules and mitigation measures. In addition, operation of the proposed Specific Plan would result in exceedance of the applicable SCAQMD thresholds for ROG_s, NO_x, and CO after implementation of mitigation. Therefore, emissions generated from implementation of the proposed Specific Plan would be significant and unavoidable.
- **Cumulative Air Quality Impacts:** As described in Section 5.2, *Air Quality*, per SCAQMD’s methodology, if an individual project results in air emissions of criteria pollutants (including ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}) that exceed the SCAQMD’s thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the region is in non-attainment under an applicable federal or state ambient air quality standard.

As described previously, emissions from construction of projects pursuant to the proposed Specific Plan would exceed SCAQMD’s threshold for ROG_s and NO_x after implementation of SCAQMD Rules and mitigation measures. In addition, emissions from buildout of the proposed Specific Plan would exceed the applicable SCAQMD thresholds for ROG_s, NO_x, and CO after implementation of mitigation. Therefore, operational-source emissions from implementation of the proposed Specific Plan would be cumulatively considerable, and cumulative air quality impacts would be significant and unavoidable.

Greenhouse Gas Emissions

- As detailed in Section 5.4, *Greenhouse Gas Emissions*, the greenhouse gas (GHG) emissions that would be generated from the increase in population and the resulting vehicular trips and use of

electricity, water, and fuels from construction and operation of the proposed Specific Plan at buildout would be in excess of both the SCAQMD screening threshold and 2035 efficiency level threshold. Mitigation Measures are included to require Specific Plan development projects to be designed to achieve a 5 percent efficiency beyond the incumbent California Building Code Title 24 requirements, and to be designed to reduce water usage by a minimum of 30 percent when compared to baseline water demand. However, even with implementation of these mitigation measures the GHG emissions generated by the proposed Specific Plan would remain significant and unavoidable.

- **Cumulative Greenhouse Gas Emissions Impacts:** GHG emissions impacts are assessed in a cumulative context, since no single project can cause a discernible change to climate. The analysis of greenhouse gas emission impacts under CEQA contained in this EIR effectively constitutes an analysis of a project's contribution to the significant statewide cumulative impact of GHG emissions. Because the estimated GHG emissions from development and operation of the proposed Specific Plan at buildout would exceed the SCAQMD screening threshold and exceed the SCAQMD 2035 efficiency level threshold after implementation of mitigation measures, the contribution of the Specific Plan to significant cumulative GHG impacts is significant and unavoidable and cumulatively considerable.

Transportation and Circulation

- As detailed in Section 5.9, *Transportation and Circulation*, the proposed Specific Plan would result in traffic impacts to the Caltrans intersection of Newport Avenue at I-5 northbound on-ramp. This intersection is forecast to operate at LOS F under existing, future, and with all project conditions. Installation of a traffic signal at the intersection would allow it to operate at LOS A and B in the peak hours. However, the intersection is under Caltrans jurisdiction, and the City does not have the sole authority to install a signal at this location. The City will cooperate with Caltrans when they initiate the construction of this intersection, is included as Mitigation Measure TR-1. Therefore, the impact at this intersection is considered significant and unavoidable. A traffic signal at this location is also recommended in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015. Unless and until Caltrans implements the traffic signal at this location, impacts would remain significant and unavoidable.
- **Cumulative Traffic Impacts:** The impacts of proposed Specific Plan and the anticipated cumulative development would result in an impact at the intersection of Newport Avenue at the I-5 northbound on-ramp, which is under the jurisdiction of Caltrans. The addition of traffic from the proposed Specific Plan would be cumulatively considerable due to the existing conditions. The City of Tustin cannot guarantee installation of a traffic signal that is in a location under Caltrans jurisdiction. Therefore, traffic impacts from implementation of the DCCSP would be cumulatively significant and remain significant and unavoidable.

6.3 PROJECT OBJECTIVES

Project Objectives

The project objectives and underlying purpose of the proposed project are derived from the DCCSP Goals and Vision Statements, as follows:

1. Bolster an economically vibrant and active downtown environment through introduction of mixed uses.
2. Draw more patrons and expand walkability through enhanced pedestrian-oriented commercial first floor development.
3. Introduce a sufficient level of high-quality, integrated residential mixed use, and focused multifamily development to invigorate Old Town Tustin.
4. Transform streets and create neighborhood connectivity through pedestrian-oriented improvements.
5. Differentiate Old Town Tustin by embracing its unique historic downtown character.
6. Maintain a commercial focus for the project area.
7. Create additional integrated public spaces to serve existing and future residents and visitors, and to provide opportunities for community events, interaction, and strengthening the area's sense of community.

6.4 ALTERNATIVES CONSIDERED BUT REJECTED

Pursuant to *CEQA Guidelines* Section 15126.6(c), an EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are potentially feasible and, therefore, merit in-depth consideration, and which are infeasible and need not be considered further. Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered (*CEQA Guidelines* Section 15126.6(f), (f)(3)). This section identifies alternatives considered by the lead agency but rejected as infeasible, and provides a brief explanation of the reasons for their exclusion. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects.

- **Alternative Site:** Alternative sites were not selected for evaluation because the primary purpose of the proposed Specific Plan is to guide redevelopment of the downtown area by introducing residential and mixed use, and proposing circulation improvements for vehicles, pedestrians, bicyclists, and transit users. Since all of the project objectives are related to Tustin's downtown area, none of these objectives could be met in another location.

6.5 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Three alternatives to the proposed Specific Plan project have been identified for further analysis as representing a reasonable range of alternatives that attain most of the objectives of the project, may avoid or substantially lessen any of the significant effects of the proposed project, and are feasible from a development perspective. These alternatives have been developed based on the criteria identified in Section 6.1, *Introduction*, and are described below:

- **Alternative 1: No Project/ Buildout of Existing Zoning Alternative.** Under this alternative, the proposed Specific Plan would not be developed. In accordance with the *CEQA Guidelines*, the No Project/ Buildout of Existing Zoning Alternative will be the continuation of the existing plan, policy or operation into the future when the project is the revision of an existing land use or regulatory plan, policy or ongoing operation. Section 15126.6(e)(3)(A) of the *CEQA Guidelines* states that, "typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan."

This alternative evaluates the environmental effects of buildout of the Specific Plan area according to the existing General Plan and zoning designations. Because the Specific Plan area is an urban area that is generally built out, most new development would occur as adaptive reuse of existing buildings, development on existing vacant sites, and infill or re-development of existing uses at the intensity allowed by the existing zoning. The addition of residential uses and mixed residential uses within the Specific Plan area would not occur, as proposed by the project. However, the Vintage Planned Community—a 140 multi-family dwelling unit community, which was recently approved by the City and is currently under construction—would be developed. In addition, as described in Chapter 3.0, *Project Description*, the 300,000 square feet of non-residential development that is assumed by the Specific Plan consists of buildout of the existing non-residential parcels in the Specific Plan area as designated by the existing General Plan Land Use Map and Zoning Map. Because the land use and zoning designations of the non-residential parcels would not change as a result of the proposed Specific Plan, the No Project/ Buildout of Existing Zoning Alternative assumes development of 300,000 square feet of non-residential space as allowed by existing General Plan and Zoning.

The Alternative 1: No Project/Buildout of Existing Zoning Alternative evaluation provides a comparison between the environmental impacts of the proposed Specific Plan in contrast to the result from not approving, or denying, the proposed Specific Plan. Thus, this alternative is intended to meet the requirements of *CEQA Guidelines* Section 15126.6(e) for evaluation of a no project alternative.

- **Alternative 2: Reduced Intensity Alternative.** Under this alternative, a 25 percent reduction in the number of proposed dwelling units would be developed (222 fewer dwelling units). The proposed Specific Plan would allow for development of up to 887 dwelling units and 300,000 square feet of non-residential development through the year 2035. Under this alternative, a maximum of 665 dwelling units (including the approved Vintage Planned Community which allows 140 multi-family dwelling units) would be assumed developed. This alternative would allow for up to a 25 percent shift of housing units between DAs, as provided by the project. This alternative includes all of the circulation and streetscape improvements that are proposed by the project, and assumes development of 300,000 square feet of non-residential space from buildout of areas that are currently designated for non-residential development.
- **Alternative 3: Limited Increase in Development Alternative.** Under this alternative, a 50 percent reduction in the number of dwelling units would be developed. The proposed Specific Plan would allow for development of up to 887 dwelling units and 300,000 square feet of non-residential development through the year 2035. Under this alternative, a maximum of 444 dwelling units would be assumed developed (including the approved Vintage Planned Community which allows 140 multi-family dwelling units). This alternative would allow for a 25 percent shift of housing units between DAs, as provided by the project. This alternative includes all of the circulation and streetscape improvements that are proposed by the project, and assumes development of 300,000 square feet of non-residential space from buildout of areas that are currently designated for non-residential development.

6.6 NO PROJECT/BUILDOUT OF EXISTING ZONING ALTERNATIVE

Section 15126.6(e) of the *CEQA Guidelines* requires analysis of the No Project Alternative. The no project alternative analysis must discuss the existing conditions at the time the Notice of Preparation/Initial Study

was published and considers conditions that would be reasonably expected to occur in the foreseeable future if the project were not approved. The No Project Alternative applies to the following scenarios:

- (1) When the project is a revision of an existing land use or regulatory plan, policy, or ongoing operation, the "no project" alternative is the continuation of the existing plan, policy, or operation into the future; or
- (2) If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed.

Therefore, under Alternative 1: No Project/Buildout of Existing Zoning Alternative, the proposed Specific Plan project would not be implemented and the Specific Plan area would be developed pursuant to the existing land use and zoning regulations. Limited new development would occur on vacant parcels and redevelopment of sites would occur pursuant to the existing zoning. The addition of residential uses other than what has already been approved and mixed residential uses within the Specific Plan area would not occur. Alternative 1: No Project/Buildout of Existing Zoning Alternative provides a comparison between the environmental impacts of the proposed Specific Plan and the result of not approving, or denying, the proposed Specific Plan.

As described previously, the No Project/ Buildout of Existing Zoning Alternative includes the Vintage Planned Community that includes 140 multi-family dwelling units, which has been recently approved by the City, and 300,000 square feet of non-residential development that is already planned by the City's General Plan and zoning code.

6.6.1 ENVIRONMENTAL IMPACTS

Aesthetics

Under the No Project/Buildout of Existing Zoning Alternative, infill development on remaining vacant parcels, re-development per the existing zoning, and adaptive reuse of existing buildings would occur within the Specific Plan area to add residential mixed uses. This alternative would not result in intensification of existing developed sites within the Specific Plan area, and development under this alternative would occur in the absence of unifying design guidelines, architectural guidelines, streetscape improvements, or other aesthetic enhancements proposed in the Specific Plan that are intended to create distinctive areas with attractive streets and public spaces. Although visual impacts would be less than significant under this alternative, the overall visual quality of the Specific Plan would not be improved as compared to the proposed project, which would result in an improvement in aesthetics and enhancement of character within the area.

Development under this alternative would result in fewer new sources of light and glare from residential infill. While the sources of light and glare would be similar, the number of sources would be fewer than under Specific Plan development, and the resulting degree of light and glare impacts would be less. However, both would result in similar less than significant impacts with implementation of the City's existing lighting regulations (TCC Article 9, Chapter 2, Part 7, Section 9271). Overall, the aesthetic impacts from this alternative would be less than significant, and neutral in comparison to the proposed project.

Air Quality

Under the No Project/Buildout of Existing Zoning Alternative, a reduced level of development would occur within the Specific Plan area by resulting in fewer new residential uses in the project area. The alternative would not result in changes to zoning or the General Plan land uses. Therefore, it would be consistent with

the Air Quality Management Plan (AQMP) and result in fewer impacts than the significant impacts to the AQMP that would result from the proposed Specific Plan.

In this alternative, 140 dwelling units would be built; therefore, it would generate fewer construction and operational emissions than would occur under the proposed Specific Plan, and is not anticipated to result in a significant and unavoidable impact, which would occur from the proposed Specific Plan.

However, the existing zoning within the project area does not promote mixed uses and transit oriented designs and does not provide improvements to circulation and connectivity that would help to reduce vehicle trips. Overall, this alternative would result in fewer air quality emissions than the proposed Specific Plan, but would not achieve the long-term objective of fostering a walkable and bikeable environment that is accessible to residents, workers, and visitors. Due to the reduction in buildout that would occur by the No Project/Buildout of Existing Zoning Alternative, less air quality impacts would occur than by the proposed Specific Plan.

Cultural Resources

The No Project/Buildout of Existing Zoning Alternative would result in infill development on remaining vacant parcels, re-development per the existing zoning, and adaptive reuse of existing buildings that have the potential for impacting historic buildings or uncovering unknown buried archaeological resources. However, less development and soils disturbance would occur by the No Project/Buildout of Existing Zoning Alternative than would occur by the proposed Specific Plan because fewer units would be built; thus, the likelihood of uncovering archaeological resources by this alternative would be less than for the proposed Specific Plan. However, similar mitigation would be required for new development under the No Project/Buildout of Existing Zoning Alternative to ensure that impacts are less than significant.

In addition, impacts related to historic resources would be avoided as adaptive reuse of historic structures under this alternative would be required to adhere with the applicable TCC provisions adopted to protect historic resource, including the City's Cultural Resources District Residential and Commercial Design Guidelines, as would the proposed Specific Plan. Therefore, the No Project/Buildout of Existing Zoning Alternative would result in a reduced potential to impact regarding cultural resources compared to the proposed Specific Plan.

Greenhouse Gas Emissions

Under the No Project/Buildout of Existing Zoning Alternative, a reduced level of development would occur within the Specific Plan area. This alternative would not develop 747 of the 887 dwelling units proposed by the Specific Plan. Therefore, it would generate fewer construction and operational emissions than would occur under the proposed Specific Plan, and is not anticipated to result in a significant and unavoidable impact, which would occur from the proposed Specific Plan.

However, the existing land use and zoning within the project area does not promote mixed-uses and transit oriented designs and does not provide improvements to circulation and connectivity that would help to reduce vehicle trips. Overall, this alternative would result in fewer GHG emissions than the proposed Specific Plan, but would not achieve the long-term objective of fostering a walkable and bikeable environment that reduces vehicle miles traveled in the region. Due to the reduction in homes that would be built by the No Project/Buildout of Existing Zoning Alternative, less GHG impacts would occur than by the proposed Specific Plan. Therefore, GHG related impacts under this alternative would be reduced compared to the proposed Specific Plan.

Land Use and Planning

The No Project/Buildout of Existing Zoning Alternative would continue the existing land uses and zoning designations within the area. The proposed Specific Plan has been prepared to provide a cohesive plan that specifically addresses: development standards, site planning, building design, parking, architectural treatment, landscaping, and circulation improvements. This alternative would not provide a cohesive plan for optimal functioning of a walkable and bikeable environment that is accessible to residents, workers, and visitors.

With the absence of the Specific Plan to guide development of the area, development would be considered on a project-by-project basis, which would not provide for a cohesive future land use plan that would maximize land use and circulation opportunities. This alternative would not implement the pedestrian and bicycle circulation patterns identified in the Specific Plan to improve access and reduce local vehicular trips. In addition, this alternative would not implement SCAG policies that encourage greater densities in areas with transit and mixed-use opportunities and less dependence on the automobile. The No Project/Buildout of Existing Zoning Alternative would not implement SCAG policies in a cohesive manner, such as would be done by the proposed Specific Plan.

However, the land uses that would occur by the No Project/Buildout of Existing Zoning Alternative would be consistent with the City's General Plan and zoning ordinance. Hence, like the proposed Specific Plan, the No Project/Buildout of Existing Zoning Alternative would result in a less than significant impact, and would be neutral in comparison to the proposed project.

Noise

The No Project/Buildout of Existing Zoning Alternative would develop 140 dwelling units instead of the 887 dwelling units (747 fewer units), as would be done under buildout of the proposed Specific Plan. However, because the Specific Plan area is urban and developed, the development that would occur under both the proposed Specific Plan and the No Project/Buildout of Existing Zoning Alternative would consist of infill and redevelopment that would result in similar construction and operation related noise impacts. Because the overall development potential would be reduced by the No Project/Buildout of Existing Zoning Alternative compared to the proposed Specific Plan, the No Project/Buildout of Existing Zoning Alternative would result in an incremental reduction in construction and operational noise impacts. However, noise sources would continue to be adjacent to or nearby existing sensitive receptors (such as, existing residences) in the Specific Plan area and would require similar mitigation measures as the proposed Specific Plan. Therefore, the construction noise impact would be the same as what would occur by the proposed Specific Plan.

The existing zoning would result in the development of 747 fewer dwelling units than the proposed project. Therefore, fewer vehicular trips would occur by the No Project/Buildout of Existing Zoning Alternative than by the proposed Specific Plan. As a result, less vehicular noise would be generated by this alternative than under the proposed Specific Plan, and vehicle-related operational noise impacts would be less under the No Project/Buildout of Existing Zoning Alternative. However, operational noise impacts that would occur by the proposed Specific Plan are considered less than significant. Other operational impacts related to equipment, machinery, loading docks, or operation of other facilities under this alternative would be similar as what would occur by the proposed Specific Plan, and would result in less than significant impacts. Additionally, the No Project/Buildout of Existing Zoning Alternative would result in fewer people exposed to noise from surrounding development and roadways because fewer additional residents would be generated. As such, impacts would be less than significant, and less than those associated with the proposed Specific Plan.

Population and Housing

Under the No Project/Buildout of Existing Zoning Alternative, 747 fewer dwelling units would be developed, then by buildout of the proposed Specific Plan. The increase in population that would be generated by this alternative would be consistent with SCAG forecasts and would not induce substantial population growth in the project area. The No Project/Buildout of Existing Zoning Alternative and the proposed Specific Plan would result in similar impacts related to population and housing, which are considered less than significant. However, implementation of this alternative would not assist as much as the proposed project in the projected jobs to housing ratio imbalance. As described in Section 5.7, *Population and Housing*, SCAG projects a jobs-to-housing ratio of 2.32 in 2035, which indicates that a substantial number of employees would be commuting into the City for employment, and the jobs and dwelling units generated from the proposed project would result in a more balanced ratio of jobs and housing than what would occur by the No Project/Buildout of Existing Zoning Alternative.

Recreation

The No Project/Buildout of Existing Zoning Alternative would result in 747 fewer dwelling units. This alternative would have no impact on recreation facilities since no new residential units (other 140 multi-family dwelling units in the approved Vintage Planned Community project) would be constructed and no new population would be introduced to the area. Unlike the proposed project, this alternative would not require contribution to park fees to fund future neighborhood parks and other recreational amenities. Overall, this alternative would not impact recreational resources.

Transportation and Circulation

The No Project/Buildout of Existing Zoning Alternative would result in 747 fewer dwelling units. Therefore, fewer traffic trips would be generated from this alternative than the proposed Specific Plan. However, due to the existing roadway conditions, the Caltrans intersection of Newport Avenue at I-5 northbound on-ramp, it is currently operating at and is forecast to operate at LOS F both with and without the project. The improvement at this location is identified and planned, but is under control of Caltrans, and cannot be guaranteed by the City. Thus, similar to the proposed project, the No Project/Buildout of Existing Zoning Alternative would result in a significant and unavoidable impact; however, the volume of trips and amount of additional congestion at the impacted intersection would be less under the No Project/Buildout of Existing Zoning Alternative.

Tribal Cultural Resources

As described previously, the No Project/Buildout of Existing Zoning Alternative would result in infill development on remaining vacant parcels, re-development per the existing zoning, and adaptive reuse of existing buildings. The excavation related to this development has the potential for uncovering unknown buried tribal cultural resources. However, less development and soils disturbance would occur by the No Project/Buildout of Existing Zoning Alternative than would occur by the proposed Specific Plan because fewer residential units would be built; thus, the likelihood of uncovering tribal cultural resources by this alternative would be less than for the proposed Specific Plan. Overall, similar less than significant impacts would occur from this alternative; however, the potential for impacts to occur would be less by this alternative with construction of 747 fewer dwelling units.

Utilities and Service Systems

The No Project/Buildout of Existing Zoning Alternative would result in less development at buildout than the proposed Specific Plan. Since the residential population would not increase to the same degree under this alternative, as would occur under the proposed Specific Plan, less utility capacity would be required to serve the area at buildout. Water supply demands and wastewater generation, needs would be less than

what would occur by the proposed Specific Plan. Therefore, this alternative would result in less than significant impacts similar to the proposed Specific Plan.

Energy

Under the No Project/Buildout of Existing Zoning Alternative, 747 fewer dwelling units would be developed than by buildout of the proposed Specific Plan. Therefore, the demand for energy would be less by this alternative than the proposed Specific Plan. Although the proposed Specific Plan's demands for energy would be compliant with Title 24 requirements and were determined to be less than significant, the amount of energy used by the No Project/Buildout of Existing Zoning Alternative would be reduced compared to the proposed Specific Plan.

6.6.2 CONCLUSION

Ability to Reduce Impacts

The No Project/Buildout of Existing Zoning Alternative would eliminate the significant and unavoidable impacts related to air quality and greenhouse gas that would occur from implementation of the residential component of the proposed Specific Plan. However, the significant and unavoidable impacts related to traffic would remain. In addition, this alternative would require the same mitigation to ensure less than significant impacts related to noise, archaeological, tribal cultural, and historic resources.

Ability to Achieve Project Objectives

The analysis of the No Project/Buildout of Existing Zoning Alternative compares the impacts of the proposed Specific Plan to the impacts that would occur if the existing General Plan and zoning continued to be implemented. Regarding the ability to achieve project objectives, the No Project/Buildout of Existing Zoning Alternative would not achieve most of the project objectives, including Objective 1, 3, 4, 6, 7. Development of the Specific Plan area under this alternative would partially achieve Objective 2, (draw more patrons and expand walkability through enhanced pedestrian-oriented commercial first floor development) if commercial uses are developed pursuant to the existing General Plan and zoning, but to a lesser extent than the proposed Specific Plan due to the absence of mixed uses. Compliance with the City's Cultural Resources District Commercial Design Guidelines would also achieve Objective 5 (differentiate Old Town Tustin by embracing its unique historic downtown character).

6.7 REDUCED INTENSITY ALTERNATIVE

As described above, the Reduced Intensity Alternative would result in a 25 percent reduction in the number of dwelling units included in the proposed Specific Plan. Under this alternative, a maximum of 665 dwelling units would be developed (including the 140 multi-family dwelling units in the approved Vintage Planned Community project). Thus, 222 fewer dwelling units would be developed. This alternative would allow for a 25 percent shift of housing units between DAs, as provided by the project. This alternative includes all of the conceptual circulation and streetscape improvements that are proposed by the project and assumes development of 300,000 square feet of non-residential space from buildout of areas that are currently designated for non-residential development.

6.7.1 ENVIRONMENTAL IMPACTS

Aesthetics

Under the Reduced Intensity Alternative, the same type of mixed-use development would occur within the Specific Plan area, however, the area would be visually less dense. The visual character and quality of the

site would be the same as the proposed condition. The new structures and landscaping would be implemented, similar to that of the proposed Specific Plan; however, it is possible that greater visual space between structures and lower height buildings with fewer stories would be developed because 222 fewer dwelling units would be developed in mixed use structures. In addition, fewer new sources of light and glare would occur from this alternative.

Implementation of the Reduced Intensity Alternative would result in the same less than significant impacts related to aesthetics as the proposed Specific Plan. The Reduced Intensity Alternative would implement the same type of visual improvements that would be introduced throughout the Specific Plan area by the proposed project (e.g., new and improved landscaping, providing a consistent design theme within the DAs, and streetscaping). Thus, improvements to the existing views, character, and quality of the Specific Plan area would also occur under the Reduced Intensity Alternative. Overall, the aesthetic impacts from this alternative would be less than significant, and neutral in comparison to the proposed project.

Air Quality

The Reduced Intensity Alternative would develop 25 percent (222) fewer housing units than the proposed project. Therefore, a reduced overall volume of construction activities and the related emissions would occur. However, the volume of ROG and NO_x emissions from construction activities would remain significant and unavoidable. As described in Section 5.2, *Air Quality*, the construction of the proposed project could generate up to 182.18 lbs/day of ROG emissions, which is above the threshold of 75 lbs/day; and up to 430.19 lbs/day of NO_x emissions, which is above the SCAQMD threshold of 100 lbs/day. Under the Reduced Intensity Alternative, it is possible that a combination of developments could occur, such that daily construction emissions would still exceed this threshold. Thus, construction air quality impacts would remain significant and unavoidable.

In addition, the reduced amount of development by this alternative would result in less stationary source emissions from equipment and less traffic associated air emissions than the proposed Specific Plan. Therefore, overall air quality impacts would be reduced in comparison to the proposed Specific Plan. However, the volume of ROG, NO_x, and CO emissions from operational vehicular emissions generated by the Reduced Intensity Alternative would remain significant and unavoidable due to the volume of vehicular trips that would occur from operation of 665 dwelling units. As described in Section 5.2, *Air Quality*, operation of the proposed project would generate up to 295.15 lbs/day of ROG emissions, which is substantially above the 55 lb/day SCAQMD threshold; 164.34 lbs/day of NO_x emissions, which is above the SCAQMD threshold of 55 lbs/day; and 862.22 lbs/day of CO, which is above the SCAQMD threshold of 550 lbs/day. Under the Reduced Intensity Alternative, the daily ROG, NO_x, and CO emissions related to residential operations would be approximately 25 percent less but would still exceed the SCAQMD thresholds. Therefore, although less emissions would occur, significant and unavoidable impacts would still occur from the Reduced Intensity Alternative. Thus, impacts under this alternative would be the same as the proposed Specific Plan.

Cultural Resources

The Reduced Intensity Alternative would result in a similar potential to adversely affect any historic or undiscovered archaeological resources on the project site as the proposed Specific Plan, despite the reduction in development that would occur from this alternative. This alternative would have similar impact on historic structures. However, like the proposed Specific Plan, similar mitigation to the project's mitigation measure and compliance with the applicable TCC provisions adopted to protect cultural and historic resources, including the Cultural Resources Design Guidelines, would be required to reduce potential impacts to less than significant. Therefore, impacts to cultural resources from the Reduced Intensity Alternative would be similar to those associated with the proposed project.

Greenhouse Gas Emissions

The Reduced Intensity Alternative would develop 25 percent (222) fewer dwelling units than the proposed Specific Plan. Therefore, a reduced volume of construction activities and related production of GHG emissions would occur. In addition, the reduced amount of development by this alternative would result in less stationary source emissions from equipment onsite, and less traffic-associated GHG emissions than the proposed Specific Plan. Therefore, the overall volume of GHG emissions would be reduced in comparison to the proposed Specific Plan. However, the development and operation of 665 dwelling units would result in significant GHG emissions and would require implementation of the same mitigation measures that are required for the proposed Specific Plan. Therefore, although fewer GHG emissions would occur, a 25 percent reduction in residential GHG emissions would continue to result in a significant and unavoidable impact after implementation of mitigation. Thus, impacts under this alternative would be the same as the proposed Specific Plan.

Land Use and Planning

Like the proposed project, the Reduced Intensity Alternative would involve General Plan and Zoning designation changes for the planning area, and would have the same type of consistency with the SCAG RTP/SCS policies, Orange County Sustainable Communities Strategy policies, and the City's General Plan. Hence, like the proposed Specific Plan, the Reduced Intensity Alternative would result in a less than significant impact related to land use, and would be neutral in comparison to the proposed project.

Noise

Construction and operation noise impacts would be reduced under the Reduced Intensity Alternative because this alternative would decrease the maximum residential development within the planning area by 25 percent. Construction of this alternative would generate the same type and volume of construction noise as the proposed Specific Plan, and impacts would continue to be potentially located next to sensitive receptors. Therefore, mitigation measures would be required to reduce construction noise and construction noise impacts would be similar to the proposed Specific Plan under the Reduced Intensity Alternative.

Operational noise would be reduced under this alternative as traffic-generated and stationary noise sources would decrease in relation to the reduction in dwelling units. Additionally, the Reduced Intensity Alternative would result in 25 percent fewer residents that could be exposed to noise from surrounding development and roadways. Overall, operational noise impacts from the Reduced Intensity Alternative would be less than the less than significant impacts associated with the proposed Specific Plan.

Population and Housing

The Reduced Intensity Alternative would reduce the number of dwelling units by 25 percent compared to the proposed Specific Plan (222 fewer). This would reduce the number of residents at buildout by 25 percent. The increase in population that would be generated by this alternative would be consistent with SCAG forecasts and would not induce substantial population growth in the project area. The Reduced Intensity Alternative and the proposed Specific Plan would result in similar impacts related to population and housing, which is considered less than significant. However, implementation of this alternative would have a reduced improvement to the projected jobs to housing imbalance, compared to the proposed project, because 222 fewer housing units would be developed.

Recreation

Under this alternative, potential impacts on recreation facilities would be decreased by approximately 25 percent since there would be 222 fewer residential units proposed. The alternative could cumulatively contribute to the parkland deficiency identified in the City's General Plan. Therefore, mitigation measures

would be required to fund recreational facilities to serve future residents. Since fewer units would be built, impacts would be decreased in comparison to the proposed project under the Reduced Intensity Alternative.

Transportation and Circulation

The Reduced Intensity Alternative would reduce the number of dwelling units by 25 percent compared to the proposed Specific Plan (222 fewer). This would reduce the number of vehicular trips from residents at buildout by approximately 25 percent. However, due to the existing roadway conditions the Caltrans intersection of Newport Avenue at I-5 northbound on-ramp, the intersection currently operates and is forecast to continue to operate at LOS F both under the proposed project and Reduced Intensity Alternative conditions. The improvement at this location is under control of Caltrans, and cannot be guaranteed by the City. Thus, similar to the proposed project, the Reduced Intensity Alternative would result in a significant and unavoidable traffic impact; however, the volume of trips and amount of additional congestion at the impacted intersection would be less under the Reduced Intensity Alternative condition.

Tribal Cultural Resources

The Reduced Intensity Alternative would result in a similar potential to adversely affect any tribal cultural resources as the proposed Specific Plan, despite the reduction in development. However, like the proposed Specific Plan, cultural mitigation measure CUL-1 would be required to reduce potential impacts to less than significant. Therefore, impacts that could occur by the Reduced Intensity Alternative would be similar to those associated with the proposed project.

Utilities and Service Systems

The Reduced Intensity Alternative would reduce the number of dwelling units by 25 percent compared to the proposed Specific Plan (222 fewer). Thus, the demand for regional water supplies and wastewater treatment from dwelling units would be approximately 25 percent less than the proposed Specific Plan. Therefore, impacts to utilities and service system would be less under this alternative than the less than significant impacts that would occur from implementation of the proposed Specific Plan.

Energy

The Reduced Intensity Alternative would reduce the number of dwelling units by 25 percent compared to the proposed Specific Plan. This would reduce the demand for energy in comparison to the proposed Specific Plan. Although the proposed Specific Plan's demands for energy were determined to be less than significant, the amount of energy used by the Reduced Intensity Alternative would be less. Therefore, impacts to energy would be less under this alternative than the less than significant impacts that would occur from implementation of the proposed Specific Plan.

6.7.2 CONCLUSION

Ability to Reduce Impacts

The Reduced Intensity Alternative would reduce the number of dwelling units within the Specific Plan area by 25 percent (222 fewer dwelling units), which would reduce the impacts related to the project. However, as described previously, the volume of air quality and GHG emissions from construction activities and operational vehicular emissions generated by the Reduced Intensity Alternative would exceed thresholds, and would remain significant and unavoidable due to the volume of vehicular trips that would occur from operation of 665 dwelling units.

In addition, due to the existing roadway conditions at the intersection of Newport Avenue at I-5 northbound on-ramp and the inability of the City to implement an improvement at an intersection that is under the jurisdiction of Caltrans, traffic impacts would remain significant and unavoidable.

Overall, although the volume of impacts would be less by the Reduced Intensity Alternative in comparison to the proposed Specific Plan, the Reduced Intensity Alternative would not eliminate any of the significant and unavoidable impacts that would result from buildout of the proposed Specific Plan.

Ability to Achieve Project Objectives

Implementation of the Reduced Intensity Alternative would achieve most of the project objectives, including Objective 1, 2, 4, 6, 7, but to a lesser extent than would be achieved by the proposed Specific Plan. With 25 percent (222) fewer dwelling units potentially developed under this alternative compared to the proposed Specific Plan, this alternative would not fully achieve the vision of the Specific Plan. The Reduced Intensity Alternative also would not meet Objective 3, that is, to introduce a sufficient level of high-quality, integrated residential mixed use, and focused multifamily development to invigorate Old Town Tustin. Compliance with the City's Cultural Resources District Commercial Design Guidelines would achieve Objective 5 (differentiate Old Town Tustin by embracing its unique historic downtown character).

6.8 LIMITED INCREASE IN DEVELOPMENT ALTERNATIVE

The Limited Increase in Development Alternative would provide a 50 percent reduction in the number of dwelling units that would be developed by the proposed Specific Plan. The proposed Specific Plan would allow for development of up to 887 dwelling units and 300,000 square feet of non-residential development through the year 2035. Under this alternative, the Specific Plan would develop a maximum of 444 dwelling units (including the 140 multi-family dwelling units in the approved Vintage Planned Community project). This alternative would allow for a 25 percent shift of housing units between DAs, as provided by the project. Additionally, this alternative includes all of the circulation and streetscape improvements that are proposed by the project, and assumes development of 300,000 square feet of non-residential space from buildout of areas that are currently designated for non-residential development.

6.8.1 ENVIRONMENTAL IMPACTS

Aesthetics

The Limited Increase in Development Alternative would provide for the same type of land uses, and would provide design guidelines, such that the visual character of new development within the planning area would be the same, as what would occur from implementation of the proposed Specific Plan project. However, because half of dwelling units would be developed by this alternative, in comparison to the proposed Specific Plan, the visual density would be less. It is anticipated that building heights would be lower and massing of non-residential structures would be less than the proposed Specific Plan because 50 percent fewer mixed use buildings would exist upon buildout. In addition, 50 percent fewer residences would generate sources of new light and glare from this alternative.

However, implementation of the Limited Increase in Development Alternative would result in the same less than significant impacts related to aesthetics as the proposed Specific Plan. The Limited Increase in Development Alternative would implement the same type of visual improvements that would be introduced throughout the Specific Plan area by the proposed project (e.g., new and improved landscaping, providing a consistent design theme within the DAs, and streetscaping). Thus, improvements to the existing views, character, and quality of the Specific Plan area would also occur under the Reduced Intensity Alternative.

Overall, the aesthetic impacts from this alternative would be less than significant, and neutral in comparison to the proposed project.

Air Quality

The Limited Increase in Development Alternative would develop 50 percent fewer dwelling units than the proposed project. Therefore, half of the volume of construction activities and the related emissions from residential development would occur. However, the volume of NO_x emissions from construction activities would remain significant and unavoidable. As described in Section 5.2, *Air Quality*, the construction of the proposed project could generate up to 182.18 lbs/day of ROG emissions, which is above the threshold of 75 lbs/day; and up to 430.19 lbs/day of NO_x emissions, which is above the SCAQMD threshold of 100 lbs/day. Under the Limited Increase in Development Alternative, it is possible that a combination of developments could occur, such that daily construction emissions would still exceed this threshold. Thus, construction air quality impacts would remain significant and unavoidable.

In addition, the reduced number of dwelling units that would be developed by this alternative would result in half the stationary source emissions from residential equipment and less residential traffic associated with air emissions than the proposed Specific Plan. Therefore, air quality impacts would be less than the proposed Specific Plan. However, the volume of NO_x and CO emissions from operational vehicular emissions generated by the Limited Increase in Development Alternative would remain significant and unavoidable due to the volume of vehicular trips that would occur from operation of 444 dwelling units. As described in Section 5.2, *Air Quality*, operation of the proposed project would generate up to 295.15 lbs/day of ROG emissions, which is substantially above the 55 lb/day SCAQMD threshold; 164.34 lbs/day of NO_x emissions, which is above the SCAQMD threshold of 55 lbs/day; and the project would generate approximately 862.22 lbs/day of CO, which is above the SCAQMD threshold of 550 lbs/day. Under the Limited Increase in Development Alternative, the daily ROG, NO_x, and CO emissions related to various operations would be less, but the ROG and NO_x emissions would still exceed the SCAQMD thresholds. Thus, operational air quality emissions would remain significant and unavoidable under the Limited Increase in Development Alternative, and impacts under this alternative would be the same as the proposed Specific Plan.

Cultural Resources

The Limited Increase in Development Alternative would result in a similar potential to adversely affect any undiscovered archaeological resources on the project site as the proposed Specific Plan, despite the reduction in development that would occur from this alternative. However, like the proposed Specific Plan, compliance with the mitigation measure and applicable TCC provisions adopted to protect cultural and historic resources would be required to reduce potential impacts to less than significant. Therefore, impacts to cultural resources from the Limited Increase in Development Alternative would be similar to those associated with the proposed project.

Greenhouse Gas Emissions

The Limited Increase in Development Alternative would develop 50 percent fewer housing units than the proposed Specific Plan. Therefore, a reduced volume of construction activities and related production of GHG emissions would occur. In addition, the reduced amount of development by this alternative would result in less stationary source emissions from residential equipment, and less residential traffic-associated GHG emissions than the proposed Specific Plan. Therefore, the overall volume of GHG emissions would be reduced in comparison to the proposed Specific Plan. However, the development and operation of 444 dwelling units would result in significant GHG emissions and would require implementation of the same mitigation measures that are required for the proposed Specific Plan. Therefore, although less GHG emissions would occur, the Limited Increase in Development Alternative would continue to result in

significant and unavoidable impacts related to GHG emissions after implementation of mitigation. Thus, impacts under this alternative would be similar to the proposed Specific Plan.

Land Use and Planning

Like the proposed project, the Limited Increase in Development Alternative would involve General Plan and Zoning designation changes for the planning area, and would have the same type of consistency with the SCAG RTP/SCS policies, Orange County Sustainable Communities Strategy policies, and the City's General Plan. Hence, like the proposed Specific Plan, the Reduced Intensity Alternative would result in a less than significant impact related to land use, and would be neutral in comparison to the proposed project.

Noise

Construction and operation noise impacts would be reduced under the Limited Increase in Development Alternative because this alternative would decrease the number of dwelling units within the Specific Plan area by 50 percent. Construction of this alternative would generate the same type and volume of construction noise as the proposed Specific Plan, and impacts would continue to be potentially located next to sensitive receptors. Therefore, mitigation measures would be required to reduce construction noise and construction noise impacts would be neutral in comparison to the proposed project under the Limited Increase in Development Alternative.

Operational noise would be reduced under this alternative as residential traffic and residential stationary noise sources would be 50 percent less under this alternative. Additionally, the Limited Increase in Development Alternative would result in 50 percent fewer residents that could be exposed to noise from surrounding development and roadways. Overall, operational noise impacts from the Limited Increase in Development would be less than the impacts associated with the proposed Specific Plan, which are considered less than significant.

Population and Housing

The Limited Increase in Development Alternative would reduce the number of dwelling units at buildout by 50 percent compared to the proposed Specific Plan. This would reduce the number of residents at buildout by 50 percent. The increase in population that would be generated by this alternative would be consistent with SCAG forecasts and would not induce substantial population growth in the project area. The Limited Increase in Development Alternative and the proposed Specific Plan would result in similar impacts related to population and housing, which are considered less than significant. However, implementation of this alternative would not achieve the City's desired improvement to the projected jobs to housing imbalance compared to the proposed project, because fewer housing units would be developed.

Recreation

Under this alternative, potential impacts on recreation facilities would be decreased by approximately 50 percent since there would be 444 fewer residential units proposed. The alternative could cumulatively contribute to the parkland deficiency identified in the City's General Plan. Therefore, mitigation measures would be required to fund recreational facilities to serve future residents. Since fewer units would be built, impacts would be reduced in comparison to the proposed project under the Limited Increase in Development Alternative.

Transportation and Circulation

The Limited Increase in Development Alternative would reduce the number of dwelling units at buildout by 50 percent compared to the proposed Specific Plan. This would reduce the number of residential vehicular trips at buildout by approximately 50 percent. However, due to the existing roadway conditions of the

Caltrans intersection of Newport Avenue at I-5 northbound on-ramp, it currently operates and is forecast to continue to operate at LOS F both under the proposed project and the Limited Increase in Development Alternative conditions. The improvement at this location is under control of Caltrans, and cannot be guaranteed by the City. Thus, similar to the proposed project, the Limited Increase in Development Alternative would result in a significant and unavoidable traffic impact. However, the volume of trips and amount of additional congestion at the impacted intersection would be substantially less under the Limited Increase in Development Alternative condition.

Tribal Cultural Resources

The Limited Increase in Development Alternative would result in a similar potential to adversely affect any tribal cultural resources as the proposed Specific Plan, despite the reduction in development. However, like the proposed Specific Plan, cultural mitigation measures would reduce potential impacts to less than significant. Therefore, impacts that could occur by the Limited Increase in Development Alternative would be similar to those associated with the proposed project.

Utilities and Service Systems

The Limited Increase in Development Alternative would reduce the number of dwelling units at buildout by 50 percent compared to the proposed Specific Plan. Thus, the demand for regional water supplies and wastewater treatment from residential would be approximately 50 percent less than the proposed Specific Plan. Therefore, impacts to utilities and service system would be less under this alternative than the impacts that would occur from implementation of the proposed Specific Plan, which are considered less than significant.

Energy

The Limited Increase in Development Alternative would reduce the number of dwelling units at buildout by 50 percent compared to the proposed Specific Plan. This would reduce the residential demand for energy in comparison to the proposed Specific Plan. Although the proposed Specific Plan's demands for energy were determined to be less than significant, the amount of energy used by the Limited Increase in Development Alternative would be less. Therefore, impacts to energy would also be less than significant.

6.8.2 CONCLUSION

Ability to Reduce Impacts

The Limited Increase in Development Alternative would reduce the number of dwelling units at buildout of the Specific Plan area by 50 percent, which would reduce the impacts related to the project. However, as described previously, the volume of air quality and GHG emissions from construction activities and operational vehicular emissions generated by the Limited Increase in Development Alternative would exceed thresholds, and would remain significant and unavoidable due to the volume of vehicular trips that would occur from operation of 444 dwelling units. Although operational emissions of CO are anticipated to be less than significant under this alternative, emissions of ROG and NO_x would remain significant after implementation of mitigation measures.

In addition, due to the existing roadway conditions at the intersection of Newport Avenue at I-5 northbound on-ramp and the inability of the City to implement an improvement at an intersection that is under the jurisdiction of Caltrans, traffic impacts would remain significant and unavoidable.

Overall, although the volume of impacts would be less under the Limited Increase in Development Alternative in comparison to the proposed Specific Plan, the Limited Increase in Development Alternative would not eliminate the overall significant and unavoidable impacts that would result from buildout of the proposed Specific Plan.

Ability to Achieve Project Objectives

Implementation of the Limited Increase in Development Alternative would achieve Objectives 1, 2, 4, 6, and 7, but at a much lesser extent than would be achieved by the proposed Specific Plan. Compliance with the City's Cultural Resources District Commercial Design Guidelines would also achieve Objective 5 (differentiate Old Town Tustin by embracing its unique historic downtown character). The Limited Increase in Development Alternative would not meet Objective 3, to introduce a sufficient level of high-quality, integrated residential mixed use, and focused multifamily development to invigorate Old Town Tustin. Additionally, the 50 percent fewer dwelling units that would be developed under this alternative, compared to the proposed Specific Plan, would not fully achieve the vision of the Specific Plan.

6.9 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" when significant environmental impacts result from a proposed project. The Environmentally Superior Alternative for the proposed project would be the No Project/Buildout of Existing Zoning Alternative. No substantially significant and long-term impacts would occur to the environment as a result of this No Project/Buildout of Existing Zoning Alternative. However, CEQA Guidelines Section 15126.6(3)(1) states:

The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. (Emphasis added).

The Environmentally Superior Alternative among the other alternatives is the Limited Increase in Development Alternative, which would provide a 50 percent reduction in the number of dwelling units that would be developed upon buildout of the proposed Specific Plan. Therefore, overall impacts would be less than the proposed Specific Plan. However, as described previously, the Limited Increase in Development Alternative would not eliminate the overall significant and unavoidable impacts that would result from buildout of the proposed Specific Plan.

In addition, the Limited Increase in Development Alternative would not meet some of the project objectives to the same extent as the proposed project. The Limited Increase in Development Alternative would provide for a walkable and bikeable environment that is accessible to fewer residents than the proposed Specific Plan, but would not fully achieve the vision of the Specific Plan area as a mixed-use, environment for residents and employees.

CEQA does not require the lead agency (the City of Tustin) to choose the environmentally superior alternative. Instead, CEQA requires the City to consider environmentally superior alternatives, weigh those considerations against the environmental impacts of the proposed project, and make findings in which the benefits of those considerations outweigh the impacts.

Table 6-1 provides, in summary format, a comparison between the level of impacts for each alternative and the proposed Specific Plan. In addition, Table 6-2 provides a comparison of the ability of each of the alternatives to meet the objectives of the proposed Specific Plan.

Table 6-1: Impact Comparison of the Proposed Specific Plan and Alternatives

	Proposed Project	Alternative 1: No Project/ Buildout of Existing Zoning Alternative	Alternative 2: Reduced Intensity Alternative	Alternative 3: Limited Increase in Development Alternative
Aesthetics	Less than Significant	Same as proposed project	Same as proposed project	Same as proposed project
Air Quality	Significant and Unavoidable	Less, no significant and unavoidable impact	Less, but remains Significant and Unavoidable	Less, but remains Significant and Unavoidable
Cultural Resources	Less than Significant with Mitigation	Less than project	Less, but mitigation measures required	Less, but mitigation measures required
Greenhouse Gas Emissions	Significant and Unavoidable	Less, no significant and unavoidable impact	Less, but remains Significant and Unavoidable	Less, but remains Significant and Unavoidable
Land Use and Planning	Less than Significant	Same as proposed project	Same as proposed project	Same as proposed project
Noise	Less than Significant	Same as proposed project	Same as proposed project	Same as proposed project
Population and Housing	Less than Significant	Less than Significant, but doesn't assist in jobs to housing ratio	Less than Significant, but reduced benefit jobs to housing ratio	Less than Significant, but limited benefit jobs to housing ratio
Recreation	Less than Significant	Less than project	Less than project	Less than project
Traffic	Significant and Unavoidable	Less, but remains Significant and Unavoidable	Less, but remains Significant and Unavoidable	Less, but remains Significant and Unavoidable
Tribal Cultural Resources	Less than Significant with Mitigation	Less than project	Less, but mitigation measures required	Less, but mitigation measures required
Utilities and Service Systems	Less than Significant	Less than project	Less than project	Less than project
Energy	Less than Significant	Less than project	Less than project	Less than project
Eliminate Significant Impacts of the Project?		Yes, two	No, none	No, none

Table 6-2: Comparison of the Proposed Specific Plan and Alternatives Ability to Meet Objectives

	Proposed Project	Alternative 1: No Project/ Buildout of Existing Zoning Alternative	Alternative 2: Reduced Intensity Alternative	Alternative 3: Limited Increase in Development Alternative
Overarching Project Objectives				
1. Bolster an economically vibrant and active downtown environment.	Yes	No	Yes, but not to the same extent as the proposed project.	Yes, but to a lesser extent than the proposed project.
2. Draw more patrons and expand walkability through enhanced pedestrian-oriented commercial first floor development.	Yes	No	Yes, but not to the same extent as the proposed project.	Yes, but to a lesser extent than the proposed project.
3. Introduce a sufficient level of high-quality, integrated residential mixed use, and focused multifamily development to invigorate Old Town Tustin	Yes	No	No	No
4. Transform streets and create neighborhood connectivity through pedestrian-oriented improvements.	Yes	No	Yes, but not to the same extent as the proposed project.	Yes, but to a lesser extent than the proposed project.
5. Differentiate Old Town Tustin by embracing its unique historic downtown character.	Yes	Yes	Yes	Yes
6. Maintain a commercial focus for the project area.	Yes	Yes, but not to the same extent as the proposed project.	Yes, but not to the same extent as the proposed project.	Yes, but to a lesser extent than the proposed project.
7. Create additional integrated public spaces to serve existing and future residents, and to provide opportunities for community events, interaction, and strengthening the area's sense of community.	Yes	No	Yes, but not to the same extent as the proposed project.	Yes, but not to the same extent as the proposed project.

7. EIR Preparers and Persons Contacted

7.1 EIR Preparers

City of Tustin

Elizabeth Binsack, Director of Community Development
Dana Ogdon, AICP, Assistant Director of Community Development
Justina Willkom, Assistant Director of Community Development
Lucy Yeager, Planning Consultant

E|P|D Solutions, Inc.

Jeremy Krout, AICP
Julie Wallen, Esq.
Konnie Dobрева, JD
Renee Escario
Meghan Macias, TE
Laurie Lovret, AICP
Rafik Albert, AICP, LEED AP

Technical Reports

Traffic Impact Analysis

Stantec Consulting Services Inc.

Daryl Zerfass, PE, PTP
Charlie Ho, PE

Noise Impact Analysis

Urban Crossroads

Bill Lawson, PE, INCE
Alex Wolfe

Air Quality and Greenhouse Gas Analysis

Urban Crossroads

Haseeb Qureshi

Cultural Resource Assessment

Cogstone

Holly Duke
Sherri Gust, RPA

7.2 Persons Contacted

City of Tustin

Ken Nishikawa, Deputy Public Works Director – Engineering
Krys Saldivar, Public Works Manager–Traffic/Transportation
Art Valenzuela, Water Services Manager

Gabrieleño Band of Mission Indians – Kizh Nation

Andrew Salas, Chairman

Matt Teutimez, Tribal Biologist

8. 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 Downtown Commercial Core Specific Plan project (project). The City of Tustin 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 project will be developed in phases and may include permits required for implementation of project components identified in Section 3.8 of the Draft EIR. There are mitigation measures that must be continuously implemented throughout the development and operation of the project.

The attached table identifies the mitigation program required to be implemented by the City for the Tustin Downtown Commercial Core Specific Plan 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
DOWNTOWN COMMERCIAL CORE SPECIFIC PLAN EIR**

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
AIR QUALITY			
<p>Plan, Program, or Policy PPP – AQ-1: Development projects shall comply with the following South Coast Air Quality District Rules:</p> <ul style="list-style-type: none"> • Rule 401: Visible Emissions. The project shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines. • Rule 402: Nuisance. The project shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. • Rule 403: Fugitive Dust. The project construction contractor shall implement dust suppression techniques that may include, but are not limited to, the following: <ul style="list-style-type: none"> ○ Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more). ○ Water active sites at least three times daily. Locations where grading is to occur shall be thoroughly watered prior to earthmoving. ○ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. 	<p>During Construction</p>	<p>City of Tustin Building Division</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<ul style="list-style-type: none"> ○ Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less. ○ Suspend all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph. ○ Provide bumper strips or similar best management practices where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip. ○ Replant disturbed areas as soon as practical. ○ Sweep onsite streets (and offsite streets if silt is carried to adjacent public thoroughfares) to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers. ● Rule 481: Spray Coating. The project construction contractor shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met: <ul style="list-style-type: none"> ○ The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control. ○ Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment. ○ An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule. ● Rule 1113: Architectural Coatings. The project construction contractor shall not apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule. A list of low/no-VOC paints is provided at the following SCAQMD website: www.aqmd.gov/prdas/brochures/paintguide.html. All paints will be applied using either high volume low-pressure spray equipment or by hand application. 			

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<ul style="list-style-type: none"> Rule 1143: Paint Thinners and Solvents. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule. 			
<p>Mitigation Measure AQ-1: <u>Tier 3</u>. The construction plans and specifications shall state that project construction that utilizes construction equipment greater than 150 horsepower (>150 HP) shall comply with EPA/CARB Tier 3 emissions standards during all construction phases and shall ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications.</p>	Prior to Grading or Building Permits	City of Tustin Building Division	
<p>Mitigation Measure AQ-2: <u>Low VOC</u>. The construction plans and specifications shall state that project construction shall utilize “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Alternatively, the applicant/developer may utilize valid construction techniques that do not require the use of architectural coatings.</p>	Prior to Grading or Building Permits	City of Tustin Building Division	
<p>Mitigation Measure AQ-3: <u>Electricity</u>. The construction plans and specifications shall state that contractors shall use the electricity infrastructure surrounding the construction site, if available, rather than electrical generators powered by internal combustion engines.</p>	Prior to Grading or Building Permits	City of Tustin Building Division	
<p>Mitigation Measure AQ-4: <u>Alternative Technology</u>. The construction plans and specifications shall state that contractors shall use alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment.</p>	Prior to Grading or Building Permits	City of Tustin Building Division	
<p>Mitigation Measure AQ-5: <u>Equipment Maintenance</u>. Construction plans and specifications shall state that construction equipment be maintained in good operating condition to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and</p>	Prior to Grading or Building Permits	City of Tustin Building Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<p>maintained as per the manufacturer’s specification. Maintenance records shall be available at the construction site for City verification.</p>			
<p>Mitigation Measure AQ-6: <u>Construction Vehicle Management Plan.</u> For projects requiring construction vehicles, construction plans and specifications shall state that the applicant/developer and/or building operators shall prepare and maintain a construction vehicle management plan, to be made available upon request to the City of Tustin Building Division, denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include, as a minimum: idling time requirements; requiring hour meters on equipment; documenting the serial number, horsepower, age, emissions ratings, and fuel of all onsite equipment. The plan shall state that California state law requires equipment fleets to limit idling to no more than 5 minutes, and that low emission vehicles will be used. If low emission mobile construction equipment is not used, construction contractor shall provide evidence in the construction vehicle management plan that their use was investigated and found to be infeasible. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District as well as the City of Tustin.</p>	<p>Prior to Grading or Building Permits</p>	<p>City of Tustin Building Division</p>	
<p>Mitigation Measure AQ-7: <u>Energy Usage Calculations.</u> Prior to the issuance of building permits for new development projects requiring design review, project applicants/developers shall submit plans certifying that the proposed development is designed to achieve 5 percent efficiency beyond the 2016 California Building Code Title 24 requirements to the satisfaction of the City of Tustin Building Division. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable):</p> <ul style="list-style-type: none"> • Increase in insulation such that heat transfer and thermal bridging is minimized; • Limit air leakage through the structure and/or within the heating and cooling distribution system; • Use of energy-efficient space heating and cooling equipment; • Installation of electrical hook-ups at loading dock areas; 	<p>Prior to Building Permit</p>	<p>City of Tustin Building Division</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<ul style="list-style-type: none"> • Installation of dual-paned or other energy efficient windows; • Use of interior and exterior energy efficient lighting that exceeds the 2016 California Title 24 Energy Efficiency performance standards; • Installation of automatic devices to turn off lights where they are not needed; • Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings; • Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors; • Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; and • Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products. 			
<p>Mitigation Measure AQ-8: Enhanced Water Conservation. Prior to the issuance of building permits for new development projects requiring design review, project applicants/developers shall certify that the project is designed to reduce water usage by a minimum of 30 percent when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Projects shall also implement the following:</p> <ul style="list-style-type: none"> • Landscaping palette emphasizing drought tolerant plants; • Use of water-efficient irrigation techniques; and • U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads. <p>The above measures reduce water consumption, but it is understood that the list is not all-inclusive and other features that reduce water consumption also are acceptable.</p>	<p>Prior to Building Permit</p>	<p>City of Tustin Building Division</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<p>Mitigation Measure AQ-9: Localized Emissions. Prior to issuance of a grading permit for new development projects that are one acre or larger, the applicant/developer shall provide modeling of the regional and the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development. If the modeling shows that emissions would exceed the SCAQMD's significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD's significance thresholds for those emissions.</p>	<p>Prior to Grading Permit</p>	<p>City of Tustin Building Division</p>	
<p>Mitigation Measure AQ-10: Toxic Air Contaminants: Development proposals for new residential and other sensitive land use projects (e.g., nursing homes, day care centers) in the Specific Plan area within 500 feet of major sources of toxic air contaminants ((e.g., Interstate 5, and roadways with traffic volumes over 100,000 vehicles per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City of Tustin Planning Division prior to design review approval. The HRA shall be prepared in accordance with policies and procedures of the SCAQMD. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM₁₀ concentrations exceed 2.5 µg/m³, PM_{2.5} concentrations exceed 2.5 µg/m³, or the appropriate noncancer hazard index exceeds 1.0, the project applicant/developer shall be required to submit an HRA that demonstrates and certifies that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:</p> <ul style="list-style-type: none"> • Air intakes located away from high volume roadways and/or truck loading zones; and • Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters (e.g., MERV 12 or better). • Buffering sensitive uses away from emission sources. 	<p>Prior to Design Review approval</p>	<p>City of Tustin Planning Division</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
CULTURAL RESOURCES			
<p>Plan, Program, or Policy PPP CUL-1: The City of Tustin Cultural Resources District Residential/Commercial Design Guidelines shall apply to all projects within the Specific Plan area.</p>	<p>Prior to Design Review approval</p>	<p>City of Tustin Planning Division</p>	
<p>Plan, Program, or Policy PPP CUL-2: The Certificate of Appropriateness process applies to all projects, when appropriate, within the Specific Plan, as outlined in Tustin City Code, Article 9, Chapter 2, Part 5, Section 9252.</p>	<p>Prior to Design Review approval</p>	<p>City of Tustin Planning Division</p>	
<p>Mitigation Measure CUL-1: Prior to issuance of a grading permit for grading of 2 feet or more in depth below the natural or existing grade, the applicant/developer shall provide written evidence to the City Planning Division that a qualified archaeologist has been retained by the applicant/developer to respond on an as-needed basis to address unanticipated archaeological discoveries and any archaeological requirements (e.g., conditions of approval) that are applicable to the project. The applicant/developer is encouraged to conduct a field meeting prior to the start of construction activity with all construction supervisors to train staff to identify potential archaeological resources. In the event that archaeological materials are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.</p> <p>If discovered archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that confirmed resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery, reburial/relocation, deposit at a local</p>	<p>Prior to Grading Permit</p>	<p>City of Tustin Planning Division</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<p>museum that accepts such resources or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.</p> <p>If discovered materials are found not to be significant archaeological resources but may be considered a Tribal Cultural Resource or objects with cultural value to a California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.</p>			
GREENHOUSE GAS EMISSIONS			
Plan, Program, or Policy PPP AQ-1: Listed previously under Air Quality	During Construction	City of Tustin Building Division	
Mitigation Measure AQ-7: Listed previously under Air Quality	Prior to Building Permit	City of Tustin Building Division	
Mitigation Measure AQ-8: Listed previously under Air Quality	Prior to Building Permit	City of Tustin Building Division	
NOISE			
Plan, Program, or Policy PPP NOI-1: Development projects are required to meet or exceed the 65 dBA CNEL exterior noise level standard, as defined by Table N-3 of the City of Tustin General Plan Noise Element, and the 45 dBA CNEL interior noise level standard of the City of Tustin General Plan Noise Element, and by Title 24, Part 2, of the California Building Code.	Prior to Building Permit	City of Tustin Building Division	
Plan, Program, or Policy PPP NOI-2: Construction plans shall include a note that construction activities shall only occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. Saturdays; with no activity allowed on Sundays and Federal holidays unless, permitted outside of those limitations in the case of urgent necessity or upon a finding that such	Prior to Building Permit	City of Tustin Building Division	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
approval will not adversely impact adjacent properties and the health, safety and welfare of the community if a temporary exception is granted, pursuant to Article 4, Chapter 6, Section 4617 of the Tustin City Code.			
<p>Mitigation Measure NOI-1: Prior to approval of a demolition permit, grading plans, and/or issuance of building permits for construction activities within 25 feet of existing residential structures or occupied noise sensitive uses that require the use of large bulldozers, large loaded trucks, jackhammers, pile drivers, and/or caisson drills, the City of Tustin Building Division shall ensure that construction plans and specifications state that the use of such vibratory equipment shall be prohibited within 25 feet of existing residential structures or occupied noise sensitive uses. Instead, small rubber-tired bulldozers shall be used within this area during demolition and/or grading operations to reduce vibration effects. If the use of large bulldozers, large loaded trucks, jackhammers, pile drivers, and/or caisson drills is necessary within 25 feet of existing residential structures or occupied noise sensitive uses, a site-specific analysis shall be prepared and submitted to the City of Tustin demonstrating that construction activity would not result in vibration at sensitive receptors that is more than the Caltrans thresholds for annoyance (0.04 in/sec PPV at receiver locations) and damage (per the Transportation and Construction Vibration Guidance Manual, September 2013, Tables 19 & 20 by building type).</p>	<p>Prior to demolition permit, grading plans, and/or issuance of building permits for construction activities within 25 feet of existing residential structures or occupied noise sensitive uses.</p>	<p>City of Tustin Building Division</p>	
<p>Mitigation Measure NOI-2: Prior to approval of grading plans the City of Tustin Building Division shall ensure that plans include the following measures to reduce construction related noise:</p> <ul style="list-style-type: none"> • Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards, and all stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive use nearest the construction activity. 	<p>Prior to Grading Permit</p>	<p>City of Tustin Building Division</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
<ul style="list-style-type: none"> • The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receiver nearest to the construction activity. • The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment by TCC Article 4, Chapter 6, Section 4617. The contractor shall design delivery routes to minimize the exposure of sensitive land uses to delivery truck noise. • If construction activity within 27 feet of occupied noise sensitive uses is proposed, the construction contractor shall ensure that construction noise levels at nearby sensitive land uses do not exceed 85 dBA Leq, and that construction-related noise level increases are less than 12 dBA Leq above the existing ambient noise levels, by one or more of the following methods: <ol style="list-style-type: none"> 1. Install temporary construction noise barriers within the line of site of occupied sensitive uses for the duration of construction activities that could generate noise exceeding 85 dBA Leq. The noise control barrier(s) must provide a solid face from top to bottom and shall: <ol style="list-style-type: none"> a. Provide a minimum transmission loss of 20 dBA and be constructed with an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts; b. Be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired; and c. Be removed and the site appropriately restored upon the conclusion of the construction activity. 2. Install sound dampening mats or blankets to the engine compartments of heavy mobile equipment (e.g. graders, dozers, heavy trucks). The dampening materials must be capable of a minimum 5-dBA noise reduction, must be installed prior to the use of heavy mobile construction equipment, and must remain installed for the duration of the equipment use. 			

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
RECREATION			
<p>Plan, Program, or Policy PPP REC-1: Prior to the approval of the final map for subdivisions under the Specific Plan, applicants shall comply with the City of Tustin Subdivision Code (Article 9, Chapter 3, Part 3, Section 9331 of the Tustin City Code). Developers may dedicate land or pay a fee in lieu or a combination of both. The value of the amount of such fee shall be based upon the fair market value of the amount of land which would otherwise be required for dedication. Dedication of land may be required by the City for a condominium, stock cooperative, or community apartment project which exceeds 50 dwelling units.</p>	<p>Prior to final map approval for subdivisions</p>	<p>City of Tustin Planning Division</p>	
<p>Mitigation Measure REC-1: For residential projects not subject to City of Tustin Subdivision Code (Article 9, Chapter 3, Part 3, Section 9331 of the Tustin City Code), applicants shall pay a parkland development fee to the City of Tustin prior to the issuance of building permits. The value of the amount of such fee shall be based upon the fair market value of the amount of land which would otherwise be required for dedication.</p>	<p>Prior to Building Permit</p>	<p>City of Tustin Building Division and Planning Division</p>	
TRANSPORTATION AND CIRCULATION			
<p>Mitigation Measure TR-1: The City of Tustin will cooperate with Caltrans when Caltrans moves forward with its planned improvements to the intersection of Newport Avenue at the I-5 northbound on-ramp. Caltrans' improvements include installation of a traffic signal per the recommendations in the Caltrans Final Traffic Operations Report for State Route 55 (I-5 to I-405) Project Approval/Environmental Document (PR/ED) that was published in October 2015.</p>	<p>Prior to and During Caltrans improvements to the intersection of Newport Avenue at the I-5 northbound on-ramp</p>	<p>City of Tustin Public Works Department</p>	
<p>Mitigation Measure TR-2: The City of Tustin shall monitor the intersection operation at Newport Avenue and El Camino Real as development applications are received and shall provide the following improvements, or equivalent, once the intersection LOS becomes deficient: Restripe the eastbound through lane to a shared through/right-turn lane so the eastbound</p>	<p>As development applications are received</p>	<p>City of Tustin Public Works Department</p>	

Standard Condition/ Plan, Program, Policy / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
approach would consist of one left-turn lane, one shared through/right-turn lane, and one right-turn lane.			
TRIBAL CULTURAL RESOURCES			
Mitigation Measure CUL-1: Listed previously under Cultural Resources.	Prior to Grading Permit	City of Tustin Planning Division	

9. Response to Comments

Section 15088 of the CEQA Guidelines requires the Lead Agency, the City of Tustin, 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 Tustin'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	Agency/Organization/Name	Comment Date
Agencies		
A1	City of Irvine	March 8, 2018
A2	Native American Heritage Commission	March 9, 2018
A3	South Coast Air Quality Management District	March 27, 2018
A4	Orange County Airport Land Use Commission	March 29, 2018
A5	California Department of Transportation (Caltrans)	April 2, 2018
A6	OC Public Works	April 2, 2018
Organizations		
O1	Gabrieleño Band of Mission Indians – Kizh Nation	February 20, 2018
O2	Saddleback Chapel Mortuary	March 27, 2018
Residents		
R1	Collette L. Morse	April 2, 2018

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LETTER A1: City of Irvine (2 pages)



Community Development

cityofirvine.org

1 Civic Center Plaza, Irvine, CA 92606-5208

949-724-6000

March 8, 2018

Sent via USPS and
email: dogdon@tustinca.org

Mr. Dana Ogdon
City of Tustin
Community Development Department
300 Centennial Way
Tustin, CA 92780

Subject: First Review of the Draft Environmental Impact Report (SCH No. 2016081004) for the Downtown Commercial Core Specific Plan and associated General Plan Amendment/Zone Ordinance Amendments in Tustin

Dear Mr. Ogdon:

City of Irvine staff has reviewed the Draft Program Environmental Impact Report (EIR) for the subject project. The proposed project is a specific plan (SP-12) encompassing approximately 220-acres divided into six Development Areas located northwest of I-5 and SR-55 interchange, centered around the intersection of Main Street and El Camino Real in Tustin as follows:

- SP-12 increases the development intensity by approximately 300,000 square feet of non-residential (commercial/office) uses;
- SP-12 includes a residential housing bank with a maximum of 887 new dwelling units configured in multi-family and mixed-use developments that could be requested by potential developers pursuant to a discretionary Residential Allocation Reservation;
- SP-12 promotes pedestrian-oriented commercial first floor development, future streetscape, roadway, pedestrian and bicycle-oriented improvements; and
- Buildout is anticipated by 2035.

A1-1

Based on the review of the Draft EIR, City of Irvine staff would like to provide the following comments:

1. Page 3-38, Section 3.5, Anticipated Discretionary Approvals and Actions: Indicate the approval sequencing for each project component, as typically the DEIR would need to be certified prior to approving the rescissions, adopting the proposed Specific Plan, and adopting the General Plan and Zoning Amendments.

Mr. Dana Ogdon
 March 8, 2018
 Page 2 of 2

2. Clarify if the Downtown Specific Plan traffic analysis includes the Red Hill Specific Plan proposal. Since these two projects are being processed at the same time, each of the project traffic studies should include any adjacent project(s) currently being processed. Please provide a response if each traffic study included the other development or not. If not, please revise the Red Hill Specific Plan and Downtown Specific Plan traffic studies to analyze the cumulative impact of each project.

A1-2

3. Figure 1 – The Traffic Study area boundary includes the intersection of Newport Avenue and Bryan Avenue, but does not provide any intersection analysis. Please provide the existing, existing plus project and 2035 plus project analysis for this intersection.

A1-3

4. Figure 2 – The Project trip distribution percentages show that 10 percent of the project traffic will go eastbound on Irvine Boulevard and 10 percent will go eastbound on Bryan Avenue. As a result of the project traffic distribution, provide additional intersection traffic analysis for the following intersections:

- Bryan/Red Hill
- Bryan/Browning
- Bryan/Tustin Ranch Road
- Irvine Boulevard/Red Hill
- Irvine Boulevard/Browning
- Irvine Boulevard/Tustin Ranch Road

A1-4

These locations listed above are located within the City of Irvine's IBC Vision Plan traffic study and Irvine's NITM traffic study.

Thank you for the opportunity to review and comment on the proposed project. Staff would appreciate the opportunity to review any further information regarding this project as the planning process proceeds. If you have any questions, I can be reached at 949-724-6395, or by email at mchao@cityofirvine.org.

Sincerely,



Melissa Chao
 Senior Planner

cc: Kerwin Lau, Manager of Planning Services
 Bill Jacobs, Principal Planner
 Sun-Sun Murillo, Supervising Transportation Analyst
 Farideh Lyons, Senior Transportation Analyst

Response to Comment Letter A1 - City of Irvine, dated March 8, 2018

Comment A1-1: The comment provides a summary of her interpretation of the project and requests that the list of Anticipated Discretionary Approvals and Actions be rearranged pursuant to the expected approval process.

Response A1-1: The first bullet states that SP-12 increases the development intensity by approximately 300,000 square feet of non-residential (commercial/office) uses; however, it should be clarified that as mentioned on page 3-18 of the Draft EIR, this “nonresidential square footage is within the existing General Plan’s buildout assumptions for the Specific Plan area.”

Regarding the rearrangement of discretionary approvals and actions, Draft EIR does not state and it was not intended that the list be sequential. It merely identifies the expected approvals and actions. No changes or further response is necessary.

Comment A1-2: The comment asks for clarification if the Downtown Core Specific Plan (DCCSP) traffic analysis includes the Red Hill Specific Plan and claims that the DCCSP traffic analysis should include “any adjacent project(s) currently being processed.” The commenter also states that if the DCCSP traffic analysis does not do so, the DCCSP traffic analysis should be revised to analyze the cumulative impact of each project.

Response A1-2: The DCCSP traffic analysis included an evaluation of year-2035 cumulative conditions using data from the Orange County Transportation Analysis Model (OCTAM) Version 3.4. OCTAM 3.4 produces forecasts of traffic volumes based on Orange County Projection (OCP) 2010 data for the year-2035, which consists of estimates of population, housing, and employment growth. The Red Hill Specific Plan traffic study similarly included an evaluation of year-2035 cumulative conditions, however the Red Hill Specific Plan traffic study used data from the Irvine Transportation Analysis Model (ITAM) and traffic associated with the DCCSP was added to the ITAM forecasts using data from the DCCSP traffic analysis. The study areas for these two traffic studies do not overlap, therefore a direct comparison of 2035 traffic forecasts from each study is not possible. To determine if the OCTAM 3.4 forecasts used in the DCCSP traffic analysis are reasonably consistent with 2035 forecasts that include the Red Hill Specific Plan, the Red Hill Specific Plan 2035 ADT volumes have been compared to OCTAM 3.4 ADT forecasts for Red Hill Avenue. 2035 ADT forecasts for Red Hill Avenue inclusive of both the Red Hill Specific Plan and the DCCSP range from 21,800 to 29,200 between Bryan Avenue and Sycamore Avenue (source: Kimley-Horn, 2018). In comparison, OCTAM 3.4 2035 ADT forecasts along these same segments of Red Hill Avenue range from 19,200 to 29,500. Since the OCTAM 3.4 2035 ADT forecasts within the Red Hill Specific Plan area are similar to the 2035 ADT forecasts shown in the Red Hill Specific Plan traffic study, it is reasonable to conclude that the OCTAM 3.4 2035 ADT forecasts account for the Red Hill Specific Plan for the purpose of the DCCSP traffic analysis. No changes or further response is necessary.

Comment A1-3: The comment states that the traffic analysis area boundary includes the intersection of Newport Avenue and Bryan Avenue, but does not provide any intersection analysis and requests the existing, existing plus project and 2035 plus project analysis for this intersection be provided.

Response A1-3: The study area intersections evaluated in the DCCSP traffic analysis were determined based on the net change in traffic volume, which was derived from a comparison of model runs for conditions with and without the DCCSP. The model data indicates that the DCCSP adds a negligible amount of traffic to the Newport Avenue/Bryan Avenue intersection. Therefore, analysis of this intersection is not required for determination of project impacts. No changes or further response is necessary.

Comment A1-4: The comment states that the DCCSP trip distribution percentages on Irvine Boulevard and Bryan Avenue warrant the provision additional intersection traffic analysis for the following intersections:

- Bryan/Red Hill

- Bryan/Browning
- Bryan/Tustin Ranch Road
- Irvine Boulevard/Red Hill
- Irvine Boulevard/Browning
- Irvine Boulevard/Tustin Ranch Road

Response A1-4: The project trip distribution percentages indicate the directional distribution of traffic generated within the DCCSP area. The net increase in traffic volume is used to determine the study area and locations potentially impacted by the added traffic. The net increase also takes into account the downsizing of roadway classifications within the DCCSP area. In the case of Bryan Avenue and Irvine Boulevard, the net increase in traffic due to the DCCSP for the indicated intersections east of the study area is 20 vehicles per hour or less. 20 vehicles per hour is less than the threshold used for impact analysis and the project's impact at the requested locations would therefore be less than significant. No changes or further response is necessary.

LETTER A2: Native American Heritage Commission (5 pages)

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
 Environmental and Cultural Department
 1550 Harbor Blvd., Suite 100
 West Sacramento, CA 95691
 Phone (916) 373-3710
 Fax (916) 373-5471

Edmund G. Brown Jr., Governor



March 9, 2018

Dane L. Ogden
 City of Tustin
 300 Centennial Way
 Tustin, CA 92780

Sent via e-mail: dogden@tustinca.org

Re: SCH# 2016081004, Downtown Commercial Core Specific Plan Project, City of Tustin; Orange County, California

Dear Mr. Ogden:

The Native American Heritage Commission (NAHC) has reviewed the Draft Environmental Impact Report prepared for the project referenced above. The review included the Executive Summary; Table 1-2, Summary of Impacts; the Introduction and Project Description; the Environmental Impact Analysis, section 5.3 Cultural Resources; and Appendix C, Cultural Resource Assessment prepared by Environmental Planning Development Solutions and Cogstone for the City of Tustin. We have the following concerns:

1. There is no documentation that **government-to-government consultation by the lead agency** was conducted under AB-52 with Native American tribes traditionally and culturally affiliated to the project area as required by statute, or that mitigation measures were developed in consultation with the tribes. Discussions under AB-52 may include the type of document prepared; avoidance, minimization of damage to resources; and proposed mitigation. Contact by consultants during the Cultural Resources Assessments is not formal consultation. A2-1
2. The significance of Tribal Cultural Resources is not addressed in the Environmental Impact Analysis as per California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," <http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf> A2-2
3. There are no mitigation measures specifically addressing inadvertent finds of Tribal Cultural Resources separately and distinctly from Archaeological Resources. Mitigation measures must take Tribal Cultural Resources into consideration as required under AB-52, **with or without consultation** occurring. Mitigation language for archaeological resources is not always appropriate for or similar to measures specifically for handling Tribal Cultural Resources. For sample mitigation measures, please refer to the California Office of Planning and Research's "Technical Advisory, AB 52 and Tribal Cultural Resources in CEQA" at http://opr.ca.gov/docs/Revised_AB_52_Technical_Advisory_March_2017.pdf A2-3

ADDITIONAL INFORMATION:

The California Environmental Quality Act (CEQA)¹, specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.² If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.³ In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE). A2-4

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).⁴ **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"⁵, that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."⁶ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.⁷ Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental

¹ Pub. Resources Code § 21000 et seq.
² Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)
³ Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)
⁴ Government Code 65352.3
⁵ Pub. Resources Code § 21074
⁶ Pub. Resources Code § 21084.2
⁷ Pub. Resources Code § 21084.3 (a)

Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966⁸ may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3710 if you have any questions.

Sincerely,


Gayle Totton, B.S., M.A., Ph.D
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

A2-4
cont.

⁸ 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

Pertinent Statutory Information:**Under AB 52:**

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project,⁹ and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18)."¹⁰

The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects.¹¹

1. The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.¹²

With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.¹³

If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss both of the following:**

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.¹⁴

Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.¹⁵

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program,** if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.¹⁶

If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).¹⁷

An environmental impact report **may not be certified,** nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.¹⁸

⁹ Pub. Resources Code § 21080.3.1, subs. (d) and (e)

¹⁰ Pub. Resources Code § 21080.3.1 (b)

¹¹ Pub. Resources Code § 21080.3.2 (a)

¹² Pub. Resources Code § 21080.3.2 (a)

¹³ Pub. Resources Code § 21082.3 (c)(1)

¹⁴ Pub. Resources Code § 21082.3 (b)

¹⁵ Pub. Resources Code § 21080.3.2 (b)

¹⁶ Pub. Resources Code § 21082.3 (a)

¹⁷ Pub. Resources Code § 21082.3 (e)

¹⁸ Pub. Resources Code § 21082.3 (d)

This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**¹⁹
- **There is no Statutory Time Limit on Tribal Consultation under the law.**
- **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research,²⁰ the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction.²¹
- **Conclusion Tribal Consultation:** Consultation should be concluded at the point in which:
 - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.²²

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
 - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
 - The request form can be found at <http://nahc.ca.gov/resources/forms/>.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - If part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have been already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

¹⁹ (Gov. Code § 65352.3 (a)(2)).

²⁰ pursuant to Gov. Code section 65040.2.

²¹ (Gov. Code § 65352.3 (b)).

²² (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
 - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.²³
 - Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.²⁴
- The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.²⁵ In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

²³ (Civ. Code § 815.3 (c)).

²⁴ (Pub. Resources Code § 5097.991).

²⁵ per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

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Response to Comment Letter A2 - Native American Heritage Commission, dated March 9, 2018

Comment A2-1: The comment claims there is no documentation that government to government consultation by the lead agency was conducted per AB 52.

Response A2-1: The commenter is directed to Draft EIR page 5.10-4, Section 5.10, *Tribal Cultural Resources*. As discussed, the City of Tustin met with the Gabrieleño Band of Mission Indians – Kizh Nation and an AB 52 and SB 18 consultation meeting was held on October 11, 2017. (See page 5.10-3 and 5.10-4)

The City requested a sacred lands record search from the Native American Heritage Commission (NAHC) on February 2, 2017. The NAHC responded that there were no known sacred lands within a half mile of the Specific Plan boundaries. In compliance with SB 18, on June 26, 2017, the City sent letters to Native American groups or individuals on NAHC's list, that may have knowledge regarding tribal cultural places in the project area.

- Campo Band of Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Gabrieleño Band of Mission Indians – Kizh Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrieliño/Tongva Nation
- Gabrieliño-Tongva Indians of California Tribal Council
- Gabrieliño-Tongva Tribe
- Jamul Indian Village
- Juaneno Band of Mission Indians Acjachemen Nation - Belardes
- Juaneno Band of Mission Indians Acjachemen Nation – Romero
- Juaneno Band of Mission Indians
- La Posta Band of Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- San Fernando Band of Mission Indians
- San Pasqual Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

Responses were received from two tribes, the Gabrieleño Band of Mission Indians – Kizh Nation and the Viejas Band of Kumeyaay Indians. An SB 18 consultation was requested by the Gabrieleño Band of Mission Indians – Kizh Nation and held on October 11, 2017.

In compliance with AB 52, the following five Native American contacts were sent letters on August 3, 2017, requesting any information related to cultural resources or heritage sites within or adjacent to the Specific Plan area:

- Gabrieleño Band of Mission Indians – Kizh Nation
- Juaneno Band of Mission Indians
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- San Gabriel Band of Mission Indians

Therefore, notification and consultation occurred pursuant to AB 52 and SB 18. No further response is necessary.

Comment A2-2: The comment claims that Tribal Cultural Resources were not addressed in the Draft EIR.

Response A2-2: The commenter is directed to Draft EIR page 5.10-4, Section 5.10, *Tribal Cultural Resources*. As discussed, although no Tribal Cultural Resources were identified in the Specific Plan area through record searches and the tribal consultation, the Draft EIR determined that development and redevelopment projects pursuant to the Specific Plan could involve grading and excavation to greater depths than previously undertaken that could disturb unknown buried Tribal Cultural Resources, including shells, funerary objects, and human remains due to previous use of the area as a traditional trade route. Thus, Mitigation Measure CUL-1 would reduce the potential for Tribal Cultural Resources to be impacted during earthmoving activities and provides for management of any identified resources. With implementation of Mitigation Measure CUL-1, impacts related to a substantial adverse change in the significance of a Tribal Cultural Resource were considered to be less than significant in the Draft EIR. The commenter is also referred to Response to Comment Letter O1.

Comment A2-3: The comment claims that there are no mitigation measures specifically addressing inadvertent finds of Tribal Cultural Resources separately and distinctly from Archaeological Resources. Mitigation language for archaeological resources is not always appropriate for or similar to measures specifically for handling Tribal Cultural Resources.

Response A2-3: The commenter is referred to Response to Comment Letter O1. Mitigation Measure CUL-1 has been revised to ensure that the tribe is notified of inadvertent finds of Tribal Cultural Resources:

“If discovered materials are found not to be significant archaeological resources, but may be considered a Tribal Cultural Resource or objects with cultural value to a California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.”

Please refer to Chapter 3, *Revisions to the Draft EIR*, herein.

Comment A2-4: The comment provides a general summary of information related to AB 52 and SB 18.

Response A2-4: As discussed in Responses to Comments A2-1 through A2-3 above, and Response to Comment Letter O1, the City of Tustin conducted AB 52 and SB 18 consultation, and addressed Tribal Cultural Resources in the Draft EIR. Impacts related to a substantial adverse change in the significance of a tribal cultural resource were considered to be less than significant in the Draft EIR.

LETTER A3: South Coast Air Quality Management District (7 pages)

SENT VIA E-MAIL AND USPS:

March 27, 2018

dogdon@tustinca.org

Dana L. Ogdon, ACIP, Assistant Director
City of Tustin – Community Development Department
300 Centennial Way
Tustin, CA 92780

**Draft Program Environmental Impact Report (Draft PEIR) for the Proposed
Downtown Commercial Core Specific Plan (SCH No.: 2016081004)**

The South Coast Air Quality Management District (SCAQMD) 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 PEIR.

SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to develop a Specific Plan that establishes the long-term vision with goals and objectives to create a vibrant, cohesive, connected, livable, and memorable City core (Proposed Project). The Proposed Project is divided into six Development Areas to reflect differences in the character of the built environment. The Proposed Project would provide for 887 residential units and 300,000 square feet of commercial and office spaces on 220 acres. Based on a review of Figure 3-1 and Figure 3-2 in the Draft PEIR, SCAQMD staff found that community residential uses are planned for Development Area 6 which is located immediately north of Interstate 5 (I-5) Freeway. The Proposed Project is expected to be developed over 17 years from 2018 through 2035¹.

SCAQMD Staff's Air Quality Analysis

Based on a review of the Air Quality Section, SCAQMD staff found that the Air Quality Analysis was based on the "a worst-case construction scenario [...]" to conservatively assume that construction would occur throughout the 17-year period," and "the emissions that would be generated from buildout of the [Proposed Project] were averaged over this timeframe²." A theoretical "maximum construction day" including onsite construction activities such as demolition, site preparation, and construction was also used³. However, there is a possibility that development projects may overlap with construction activities⁴.

The Lead Agency quantified the Proposed Project's construction and operational emissions and compared them to SCAQMD's regional air quality CEQA significance thresholds. After incorporating Mitigation Measure AQ-1 through AQ-6⁵, the Lead Agency found that the Proposed Project's mitigated construction emissions would remain significant and unavoidable for ROG and NOx. The Proposed Project's operational emissions would exceed SCAQMD's regional CEQA significance thresholds for ROG and NOx emissions after incorporating Mitigation Measures AQ-7 and AQ-8⁶.

A3-1

¹ Draft PEIR, Page 5.2-14.

² *Ibid.*

³ *Ibid.*

⁴ *Ibid.*, Page 5.2-17.

⁵ *Ibid.*

⁶ *Ibid.*, Table 5.2-8.

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SCAQMD's 2016 Air Quality Management Plan

On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP)⁷, which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment.

General Comments

SCAQMD staff has reviewed the Air Quality Analysis in the Draft PEIR and has comments on the methodology. Please see the attachment for more information. Additionally, as described in the 2016 AQMP, to achieve NOx emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. SCAQMD is committed to attain the ozone NAAQS as expeditiously as practicable. The Proposed Project plays an important role in contributing to NOx emissions. Therefore, SCAQMD staff has comments on air quality mitigation measures to further reduce NOx emissions as well as ROG emissions. Finally, the attachment includes recommendations to include discussions on SCAQMD rules.

A3-1
cont.Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), SCAQMD staff requests that the Lead Agency provide SCAQMD staff with written responses to all comments contained herein prior to the certification of the Final PEIR. 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 or useful to decision makers and to the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the recommended mitigation measures are not feasible, the Lead Agency should describe the specific reasons for rejecting them in the Final PEIR (CEQA Guidelines Section 15091).

SCAQMD staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact me at lsun@aqmd.gov if you have any questions regarding the enclosed comments.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment
LS
[LAC180216-04](#)
Control Number

⁷ South Coast Air Quality Management District. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

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ATTACHMENT

Air Quality Analysis – Overlapping Construction and Operational Activities

1. When specific development is reasonably foreseeable as a result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in a CEQA document. In the Draft PEIR, the Lead Agency stated that there is potential overlap of concurrent development projects and various construction activities. Since an overlapping construction and operation scenario is reasonably foreseeable, the Lead Agency should analyze a scenario where construction activities overlap with operational activities, unless the Lead Agency includes requirements and/or conditions in applicable bid document and/or development agreement to expressly prohibit overlapping construction and operational activities.

A3-2

To analyze a worst-case impact scenario that is reasonably foreseeable at the time the Draft PEIR is prepared, SCAQMD staff recommends that the Lead Agency identify the overlapping years, combine construction emissions (including emissions from demolition) with operational emissions, and compare the combined emissions to SCAQMD’s air quality CEQA *operational* thresholds of significance to determine the level of significance in the Final FEIR. In the event that the Lead Agency, after revising the Air Quality analysis, finds that the Proposed Project’s air quality impacts would be significant, mitigation measures will be required pursuant to CEQA Guidelines Section 15126.4. For more information on potential mitigation measures as guidance to the Lead Agency, please see Comment Nos. 2 through 7 below and visit SCAQMD’s CEQA Air Quality Handbook website⁸.

Recommended Changes to Existing Mitigation Measures

2. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse impacts. SCAQMD staff recommends that the Lead Agency incorporate the following changes to existing Mitigation Measures AQ-1 and AQ-6 in the Final PEIR to further reduce NOx emissions during construction and operation. Additionally, information on the localized air quality analysis during construction is provided to supplement Mitigation Measure AQ-9. Lastly, to reduce toxic air contaminants, it is recommended that the Lead Agency require the use of enhanced filtration units rated MERV 13 or better and ensures that the enhanced filtration units are enforceable and effective throughout the lifetime of the Proposed Project. For more information on other potential mitigation measures as guidance to the Lead Agency, please visit SCAQMD’s CEQA Air Quality Handbook website⁹.

A3-3

Mitigation Measure AQ-1

3. Under Mitigation Measure AQ-1, the Lead Agency requires project construction that utilizes construction equipment greater than 150 horsepower (>150 HP) to comply with EPA/CARB Tier 3 emissions standards during all construction phases and to ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications. To further reduce NOx emissions during construction, SCAQMD staff recommends that the Lead Agency incorporate the following changes to Mitigation Measure AQ-1 in the Final EIR.

A3-4

⁸ South Coast Air Quality Management District. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa>.
⁹ South Coast Air Quality Management District. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

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Mitigation Measure AQ-1: Tier 3 & 4. The construction plans and specifications shall state that project construction that utilizes construction equipment greater than ~~450~~ 50 horsepower (>450 50 HP) shall comply with EPA/CARB Tier 3 & 4 emissions standards during all construction phases and shall ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications. In the event that construction equipment cannot meet the Tier 4 engine certification, the developer must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Project, using cleaner vehicle fuel, and/or limiting the number of individual construction project phases occurring simultaneously.

A3-4
cont.

Mitigation Measure AQ-6

- Mitigation Measure AQ-6 requires the preparation of construction vehicle management plan, and the plan requires, among others, the use of low emission vehicles. To further reduce NOx emissions during construction, SCAQMD staff recommends that the Lead Agency revise Mitigation Measure AQ-6 to require all diesel-fueled trucks accessing the Proposed Project to meet the U.S. Environmental Protection Agency/California Air Resource Board truck engine standard for Model Year 2010 or better. In the event that that 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emissions requirements, at a minimum. Additionally, consider other measures such as incentives, phase-in schedules for clean trucks, etc. Alternatively, the Lead Agency should provide additional information on how the information included in this Mitigation Measure will be used to reduce the Proposed Project’s significant operational NOx emissions.

A3-5

Mitigation Measure AQ-9

- Mitigation Measure AQ-9 requires the applicant to provide modeling of the regional and the localized emissions (NOx, CO, PM10, and PM2.5) associated with the maximum daily grading activities for the proposed development, and the emissions must not exceed applicable SCAQMD’s significance thresholds.

SCAQMD staff recommends that the Lead Agency include the SCAQMD’s guidance for performing a localized air quality analysis in the Final PEIR. The guidance can be found at the SCAQMD website¹⁰. In the event that localized emissions would exceed SCAQMD’s localized air quality CEQA significance thresholds, mitigation measures are required pursuant to CEQA Guidelines Section 15126.4.

A3-6

Mitigation Measure AQ-10

- Mitigation Measure AQ-10 requires submittal of a health risk assessment (HRA) to the City of Tustin Planning Division prior to design review approval for development proposals for new residential and other sensitive land use projects (e.g., nursing homes, day care centers) in the Specific Plan area within 500 feet of major sources of toxic air contaminants (e.g., Interstate 5, and roadways with traffic volumes over 100,000 vehicles per day).

A3-7

¹⁰ South Coast Air Quality Management District. Localized Significance Thresholds. Accessed at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

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- a) SCAQMD Staff's Comment 1: Notwithstanding the court rulings, SCAQMD is concerned about the potential public health impacts of siting sensitive populations within close proximity of freeways or other sources of air pollution. As such, SCAQMD staff supports the requirement that a HRA shall be prepared and submitted prior to design review approval for new residential and other sensitive land use projects that are located within 500 feet of freeways such as I-5 and roadways with traffic volumes over 100,000 vehicles per day. This requirement is in line with the purpose and goal of CEQA on public disclosure¹¹. The SCAQMD guidance for performing a HRA is available on SCAQMD website¹².
- b) SCAQMD Staff Comment 2: In addition, SCAQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and SCAQMD to reduce community exposure to source-specific and cumulative air pollution impacts, SCAQMD adopted the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* in 2005¹³. This Guidance document provides recommended policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. Therefore, it is recommended that the Lead Agency review this Guidance document prior to approving the Proposed Project.
- c) SCAQMD Staff Comment 3: Mitigation Measure AQ-10, among others, requires the use of enhanced filtration system rated MERV 12 or better. SCAQMD staff recommends that the Lead Agency require the use of MERV 13 or better to ensure the maximum reduction of health risks from exposures to diesel particulate matter (DPM) emissions from vehicles and trucks traveling on I-5 and roadways with traffic volumes over 100,000 vehicles per day.
- d) SCAQMD Staff Comment 4: Enhanced filtration units have limits. Many strategies are available to reduce exposure, including, but are not limited to, building filtration systems, sound walls, vegetation barriers, etc. Because of the potential adverse health risks involved with siting sensitive receptors near sources of air pollution, it is essential that any proposed strategy must be carefully evaluated before implementation. Since enhanced filtration system is required under Mitigation Measure AQ-10, SCAQMD staff recommends that the Lead Agency consider the limitations of the enhanced filtration. For example, in a study that SCAQMD conducted to investigate filters¹⁴, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the residents. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and the environmental analysis does not generally account for the times when the residents have their windows or doors open or are in common space areas of the project. In addition, these filters have no ability to filter out any toxic gases from vehicle exhaust. Therefore, the presumed

A3-7
cont.

A3-8

¹¹ SCAQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When SCAQMD acts as the Lead Agency, SCAQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

¹² "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis," accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

¹³ South Coast Air Quality Management District. May 2005. "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" Accessed at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

¹⁴ This study evaluated filters rated MERV 13 or better. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see also 2012 Peer Review Journal article by SCAQMD: <http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf>.

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effectiveness and feasibility of any filtration units should be carefully evaluated in more detail prior to assuming that they will sufficiently alleviate exposures to DPM emissions.

- e) SCAQMD Staff Comment 5: Since enhanced filtration units are proposed for the Proposed Project, and to ensure that the enhanced filtration units are enforceable throughout the lifetime of the Proposed Project and that they are effective in reducing exposures to DPM emissions, SCAQMD staff recommends that the Lead Agency provide additional details on future operational and maintenance implementation and monitoring in the Final PEIR to facilitate a good faith effort at full disclosure. At a minimum, the Final PEIR should include the following information:

- Disclosure on increased energy costs for running the HVAC system to prospective residents;
- Disclosure on potential health impacts to prospective residents who live in proximity to freeways;
- Identification of the responsible implementing and enforcement agency (or entity);
- Recommended schedules for replacing the enhanced filtration units;
- Ongoing monitoring schedules;
- Ongoing cost sharing strategies, if any, for replacing the enhanced filtration units;
- Criteria for assessing progress in installing and replacing the enhanced filtration units; and
- Process for evaluating the effectiveness of the enhanced filtration units.

A3-8
cont.

Additional Recommended Mitigation Measures

- 7. In addition to the recommended changes to existing air quality mitigation measures, SCAQMD staff recommends that the Lead Agency incorporate the following mitigation measures for air quality impacts in the Final PEIR.

- a) Require that 240-Volt electrical outlets or Level 2 chargers be installed in parking lots that would enable charging of NEVs and/or battery powered vehicles.

Vehicles that can operate at least partially on electricity have the ability to substantially reduce the significant NOx and ROG impacts from this project. It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, SCAQMD staff recommends the Lead Agency require the Proposed Project be constructed with the appropriate infrastructure to facilitate sufficient electric charging for vehicles to plug-in.

A3-9

- b) Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the Project site to generate solar energy for the facility.
- c) Limit parking supply and unbundle parking costs.
- d) Maximize the planting of trees in landscaping and parking lots.
- e) Use light colored paving and roofing materials.
- f) Install light colored “cool” roofs and cool pavements.

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- g) Require use of electric or alternatively fueled sweepers with HEPA filters.
- h) Require use of electric lawn mowers and leaf blowers.
- i) Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
- j) Use of water-based or low VOC cleaning products.

A3-9
cont.

Compliance with SCAQMD Rule 403(e) and Rule 1403

8. The Lead Agency included a discussion on general compliance with SCAQMD Rule 403 in the Draft PEIR. Since the Proposed Project is a large operation of approximately 220 acres (50-acre sites or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin. The Lead Agency is required to comply with SCAQMD Rule 403(e) – Additional Requirements for Large Operations¹⁵, which includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class¹⁶. Therefore, SCAQMD recommends that the Lead Agency include a discussion to demonstrate specific compliance with SCAQMD Rule 403(e) in the Final PEIR. Compliance with SCAQMD Rule 403(e) will further reduce particulate matters from the Proposed Project.

A3-10

9. Since the Proposed Project would include demolition, asbestos may be encountered during demolition. As such, SCAQMD staff recommends that the Lead Agency include a discussion to demonstrate compliance with SCAQMD Rule 1403 in the Final PEIR.

A3-11

¹⁵ *Ibid.*

¹⁶ South Coast Air Quality Management District Compliance and Enforcement Staff's contact information for Rule 403(e) Large Operations is (909) 396-2608 or by e-mail at dustcontrol@aqmd.gov.

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Response to Comment Letter A3 – South Coast Air Quality Management District, dated March 27, 2018

Comment A3-1: The comment provides a summary of the proposed Specific Plan, the air quality analysis within the Draft EIR, the 2016 Air Quality Management Plan, general information about CEQA Guidelines requirements, and provides an introduction to the specific project related comments that follow.

Response A3-1: The comment is general in nature and does not provide specific comments related to the adequacy of the Draft EIR, or air quality impacts that could result from the proposed Specific Plan. The comment also states that the comments are meant as guidance. Thus, no further response is required or provided.

Comment A3-2: The comment states that the Lead Agency should analyze a worse-case scenario where construction activities overlap with operational activities and implement required mitigation.

Response A3-2: The Draft EIR and the Air Quality Technical Study (included as Appendix B of the Draft EIR) conservatively evaluated several phases of project construction that could occur during implementation of the Specific Plan and determined that emissions from construction activities would be significant and unavoidable. The Draft EIR also evaluates project operational activity and identifies the peak daily emissions that would occur and concludes these emissions are significant and unavoidable. This evaluation is based upon full occupancy and maximum buildout of the proposed Specific Plan, which is a conservative methodology to ensure that potential impacts are identified. Furthermore, cumulative impacts related to construction and operational emissions were determined to be significant and unavoidable. The SCAQMD has issued no formal guidance on overlapping construction and operational activities – in fact, the SCAQMD utilizes different thresholds for construction and operational activities since these activities are intended to be calculated separately and compared to applicable thresholds. Thus, the Draft EIR air quality analysis evaluates an appropriately conservative analysis and has included 10 mitigation measures to reduce air quality emissions impacts to the extent feasible.

Comment A3-3: The comment is an introduction to specific comments that follow, which recommends changes to the air quality related mitigation measures in the Draft EIR.

Response A3-3: As this comment is introductory in nature, no specific response is required. Specific responses to the detailed mitigation recommendations are provided in Responses A3-4 through A3-8.

Comment A3-4: The comment recommends that Mitigation Measure AQ-1 be changed to require construction equipment that meets Tier 4 emissions standards.

Response A3-4: The availability of Tier 4 equipment for the project construction cannot be assured by the City or future project applicants. A review of data available from the California Air Resources Board's (CARB's) OFFROAD2011 Model shows that heavy-duty, off-road construction equipment meeting Tier 4 emission standards account for only approximately 13% of the statewide fleet. Also, the US EPA has provisions that allow construction fleets to defer converting to Tier 4 requirements until at least 2020 in some instances – further underscoring the lack of available Tier 4 compliant equipment. With the low availability of Tier 4-compliant equipment, it would not be feasible to require the project's construction equipment to meet these requirements. Hence, the mitigation requires equipment that meets the Tier 3 standards to reduce construction emissions.

Comment A3-5: The comment states that that Mitigation Measure AQ-6 be changed to require all diesel-fueled trucks accessing the Specific Plan area to meet the U.S. Environmental Protection Agency/California Air Resource Board truck engine standard for Model Year 2010 or better; and to consider phase-in schedules for clean trucks.

Response A3-5: The project would implement a Specific Plan for the downtown area of the City to appropriately plan for future land uses. This recommendation is beyond the scope of this EIR and is not under the control of the City because fleet-related requirements such as these must be and are being achieved on a statewide basis as a result of statewide regulations (e.g., California Air Resources Board regulations). However, Mitigation Measure AQ-6 requires use of low emissions vehicles and other measures to reduce construction related emissions, and the City implements existing regulations to reduce emissions.

Comment A3-6: The comment recommends that the Lead Agency include the SCAQMD's guidance for performing a localized air quality analysis in the Final EIR.

Response A3-6: The Draft EIR and the Air Quality Technical Study (included as Appendix B of the Draft EIR) include a discussion of methodology for performing a localized air quality analysis. In addition, the Air Quality Technical Study references includes the website address for the AQMD significance thresholds and air quality analysis handbook. This comment does not provide specific comments related to the adequacy of the Draft EIR. Thus, no further response is required or provided.

Comment A3-7: The comment states that SCAQMD supports Mitigation Measure AQ-10, which requires preparation of a Health Risk Assessment for sensitive uses within 500 feet of high volume roadways. In addition, the comment states that it is recommended that the Lead Agency review the AQMD Guidance Document related to local planning.

Response A3-7: This comment agrees with the evaluation and mitigation required in the Draft EIR and does not provide specific comments related to the adequacy of the Draft EIR that require response. Thus, no further response is provided.

Comment A3-8: The comment discusses the use of enhanced filtration systems that are rated MERV 12 or better and states that they are required by Mitigation Measure AQ-10.

Response A3-8: The Draft EIR and the Air Quality Technical Study (included as Appendix B of the Draft EIR) do not include discussion of or requirements for use of enhanced filtration systems rated MERV 12 or better. Instead Mitigation Measure AQ-10 requires preparation of a Health Risk Assessment (HRA) if any sensitive uses are proposed within 500 feet of major sources of toxic air contaminants along with appropriate enforcement mechanisms that could include disclosures and monitoring of the systems. The need for enhanced air filtration systems, and the types of filters needed, will be identified by the HRAs prepared for future implementing projects, as necessary for proposed sensitive uses near existing major sources of toxic air contaminants.

Comment A3-9: The comment recommends that the Lead Agency incorporate additional mitigation measures related to 240-volt electrical outlets, use of solar panels, limited parking supply, use of light colored roofing, installation of cool roofs and pavement, HEPA filters, electric lawn mowers, and low VOC cleaning products.

Response A3-9: The project would implement a Specific Plan for the downtown area of the City to appropriately plan for future land uses. The Specific Plan does not include a specific development proposal on a specified parcel of land. Instead, the Specific Plan provides a land use plan and design guidelines that would accommodate the anticipated growth within the area and provide a better jobs to housing balance. Because the project does not contain a specific development proposal, and new development in the Specific Plan area would consist mostly of infill, mixed-use, and redevelopment projects that are market and need dependent, it is not known whether the recommended measures would be applicable or feasible. However, the Draft EIR does include Mitigation Measure AQ-7 that would be implemented to require development projects in the Specific Plan area to achieve 5 percent efficiency beyond the 2016 California Building Code Title 24 requirements; and Mitigation Measure AQ-8 that would require enhanced water conservation for Specific Plan development projects. These measures

provide the flexibility to include emissions reduction features that are applicable and feasible for each proposed development, many of the measures listed in the comment are provided in Mitigation Measure AQ-7. Furthermore, implementation of Mitigation Measures AQ-7 and AQ-8 would likely equate to similar reductions as the measures recommended by this comment.

Comment A3-10: The comment states that since the proposed project is a large operation of approximately 220 acres (50-acre sites or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin, the Lead Agency is required to comply with SCAQMD Rule 403(e) – Additional Requirements for Large Operations¹⁵.

Response A3-10: The proposed project is not a large operation and does not contain any sites that are over 50 acres in size. As described in the previous response, project would implement a Specific Plan for the downtown area of the City to appropriately plan for future land uses. The Specific Plan does not include a specific development proposal on a specified parcel of land. Instead, the Specific Plan provides a land use plan and design guidelines that would accommodate the anticipated growth. It is not anticipated that any project under the proposed specific plan would grade 3,850 cubic yards of soils on three days per year. However, the Draft EIR includes Mitigation Measure AQ-9 that requires projects on parcels that are one acre or larger to provide modeling of the regional and the localized emissions (NO_x, CO, PM₁₀, and PM_{2.5}) associated with the maximum daily grading activities for the proposed development. If the modeling shows that emissions would exceed the SCAQMD's significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD's significance thresholds for those emissions. This includes compliance with SCAQMD Rule 403 (e) as required.

Comment A3-11: The comment states that since the proposed project would include demolition, asbestos may be encountered during demolition. As such, SCAQMD staff recommends that the Lead Agency include a discussion to demonstrate compliance with SCAQMD Rule 1403.

Response A3-11: The Draft EIR Appendix A, Initial Study (page 52) includes a discussion of the potential of buildings within the Specific Plan to contain asbestos containing materials. It states that SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities. Rule 1403 requires surveys of any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable asbestos containing materials. Rule 1403 also establishes notification procedures, removal procedures, handling operations, and warning label requirements, including HEPA filtration, the glove bag method, wetting, and some methods of dry removal that must be implemented when disturbing appreciable amounts of asbestos containing materials (more than 100 square feet of surface area). Thus, the EIR contains the information requested by this comment.

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LETTER A4 – Orange County Airport Land Use Commission (1 page)



March 29, 2018

AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY

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

Dana Ogdon, Assistant Director
City of Tustin
Community Development Department
300 Centennial Way
Tustin, CA 92780

Subject: Notice of Availability of a DEIR for the Downtown Commercial Core Specific Plan

Dear Mr. Ogdon:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the proposed Downtown Commercial Core Specific Plan. The proposed project is not located within the Notification Area (Airport Planning Area) for John Wayne Airport (JWA). Therefore, the Airport Land Use Commission (ALUC) for Orange County has no comment on the DEIR related to land use, noise or safety compatibility with the *Airport Environs Land Use Plan (AELUP) for JWA*.

Although the proposed development is located outside of the Airport Planning Area, please be aware that development proposals which include the construction or alteration of a structure more than 200 feet above ground level, require filing with the Federal Aviation Administration (FAA). Structures meeting this threshold must comply with procedures provided by Federal and State law, with the referral requirements of ALUC, and with all conditions of approval imposed or recommended by the FAA and ALUC including filing a Notice of Proposed Construction or Alteration (FAA Form 7460-1).

The proposed project does not include the development of heliports or helistops. For your information, 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.

Thank you again for the opportunity to comment on this DEIR. Please contact Lea Choum at (949) 252-5123 or via email at lchoum@ocair.com should you have any questions related to the Airport Land Use Commission for Orange County.

Sincerely,

Kari A. Rigoni
Executive Officer

A4-1

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Response to Comment Letter A4 – Orange County Airport Land Use Commission, dated March 29, 2018.

Comment A4-1: This commenter states that the Airport Land Use Commission for Orange County has no comment on the Draft EIR. The commenter also provides information for future structures that would be 200 feet above ground level and for future projects that may include the development of heliports.

Response A4-1: Thank you for your comment. The proposed Specific Plan does not propose, and would not permit, structures more than 200 feet above ground level or heliports or helistops in the Downtown area of Tustin.

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LETTER A5: California Department of Transportation (3 pages)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 12
1750 EAST FOURTH STREET, SUITE 100
SANTA ANA, CA 92705
PHONE (657) 328-6268
FAX (657) 328-6510
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life.*

April 2, 2018

Dana Ogdon
City of Tustin
300 Centennial Way
Tustin, CA 92680

File: IGR/CEQA
SCH: #2016081004
12-ORA-2018-00811
I-5; PM 29.787
SR 55; PM 10.793

Dear Mr. Ogdon,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Draft Environmental Impact Report (DEIR) for the proposed Downtown Commercial Core Specific Plan which borders the Interstate 5 (I-5) Freeway as well as State Route 55 (SR 55). The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.

The proposed Specific Plan establishes the long-term vision and objectives for land use development and public improvements within Tustin's downtown. The Specific Plan area is divided into six Development Areas (DAs), which generally reflect differences in the character of the built environment. The Specific Plan establishes permitted uses, development standards, and design criteria regulating site planning, building design, parking, architectural treatment, landscaping, and circulation improvements for each of the DAs. The proposed Specific Plan also establishes a residential housing bank with a maximum of 887 new dwelling units (multifamily and mixed use) that would be allowed pursuant to a discretionary permit, as required by the City's municipal code. In addition to the residential, the proposed Specific Plan would provide for approximately 300,000 square feet of non-residential (commercial/office) space to be developed within the Specific Plan area.

A5-1

The 220-acre Specific Plan area is generally located northeast of the I-5 at the SR 55 interchange; and is centered around the intersection of Main Street and El Camino Real. The Specific Plan area is generally bounded by I-5 to the south and SR 55 to the west. First Street generally defines the northern edge and includes parcels along the north side of First Street. Newport Avenue and parcels along the east side of Newport Avenue generally define the eastern boundary. Interstate 5 and State Route 55 are overseen by Caltrans. Caltrans is the responsible agency and has the following comments:

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

City of Tustin
 April 2, 2018
 Page 2

System Planning Comments:

- | | |
|---|-------------|
| <p>1. Explore the potential of establishing a city-wide multimodal transportation fee to fund non-auto infrastructure improvement projects. A fee program as such would support the management of vehicular trip demand.</p> <ul style="list-style-type: none"> o The City may want to take into consideration ongoing efforts with the Red Hill Avenue Specific Plan. The Traffic Impact Study of the Red Hill Avenue Specific Plan suggests that funding mechanisms can be implemented to fund improvements for new developments. Therefore, the City may want to consider the possibility of funding programs that could benefit both of these Specific Plans. Additionally, Policy 6.14 in the City's General Plan Circulation Element (2008) supports the notion of using funds from new developments to construct bicycle and pedestrian facilities. | <p>A5-2</p> |
| <p>2. Please explore a potential partnership with Caltrans to provide, or dedicate spaces in an existing lot, to create a park and ride facility within or adjacent to the project area. A park and ride lot would support Caltrans' initiative to create a network of managed lanes facilities. Policy 5.1 of the City's Circulation Element (2008) supports the development of park-and-ride lots near the SR-55 and I-5 freeways.</p> | <p>A5-3</p> |
| <p>3. Based on the intentions of this project, the City may want to consider Community Based Transit/Circulators, which may help relieve congestion and increase connectivity in the project area. For this, we would recommend coordination with OCTA. Additionally, Project V in OCTA's OC Go program may be of interest regarding funding for the transit/circulator. The City should also consider a possible connection between this Specific Plan and the Red Hill Avenue Specific Plan.</p> | <p>A5-4</p> |
| <p>4. Please consider the designation of vehicle parking spaces developed within the Specific Plan area to be EV ready in order to encourage EV use and appropriately sized electrical panels to accommodate future expanded EV use. A voluntary ride sharing program could be achieved through a multifaceted approach, such as designating a certain percentage of parking spaces for ride-sharing vehicles.</p> | <p>A5-5</p> |
| <p>5. Future development documents that fall within the project area should be circulated to Caltrans for review and concurrence.</p> | <p>A5-6</p> |
| <p>6. We also encourage the City to develop Travel Demand Management (TDM) policies to encourage smart mobility and the use of nearby OCTA Bus Routes 71, 79, and 79A. To reduce regional VMT and traffic impacts to the State Highway System please consider requiring future development to adopt the TDM options listed below:</p> <ul style="list-style-type: none"> o Project design to encourage walking, bicycling, and convenient transit access; o Dedicate carpool parking spaces; o Allocate space for bicycle parking; o Form of a Transportation Management Association (TMA) in partnership with other developments in the area; | <p>A5-7</p> |

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

City of Tustin
 April 2, 2018
 Page 3

- o Adopt an aggressive trip reduction target with Lead Agency monitoring and enforcement;
- o Reduce headway times for adjacent transit routes; and
- o Provide and/or subsidize transit passes for employees and residents on a continuing basis.

A5-7
 cont.

Active Transportation Comments:

7. A Class II bike lane along First Street is consistent with the City of Tustin’s Master Bikeway Plan (2005), which identifies the street as a possible Class II route. Additionally, according to the Specific Plan, these bike facilities on First Street, as well as the planned facility along Main Street, will be connected to an existing Class I bike path on Newport Avenue, thus increasing connectivity.
 - o To increase regional connectivity, the City may consider connecting the bike facilities in the Specific Plan to the Tustin Metrolink station and to bike facility improvements outlined in the Red Hill Avenue Specific Plan.

A5-8

8. There are schools located adjacent to the project area, and measures should be implemented to ensure the safety of students and connectivity throughout the Specific Plan and regionally.

A5-9

9. Ramps and other measures (i.e., truncated domes, sidewalk widths, etc.) shall be constructed or updated at all intersections in the project area to adhere to the Americans with Disabilities Act standards. Policy 6.3 of the City’s Circulation Element (2008) supports this notion.

A5-10

Water Quality

10. At this time, the Draft EIR does not contain analysis for Water Quality. The draft EIR should include some type of water quality analysis to ensure that the proposed project will address water quality impacts (i.e. comply with local MS4 Permit, Construction General Permit/ NPDES Permit). This project is located upstream from Caltrans’ I-5 Right of Way and should identify proposed measures to address water quality impacts created by the project.

A5-11

Please continue to coordinate with Caltrans for any future developments that could potentially impact State transportation facilities. If you have any questions, please do not hesitate to contact Julie Lugaro at 657-328-6368 or Julie.lugaro@dot.ca.gov.

Sincerely,



MARLON REGISFORD
 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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Response to Comment Letter A5 – California Department of Transportation, dated April 2, 2018.

Comment A5-1: The comment provides thanks for review of the Draft EIR that borders two Caltrans facilities. The comment also provides a summary of the proposed Specific Plan.

Response A5-1: The comment is introductory in nature and does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. Therefore, no further response is required or provided.

Comment A5-2: The comment states that the City should explore the potential of establishing a citywide multimodal transportation fee to fund non-auto infrastructure. The comment suggests this could be included in the Red Hill Avenue Specific Plan, and notes that the City's Circulation Element supports the concept.

Response A5-2: Establishment of Citywide funding measures is beyond the scope of the proposed Downtown Commercial Core Specific Plan. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. The recommendation will be forwarded to the City's decisionmakers for consideration.

Comment A5-3: The comment asks the City to explore a partnership with the Caltrans to create a park and ride facility within or adjacent to the project area, which would support Caltrans's initiative in Policy 5.1 of the City's Circulation Element.

Response A5-3: The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. The request will be forwarded to the City's decisionmakers for consideration.

Comment A5-4: The comment suggests that the City may want to consider Community Based Transit/Circulators and to coordinate with OCTA for funding.

Response A5-4: Transit funding is beyond the scope of the proposed Specific Plan. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. The request will be forwarded to the City's decisionmakers for consideration.

Comment A5-5: The comment suggests designation of vehicle parking for EV and provision of appropriate electrical panels to support future EV usage. The comment also states a voluntary ride sharing program could be achieved by provision of rideshare vehicle parking.

Response A5-5: The Specific Plan does not propose any specific development projects which could address this comment, but provides for future infill and redevelopment within the Specific Plan area to accommodate a variety of land uses. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. The suggestion will be forwarded to the City's decisionmakers for consideration during review of specific developments within the project area.

Comment A5-6: The comment states that future development documents should be circulated to Caltrans.

Response A5-6: Future proposed developments that require CEQA documentation, such as a Mitigated Negative Declaration, will be forwarded to Caltrans for review and comment. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. Therefore, no further response is required or provided.

Comment A5-7: The comment encourages the City to develop Travel Demand Management (TDM) policies to encourage smart mobility and encourage the use of nearby OCTA bus routes.

Response A5-7: Policy development related to TDM is beyond the scope of the proposed Specific Plan. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. The suggestion will be forwarded to the City's decisionmakers for consideration.

Comment A5-8: The comment suggests connecting the bicycle facilities in the Specific Plan to the Tustin Metrolink station and to the bike facilities outlined in the Red Hill Specific Plan.

Response A5-8: The comment suggests extension of bicycle facilities beyond those planned in the Specific Plan and does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. The request will be forwarded to the City's decisionmakers for consideration.

Comment A5-9: The commenter suggest that measures should be implemented to ensure school safety of students and connectivity throughout the Specific Plan and regionally.

Response A5-9: There are no public schools within the Specific Plan planning area. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR.

Comment A5-10: Comment requests that all ramps and measures at intersections constructed or updated in the City adhere to the American's with Disabilities Act and notes that this is supported by the City's Circulation Element.

Response A5-10: All public improvements and new development projects will be required to adhere to the American's with Disabilities Act, which is verified by the City's Building Division prior to approval of building permits. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR.

Comment A5-11: The comment states that water quality is not addressed in the Draft EIR and that the EIR should include water quality analysis.

Response A5-11: A discussion of potential impacts to water quality and hydrology are provided in the Initial Study for the proposed project, on pages 55 through 57, which is provided as Appendix A of the Draft EIR. In addition, Draft EIR Section 5.11, Utilities and Service Systems, on page 5.11-1, describes that the Orange County Drainage Area Management Plan (DAMP) is the primary stormwater control regulation for development projects. The DAMP requires implementation of Water Quality Management Plans based on the anticipated pollutants that could result from individual projects. Each future development project would be required to provide onsite stormwater drainage features, such as catch basins, that have been sized to meet the drainage requirements of that particular project. The Orange County DAMP requires projects to infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event. All future development within the Specific Plan area will be subject to the provisions of the National Pollution Discharge Elimination System (NPDES) to protect downstream water quality pursuant to the Clean Water Act and the City implements NPDES requirements through Tustin City Code Article 4 (Health and Sanitation), Chapter 9 (Water Quality Control). As described in the Initial Study, through implementation of these existing requirements, as done through the City's permitting process, impacts would be less than significant.

LETTER A6: OC Public Works (2 pages)



March 30, 2018

NCL-18-008

Dana Ogdon
 City of Tustin
 Community Development Department
 300 Centennial Way
 Tustin, CA 92780

Subject: Draft Program Environmental Impact Report for the Downtown Commercial Core Specific Plan

Dear Dana Ogdon:

Thank you for the opportunity to comment on the Draft Program Environmental Impact Report (EIR) for the Downtown Commercial Core Specific Plan. The County of Orange offers the following comments for your consideration.

OC Public Works – Environmental Resources

1. While the formulation of a site specific Water Quality Monitoring Plan (WQMP) is discussed in the Draft Program EIR, the EIR should note specifically whether or not the project qualifies as a *Priority Development Project* under the City’s municipal stormwater permit (Board Order R8-2009-0030) and as further elaborated on in the Technical Guidance Document (TGD), or instead is a *Non-Priority Project* which would require preparation of a *Non-Priority Water Quality Project Plan*. If the project is designated at a *Priority Development Project* then the consideration of water quality approaches should be considered at the earliest phase of the development and planning process. The Model WQMP (<http://ocwatersheds.com/documents/wqmp>), which was approved by the Santa Ana Regional Water Quality Control Board on May 19, 2011, states the following regarding the role of a conceptual or preliminary WQMP in the CEQA process (Section 7.II; page 7.II 1-1):

For most projects the process will first involve preparing a Conceptual or Preliminary WQMP to incorporate Low Impact Development (LID) and hydromodification control BMPs where necessary at the earliest conceptual planning stages of a project for early review. All Priority Projects will require a final WQMP be prepared, regardless of whether a Conceptual or Preliminary WQMP was prepared first. The process for preparing Conceptual or Preliminary WQMPs and/or final Project WQMPs is described in Section 7.II05.0 with supplemental information provided in the TGD.

Since the Specific Plan is a regional scale planning process, consideration should be given to potential opportunities for regional scale water quality best management practices when

A6-1

300 N. Flower Street, Santa Ana, CA 92703
 P.O. Box 4048, Santa Ana, CA 92702-4048

www.ocpublicworks.com
 714.667.8800 | Info@OCPW.ocgov.com

developing the conceptual or preliminary WQMP for the Downtown Commercial Core Specific Plan.

If you have any questions regarding these comments, please contact Matt Tucker at (714) 955-0669 in Environmental Resources; or Ashley Brodtkin at (714) 667-8854 in OC Development Services.

A6-1
cont.

Sincerely,



for Richard Vuong, Manager, Planning Division
OC Public Works Service Area/OC Development Services
300 North Flower Street
Santa Ana, California 92702-4048
Richard.Vuong@ocpw.ocgov.com

cc: Matt Tucker, OC Public Works – Environmental Resources

Response to Comment Letter A6 – OC Public Works, dated April 2, 2018.

Comment A6-1: The comment states that the EIR should note whether the project qualifies as a Priority Development Project under the City’s municipal stormwater permit, and if so consideration of water quality approaches should be considered early in the planning and development process. The comment then refers to the Model WQMP and states that consideration should be given to regional scale best management practices.

Response A6-1: The Specific Plan does not propose any specific development projects which could address this comment, but provides a land use plan to accommodate future infill and redevelopment within the Specific Plan area. It is currently unknown whether future proposed projects in the Specific Plan area would consist of Priority Development Projects or Non-Priority Projects. However, the Draft EIR Section 5.11, Utilities and Service Systems, describes on page 5.11-1, that the Orange County Drainage Area Management Plan (DAMP) requires implementation of Water Quality Management Plans based on the anticipated pollutants that could result from individual projects. Each future development project will be subject to the provisions of the National Pollution Discharge Elimination System (NPDES) to protect downstream water quality pursuant to the Clean Water Act and the City implements NPDES requirements through Tustin City Code Article 4 (Health and Sanitation), Chapter 9 (Water Quality Control).

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LETTER O1 - Gabrieleño Band of Mission Indians – Kizh Nation (1 page)



Gabrieleño Band of Mission Indians – Kizh Nation

Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

February 20, 2018

Regarding: City of Tustin Downtown Commercial Core Specific plan DEIR

Dear Dana L. Ogdon,

This email is in response to the above referenced project located at the northeast intersection of Interstate 5 and the State Route 55 and is centered around the intersection of Main St. and El Camino Real City of Tustin. The project location is within our Ancestral territory which may have potential for discoveries of our cultural resources. Therefore, we would like to request that one of our Native Monitors be present during any and all ground disturbances.

O1-1

Should you have any questions or concerns, please contact our office at 844-390-0787.

Thank you,

Andrew Salas

Chairman, Gabrieleño Band of Mission Indians-Kizh Nation

Gabrieleño Band of Mission Indians – Kizh Nation
website: www.gabrieleñoindians.org

PO Box 393

Covina, CA

91723

(626)926-4131

email: gabrieleñoindians@yahoo.com

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Response to Comment Letter O1 - Gabrieleno Band of Mission Indians – Kitz Nation, dated February 20, 2018.

Comment O1-1: The commenter states that the Specific Plan area is located within Ancestral territory of the Kitz Nation and may have potential for discoveries of their cultural resources. The commenter requests that Native monitors be present during any and all ground disturbances.

Response O1-1: Assembly Bill 52 (AB 52; Public Resource Code Section 21080.3.1), established a requirement under CEQA to consider “tribal cultural values, as well as scientific and archaeological values when determining impacts and mitigation.” Tribal Cultural Resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or local registers of historical resources.

Public Resources Code § 21074 defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency determines, in its discretion, is a tribal cultural resource.

According to the Technical Advisory on AB 52 and Tribal Cultural Resources in CEQA from Governor’s Office of Planning and Research (July 2017), when a lead agency decides to treat a resource as a tribal cultural resource, that determination shall be supported with substantial evidence¹, applying the criteria in the historical register, and considering the significance of the resource to a California Native American Tribe. (PRC § 5024.1, PRC § 21074). Because the statute gives lead agencies discretion regarding how to treat non-listed resources, evidence of a fair argument is insufficient by itself to compel a lead agency to treat it as a tribal cultural resource if the lead agency determines otherwise. (*Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal. 4th 1086, 1117 (“the fair argument standard does not govern ...’ an agency’s determination of whether a building qualifies as a ‘historical resource’”) (quoting *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1072).)

As discussed on Draft EIR page 5.10-4, Section 5.10, *Tribal Cultural Resources*, the City of Tustin met with the Gabrieleño Band of Mission Indians – Kizh Nation and an AB 52 consultation meeting was held on October 11, 2017. The representatives generally stated the importance of the historic El Camino Real, which was a footpath and used by Native Californians as a traditional pathway and trade route. No tribal cultural places or Tribal Cultural Resources, including the actual location of the historic El Camino Real were geographically identified within the Specific Plan area during the consultation.

Although no Tribal Cultural Resources were identified in the Specific Plan area through record searches and the tribal consultation, the Draft EIR stated that development and redevelopment projects pursuant to the Specific Plan could involve grading and excavation to greater depths than previously undertaken that could disturb unknown buried Tribal Cultural Resources, including shells, funerary objects, and human remains due to previous use of the area as a traditional trade route. Thus, Mitigation Measure CUL-1 would reduce the potential for Tribal Cultural Resources to be impacted during earthmoving activities and provides for management of any identified resources.

With implementation of Mitigation Measure CUL-1, impacts related to a substantial adverse change in the significance of a tribal cultural resource were considered to be less than significant in the Draft EIR.

Mr. Salas’ comment on the Draft EIR requests that Native monitors be present during “any and all ground disturbances” because the “project location is within our Ancestral territory which may have potential for

¹ Public Resources Code § 21080 (e)(1) states “... substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”

discoveries of our cultural resources.” Much, if not all, of Orange County and portions of LA County are considered to be within the Ancestral territory by the Kitz Nation. The oral information provided at the AB 52 consultation and the letter submitted by the Kitz Nation in response to Draft EIR do not constitute substantial evidence that the project may cause a substantial adverse change to tribal cultural resources and that all ground disturbances in the Specific Plan area require full-time Native monitoring. As discussed, the City’s determination that additional mitigation is needed must be supported with substantial evidence. Evidence of a fair argument is insufficient by itself to compel a lead agency to treat it as a tribal cultural resource if the lead agency determines otherwise, as the City of Tustin did in the Draft EIR.

Mitigation Measure CUL-1 has been revised to ensure that the Kitz Nation is notified when potential tribal cultural resources or objects with cultural value to Tribe are encountered. Changes made to the Draft EIR are identified here in ~~strikeout~~ text to indicate deletions and in underlined text to signify additions.

Mitigation Measure CUL-1: Prior to issuance of a grading permit for grading of 2 feet or more in depth below the natural or existing grade, the applicant/developer shall provide written evidence to the City Planning Division that a qualified archaeologist has been retained by the applicant/developer to respond on an as-needed basis to address unanticipated archaeological discoveries and any archaeological requirements (e.g., conditions of approval) that are applicable to the project. The applicant/developer is encouraged to conduct a field meeting prior to the start of construction activity with all construction supervisors to train staff to identify potential archaeological resources. In the event that archaeological materials are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.

If discovered archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that confirmed resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery, reburial/relocation, deposit at a local museum that accepts such resources or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

If discovered materials are found not to be significant archaeological resources, but may be considered a Tribal Cultural Resource or objects with cultural value to a California Native American tribe, the archeologist shall contact representatives of Gabrieleño Band of Mission Indians – Kizh Nation to assess the discovery and develop appropriate avoidance measures, data recovery, reburial/relocation, or other appropriate mitigation.

Please see Chapter 3, *Revisions to the Draft EIR*, herein.

LETTER O2 – Saddleback Chapel Mortuary (4 pages)

March 27, 2018

Dana L. Ogdon, AICP
City of Tustin Community Development
300 Centennial Way
Tustin, CA 92780

Saddleback Chapel was founded over 50 years ago by a group of 12 local businessmen and, unlike other local mortuaries which have sold out to major conglomerates, Saddleback is still locally owned and operated by the descendants of those original founding families. We proudly embody a deep sense of history and continuity here, as Saddleback Chapel sits on property that was directly purchased from the estate of Samuel Tustin.

Throughout our history, we have been active supporters and sponsors of countless local civic organizations and events, the local police department, historical society, senior citizens organizations, churches, Broadway in the Park, and the high school drunk driving program “Every 15 Minutes,” just to name a few. Every month, hundreds of people come to downtown Tustin to attend services at our facility, many of whom have never been to Tustin or ever had a previous reason to visit our city. Visitors to our mortuary have a myriad of needs, and we enthusiastically promote and direct them to our fellow merchants and local amenities. If they are hungry, we point out our restaurants; if they need flowers, a new shirt, a haircut, shoes repaired, a place to entertain their kids for an hour, or a bar, we make local recommendations. Galaxy Automotive maintains our fleet of vehicles. We have scrupulously maintained our facility and its landscaping to ensure that we present an attractive visage and remain an asset to Tustin. And, since our facade was used in a recent city water conservation mailing, we must be

O2-1

doing something right! In short, we have been good neighbors for over 50 years and hope to continue as such for many more.

O2-1
cont.

I know the City has conducted workshops regarding downtown Tustin, but it was only recently brought to our attention that the plans which the City intends to implement will create a serious detriment to our ability to conduct our business. We have always maintained one entrance and one exit onto Main Street, and the striping in our parking lot not only maximizes our available space, but it enables cars to be lined up for processions to the cemetery. Our unique layout also affords visitors the ability to leave a service early without being “boxed in.” We have established a safe, orderly pattern of movement of cars entering and leaving our premises, all while maintaining a fire lane and handicap access. Vehicles are able to freely turn either east or west onto Main Street, depending upon their destinations. Our system works.

O2-2

Unfortunately, the planned improvements in front of the mortuary will cripple our current ingress and egress. The proposed median strip will render it impossible to turn left onto Main Street from our property, and it is neither safe nor logistically feasible to properly serve our families under this proposed plan. It has currently reached the point that, on any given afternoon, westbound traffic on Main Street is backed up all the way to Centennial; I fail to see how a median strip and a narrower street will do anything but exacerbate this. The “improvements” to El Camino Real have already pushed auto traffic onto B Street, 6th St and Prospect, and the new housing development on 6th St. will only add to this congestion. Clogging the traffic flow and forcing vehicles onto other arterials will not entice visitors to downtown enterprises—it will only frustrate and discourage them from venturing here at all.

In the course of a typical business day at Saddleback Chapel many, if not most, of the vehicles leaving the property are headed west, destined to the coroner, churches, hospitals, cemeteries, the county health department, as well as to the very downtown businesses the city is trying to help. The existence of a median strip would force our traffic to turn right and head east toward Centennial and then north, and then west. This is not only inconvenient, but time consuming and annoying. So too, while our employees may be familiar with the nuances of the neighborhood, most of our visitors are not. The need to explain or direct them to navigate this nuisance poses an unnecessary and unwelcome obstacle to already stressed, emotional and distracted drivers. Another concern of ours is that the median will prevent traffic approaching from the west the ability to turn left into the public parking lot on the north side of Main. When our parking lot is full, it is our practice to place orange cones across our entrance to keep vehicles from crowding the lot and obstructing the fire lane. This requires the drivers to either park on the street or turn left into the public parking lot. The new configuration reduces the available on-street parking in front of the mortuary, and it prevents vehicles from turning into the lot across the street. Thus, we will have drivers driving around in circles trying to find a place to park, often in the dark of night. Will U-turns be allowed or even possible at the library and at Centennial? And is Centennial truly engineered and capable of absorbing this onslaught of new traffic?

O2-2
cont.

We have a bronze plaque near our entrance which bears a famous quote by William Gladstone. It reads, “Show me the manner in which a nation or a community cares for its dead and I will measure with mathematical exactness the tender sympathies of its people, their respect for the laws of the land and their loyalty to high ideals.” We at Saddleback Chapel truly believe in those sentiments, and hope that the city stewards do as well. Our mission is to be able to minister to families suffering loss and to serve our community in a productive, cooperative, and compassionate fashion for many more years to come. We fervently hope that your final

O2-3

redevelopment plans do not jeopardize our ability to provide that care. Thank you.

Nancy Shumar
Member, Board of Directors
Saddleback Chapel Mortuary

Cc: Doug Stack, Elizabeth Binsack

Response to Comment Letter O2 – Saddleback Chapel, dated March 27, 2018.

Comment O2-1: The comment provides history of the Saddleback Chapel Mortuary business and the authors experience in the area, including description of the current site design and access, and concerns that there may be change that affects the access to the site that would cause an inconvenience to drivers visiting the business.

Response O2-1: The comment does not pertain to environmental impacts and is not a comment specifically on the EIR; therefore, no further response is required or provided.

Comment O2-2: The comment asks for clarification on whether U-turns will be allowed at the Tustin Library at Centennial Way and Main Street and if Centennial Way has been designed and has sufficient capacity to accommodate the projected increase in traffic by the DCCSP.

Response O2-2: The proposed Specific Plan does not provide details on how the street would be redesigned; only conceptual planned improvements. The Tustin Public Works Department will refine the detail during the design for the improvements.

Comment O2-3: The comment describes the business' mission and values and requests that changes to the road not impact the business' ability to serve their clientele.

Response O2-3: The comment does not pertain to environmental impacts and is not a comment specifically on the EIR; therefore, no further response is required or provided.

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LETTER R1 – Collette Morse (3 pages)

April 2, 2018

Transmitted via Email

Mr. Dana L. Ogdon, AICP
Assistant Director of Community Development
City of Tustin
300 Centennial Way
Tustin, CA 92780
dogdon@tustinca.org

Subject: Comments on Downtown Commercial Core Specific Plan Draft Program EIR

Dear Mr. Ogdon:

Notice of Availability

Since the beginning of the Downtown Commercial Core Specific Plan process in 2014, I have received mailed notices regarding community workshops (2014-2016) and the Notice of Preparation and Scoping Meeting in August 2016. However, I did not receive a Notice of Availability of the Draft EIR via USPS, but did receive a notice of the Planning Commission hearing on April 10, 2018 via USPS.

It was fortunate that I had included my email address on the community workshop sign-in sheets, as I received an email on February 15, 2018 regarding the Notice of Availability of a Draft EIR.

Ensuring proper notice of residents, business owners, and property owners within the Specific Plan and the radius determined by the City is important for all to have an opportunity to participate in the planning and environmental process. My address is provided at the end of this letter. Please confirm my name and address are on the City's mailing list for this project and all future mailings.

General Opposition

I oppose the following changes with the proposed Specific Plan:

1. General Plan Circulation Element Amendment to be consistent with the proposed circulation changes resulting from conceptual planned improvements to First Street, Second Street and Third Street.

R1-1

R1-2

Mr. Dana L. Ogdon, AICP
April 2, 2018

Page 2

2. The proposed Specific Plan contains planned modifications to First and Main Streets, which are included in the Master Plan of Arterial Highways (MPAH) administered by the Orange County Transportation Authority (OCTA) to:

- Reclassify First Street from just east of State Route 55 to Newport Avenue, from a primary (four-lane, divided) arterial to a divided collector (two-lane, divided) arterial.

R1-2
cont.

These proposed changes create traffic impacts that have not been fully analyzed in the Draft EIR. Additional analysis is necessary and would require a recirculation of the Draft EIR.

General Comments

The Draft EIR has inadequately described the proposed project throughout the entirety of the document. The proposed Specific Plan includes a number of changes to zoning, height, stories, etc., but these and other items are not identified or discussed in detail. In addition, the analysis in Section 5.0 inadequately incorporated technical analyses. Key environmental setting and analysis, along with tables and exhibits, are only included in the Technical Appendices, and not in Section 5.0. Thus, the Draft EIR requires revisions to Section 3.0, Project Description, and all of Section 5.0, Environmental Impact Analysis, to clearly articulate the changes and the associated environmental impacts.

R1-3

Section 5.9, Traffic and Circulation

The analysis in this section does not identify which intersections are signalized and which intersections are unsignalized. This is necessary to provide context for both the existing environmental and proposed conditions.

R1-4

The analysis in this section does not identify the type of each street within the Plan area (i.e., arterial, collector, residential), the design capacity of each street, or the latest daily volumes counts for each street. This is necessary to provide context for both the existing environmental and proposed conditions.

R1-5

Both Main Street and First Street serves as alternative travel routes to Irvine Boulevard. The reduction in travel lanes on both Main Street and First Street will result in more cut-through traffic on residential streets or other collector streets both within and outside of the Specific Plan area.

R1-6

The traffic analysis needs to include a Residential Neighborhood Roadway Segment Analysis to fully document the new travel patterns that would result from the identified General Plan Circulation Element changes to Main Street, First Street, Second Street, and Third Street.

Mr. Dana L. Ogden, AICP
April 2, 2018

Page 3

This analysis should include streets that would be impacted by the proposed Specific Plan both within and outside the Plan area.

R1-6
cont.

Longer Turn Delays

I reside on North C Street, which includes a stop sign at First Street. I presently experience delays turning left onto First Street that can range up to several minutes. These lengthy delays occur throughout the day (AM, Mid-Day, and PM peak hours). Residential streets off First Street will experience in an increase in time it takes to make left turns onto First Street with the proposed modifications to First Street. These changes will result in significant delays, particularly for unsignalized (stop-controlled) intersections.

R1-7

Appendix E, Traffic Study

Appendix A, Traffic Count Worksheets

The worksheets for Intersection No. 6, 7, 8, 9, 10, and 11 along First Street show no Pedestrian + Bike Crossings, Pedestrian Crossings, or Bicycle Crossings during the identified AM or PM peak hour. First Street is well -utilized by both pedestrians and bicyclists throughout the day. The counts are wrong and completely understate the existing environment. New counts should be taken to provide an accurate baseline for impact analysis.

R1-8

Conclusion

The Draft EIR has not adequately described the proposed Specific Plan or the environmental impacts associated with its implementation. Thus, the Draft EIR must be revised and recirculated for public review to ensure sufficient details and analysis are provided prior to any decision by the Planning Commission or City Council.

R1-9

Sincerely,



Collette L. Morse
145 N C Street
Tustin, CA 92780

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Response to Comment Letter R1 - Collette Morse, dated April 2, 2018

Comment R1-1: The comment states that mailed notices were received regarding the community workshops, Notice of Preparation, and Scoping Meeting; but no mailed notice regarding the Draft EIR was received. Instead an email regarding the Notice of Availability was received. The comment also states that Ensuring proper notice of the public is important for all to have an opportunity to participate in the planning and environmental process. Further, the comment requests confirmation that the commenter's name and address is on the City's mailing list.

Response R1-1: The Notice of Availability (NOA) for the Draft EIR was sent to all interested persons, including those who attended and provided contact information at the Specific Plan Workshops. In addition, the NOA was published in the Tustin News. It was the intent of the City to communicate to all property owners and interested persons that the Draft EIR was available for review and comment. The comment does not provide any specific concerns related to physical environmental impacts that could result from implementation of the proposed Specific Plan or otherwise comment on the content of the Draft EIR. Therefore, no further response is required or provided.

Comment R1-2: The comment expresses opposition to the General Plan Circulation Element Planned Improvements to First, Second, and Third Streets; and to the OCTA improvement that would reclassify First Street from just east of State Route (SR) 55 to Newport Avenue, from a primary (four-lane, divided) arterial to a divided collector (two-lane, divided) arterial. The comment asserts that these changes would result in impacts not evaluated in the EIR.

Response R1-2: The proposed Specific Plan would not result in impacts that were not evaluated in the EIR. The following responses provide detail pursuant to specific concerns raised by the commenter.

Comment R1-3: The comment states that Draft EIR has inadequately described the changes to zoning, height, stories, etc., but these and other items are not identified or discussed in detail. In addition, the comment states that the analysis in Section 5.0 inadequately incorporated technical analyses, that are only included in the Technical Appendices, and not in Section 5.0.

Response R1-3: The changes to the number of stories of buildings is described in Section 5.1.6 Environmental Impacts of the Aesthetics Draft EIR Section. As detailed, the Specific Plan provides design criteria for each Development Area (DA). For example, it is described that vertical residential mixed use would be allowed up to three stories high along First Street and Irvine Boulevard. Vertical or horizontal mixed use would be allowed up to three stories high along Centennial Way and Holt Avenue, with up to four stories high within the interior of the parcels (see the development standards in Table 3.2). In addition, CEQA Guidelines Section 15147 provides that information contained in an EIR include summarized technical data, and states that the technical studies be made readily available for review, which has been done for the Draft EIR.

Comment R1-4: The comment states that the analysis in the Traffic and Circulation section of the Draft EIR does not identify which intersections are signalized and which intersections are unsignalized. This is necessary to provide context for both the existing environmental and proposed conditions.

Response R1-4: The type of intersection control, such as by traffic signal or by stop sign, is provided in the proposed Specific Plan's Traffic Study. For example, in Draft EIR Appendix E, the Traffic Study page A.2 provides a summary of conditions for Intersection 1, Tustin at 4th Street, including that the intersection control type is a traffic signal. The corresponding information for each study area intersection is likewise provided in this same appendix.

Comment R1-5: The comment states that the Traffic and Circulation section of the Draft EIR does not identify the type of each street within the Plan area (i.e., arterial, collector, residential), the design capacity of each street, or the latest daily volumes counts for each street. The comment asserts that this information is necessary to provide context for both the existing environmental and proposed conditions.

Response R1-5: The Draft EIR Section 5.9, Traffic and Circulation, includes the information relevant to determination of significant impacts based on the established criteria of the City of Tustin, Caltrans, and the County of Orange Congestion Management Program. Additional information referenced in the comment not related to the determination of an impact can be found throughout the Draft EIR and the technical appendices. For example, information regarding the types of streets within the Specific Plan area as it relates to the proposed Specific Plan is discussed in Draft EIR Chapter 3, Project Description, where the reclassification of First Street and Main Street from a Primary Arterial to a Divided Collector roadway is presented. Additional technical information, such as roadway lane capacities and current and forecast daily traffic volumes for each roadway in the study area, is provided in the proposed Specific Plan's Traffic Study, provided as Appendix E of the Draft EIR.

Comment R1-6: The comment states that Main Street and First Street serves as alternative travel routes to Irvine Boulevard. The comment asserts that a reduction in travel lanes on both Main Street and First Street will result in more cut-through traffic on residential streets or other collector streets. The comment further states that a Residential Neighborhood Roadway Segment Analysis is needed to fully document the new travel patterns that would result from the identified General Plan Circulation Element changes to Main Street, First Street, Second Street, and Third Street.

Response R1-6: Main Street is currently built as a two-lane street for all but a short segment near Newport Avenue where it expands to four-lanes. The proposed change of Main Street to a two-lane Divided Collector is a change to the roadway's Plan designation only and does not reduce the current roadway capacity such that cut-through traffic onto other neighborhood streets would be expected to result. First Street is currently constructed as a four-lane street, but as shown in Draft EIR Table 4.9.1, Existing Conditions Intersection LOS Summary, the roadway currently operates at LOS A during the a.m. and p.m. peak hours, which indicates there is currently an excess of capacity along First Street. With the roadway's change to a two-lane Divided Collector, the Draft EIR Table 4.9-3, Existing plus Project Intersection Level of Service, shows that First Street would operate at LOS A and B during the a.m. and p.m. peak hours, which indicates that sufficient capacity will be available and that cut-through traffic onto other neighborhood streets would not be expected. Also, the Draft EIR Table 4.9-5, Cumulative 2035 plus Project Intersection Level of Service, shows that First Street would operate at LOS A, B and C during the a.m. and p.m. peak hours, with the exception of the Prospect Avenue intersection, which is forecast to operate at LOS D during the p.m. peak hour under long-range 2035 conditions. In each case, the analysis indicates that sufficient capacity will be available and that cut-through traffic onto other neighborhood streets would not be expected. The proposed Specific Plan's traffic study, provided as Appendix E of the Draft EIR, provides a comprehensive analysis of the new traffic patterns that would result from the proposed changes to the General Plan Circulation Element. Of note, the redesignations to First Street and Main Street are OCTA approved Master Plan of Arterial Highways designations and are in line with the same designations within the City of Santa Ana. The Downtown Plan does not provide any details on how the street will be redesigned; only conceptual improvements. That will be up to the Public Works Department when it comes time to move forward with a design for the improvements.

Comment R1-7: The comment states that the stop-controlled intersection on North C Street at First Street experiences delays up to several minutes throughout the day. The comment further asserts that the proposed modifications at First Street would result in significant delays at stop-controlled intersections.

Response R1-7: It is typical that at intersections such as North C Street at First Street where the side-street left turns are controlled by a stop sign, side street vehicles will typically experience delay when waiting

for a gap in the cross-street traffic. In contrast, vehicles on the higher volume cross-streets experience no delay. This is not a significant impact based on CEQA criteria.

Comment R1-8: The comment states that the worksheets for Intersection No. 6, 7, 8, 9, 10, and 11 along First Street show no Pedestrian + Bike Crossings, Pedestrian Crossings, or Bicycle Crossings during the identified AM or PM peak hour. The comment asserts that First Street is well-utilized by both pedestrians and bicyclists throughout the day. The comment further asserts that the counts are wrong and completely understate the existing environment, and that new counts should be taken to provide an accurate baseline for impact analysis.

Response R1-8: The traffic count worksheets referenced in the comment include a tabulation of motorized vehicle turning movements only, consistent with the City's impact criteria requirements. Therefore, the data provided in the worksheets is not wrong as asserted in the comment by not showing pedestrian and bicycle volumes, rather the data is specific to motorized vehicle traffic only. It is recognized that First Street is well-utilized by pedestrians and bicyclists, which is consistent with the proposed Specific Plan's intent to provide a more attractive environment for non-motorized traffic along the First Street corridor. With the redesigned street corridor, pedestrian circulation would be easier and bike lanes have been provided to provide for bicycle circulation.

Comment R1-9: The comment is conclusory and claims that the Draft EIR has not adequately described the proposed Specific Plan or the environmental impacts associated with its implementation. The comment further asserts that the Draft EIR must be revised and recirculated.

Response R1-9: As described in the previous responses the Draft EIR adequately describes the potential impacts that would result from the proposed Specific Plan. Thus, the Draft EIR does not require recirculation.

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