CHAPTER 1 Executive Summary

1.1 PURPOSE OF THE SUMMARY

This summary is intended to highlight the major areas of importance in the environmental analysis for the proposed Transit Zoning Code (SD 84A and SD 84B) as required by Section 15123 of the California Environmental Quality Act (CEQA) Guidelines. The summary includes a brief description of the Transit Zoning Code, the project objectives, community/agency issues, the purpose of the Mitigation Monitoring and Reporting Program, and a summary of the alternatives to the Transit Zoning Code. In addition, this chapter also provides a table summarizing (1) the potential environmental impacts that would occur as a result of the project; (2) the level of significance before mitigation measures; (3) the recommended mitigation measures that avoid significant environmental impacts; and (4) the level of significance after mitigation measures are implemented.

1.2 PROJECT LOCATION

The project is located in the central urban core of Santa Ana and comprises over 100 blocks and 450 acres, approximately 10 miles west from the Pacific Ocean, as shown in Figure ES-1 (Regional Location Map). The proposed project is located in the area west of Interstate 5, north of First Street, and between Grand Avenue and Flower Street and south of Civic Center Drive in the City of Santa Ana in Orange County, California.

1.3 PROJECT OBJECTIVES

The primary objective of the proposed project is to provide zoning for the integration of new infill development into existing neighborhoods, to allow for the reuse of existing structures, and to provide a transit-supportive, pedestrian-oriented development framework to support the addition of new transit infrastructure. The Transit Zoning Code would preserve and reinforce the historic character and pedestrian nature of the City while encouraging alternative modes of transportation, including the rail system that connects San Diego to Los Angeles. The Transit Zoning Code is broken down into nine distinct subzones (refer to Figure ES-2 [Transit Zoning Code Map]). These zones and their objectives are as follows:

Transit Village (TV) Zone—This zone is applied to areas adjacent to and north of the Santa Ana Regional Transportation Center, easterly to Interstate 5. This zone is intended to provide standards for compact transit-supportive mixed-use/residential development. This zone is characterized by a wide range of building intensities including mixed-use tower-on-podium buildings, commercial blocks, liners, stacked flats, and courtyard housing. The zone accommodates retail, restaurant, entertainment, and other pedestrian-oriented uses at street level, with offices and flats above in the mixed-use building types, at

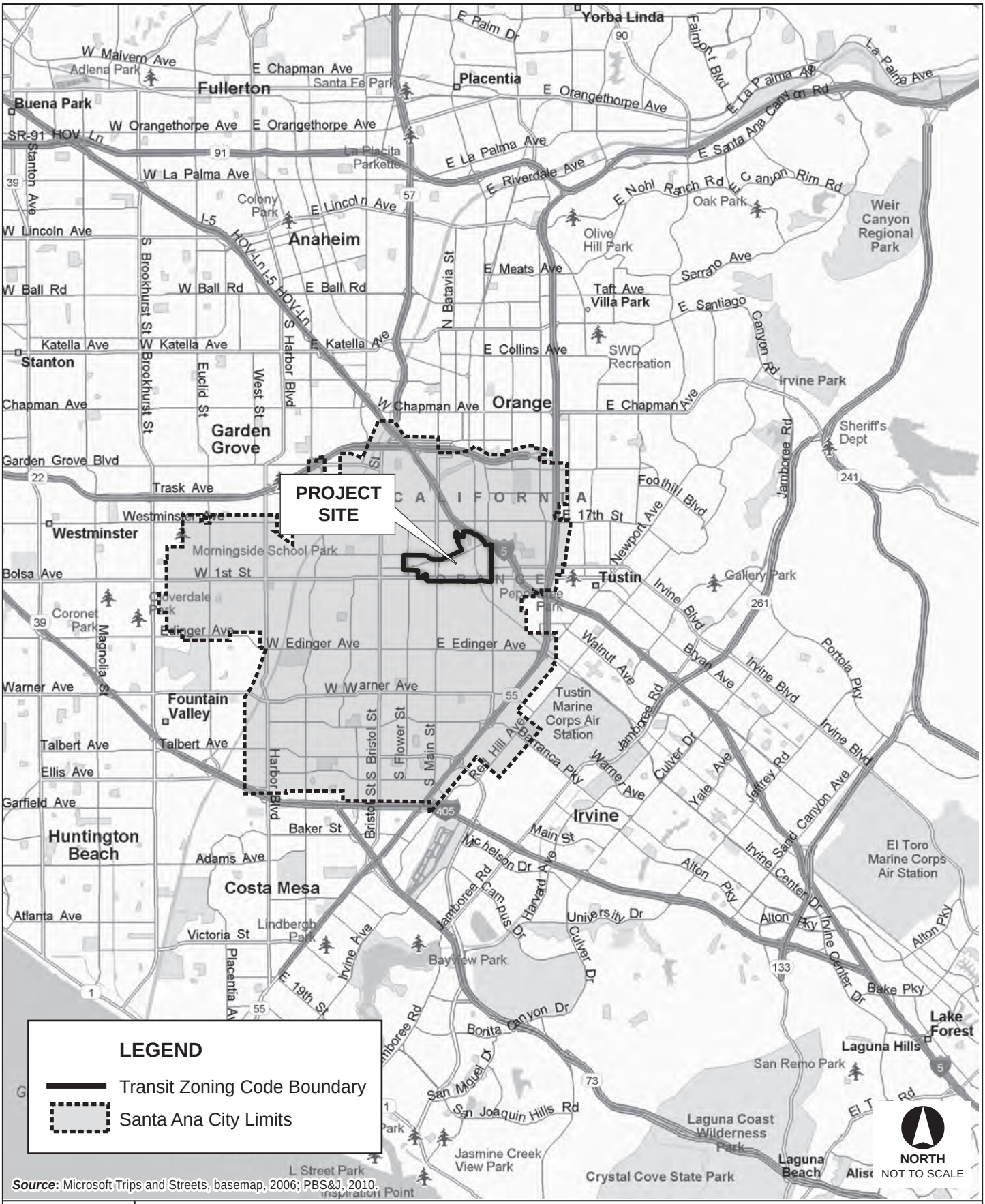
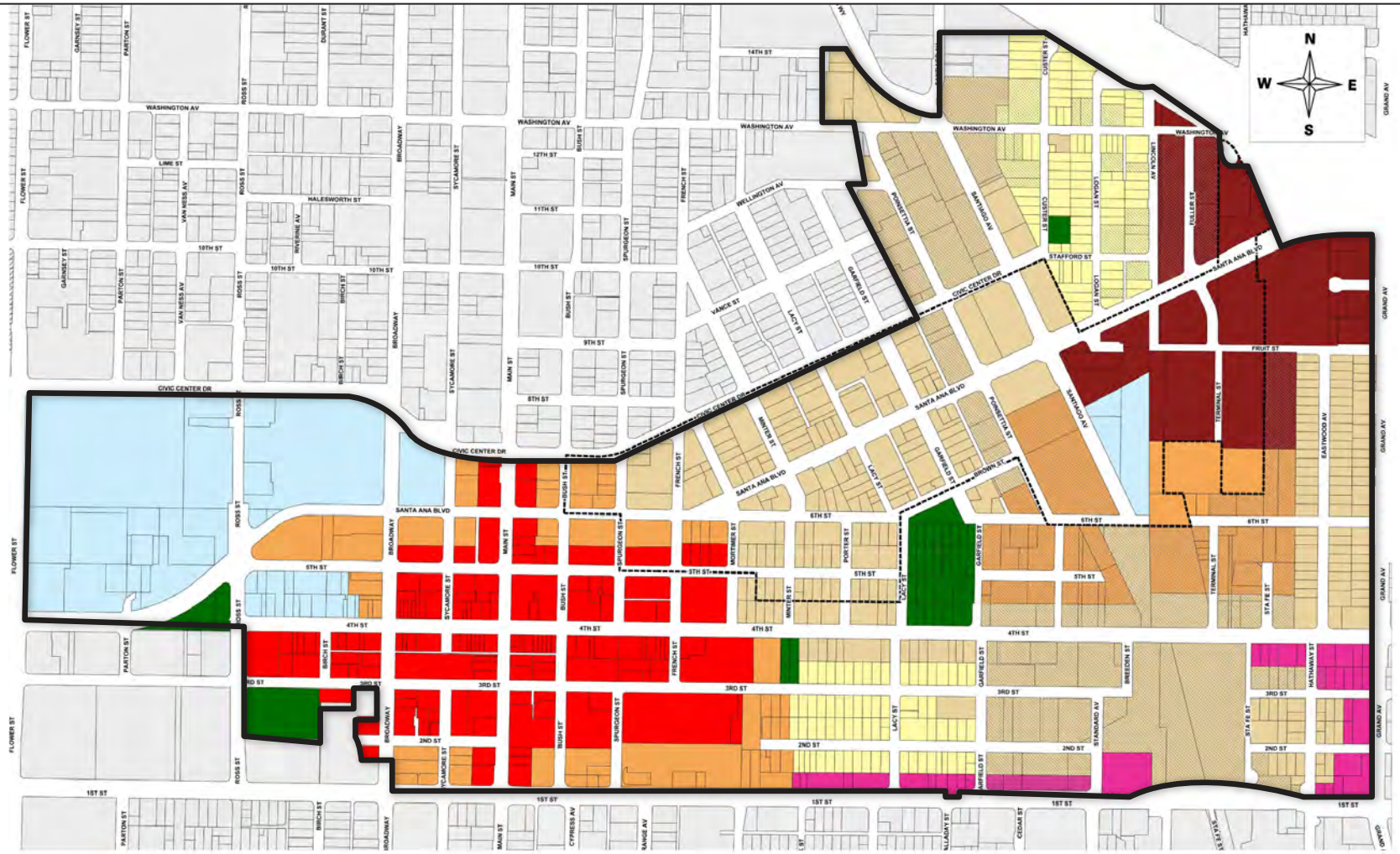


FIGURE **ES-1**

Regional Location Map



NORTH
NOT TO SCALE

***Source*:** City of Santa Ana GIS, January 2010.

FIGURE **ES-2**

Transit Zoning Code (SD 84A and SD 84B) Map

high intensities and densities. The landscape palette is urban with shading and accent street trees in parkway strips along Santa Ana Boulevard, and in sidewalk tree wells where on-street parking is provided. Parking may be accommodated on street, in structures with liner buildings, and underground.

Government Center (GCD) District—This zone is applied to the Civic Center area west of the Downtown. This area accommodates a wide variety of civic uses, including Federal, State and local government offices and services, libraries, museums, community centers, and other civic assembly facilities. Building types vary according to their public purpose, are programmed by the City for their specific, are programmed by various government agencies for their specific sites, and therefore are not coded by the Transit Zoning Code (SD 84A and SD 84B0. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells, and in landscaped public plazas.

Downtown (DT) Zone—This zone is applied to the historical shopping district of Santa Ana; a vital, pedestrian-oriented area that is defined by multi-story urban building types (commercial blocks, live-work, stacked dwellings, and courtyard housing in the Downtown edges) accommodating a mixture of retail, office, light service, and residential uses. The standards of this zone are intended to reinforce the form and character represented by existing pre-World War II buildings and recognized as a National Historic District, through restoration, rehabilitation, and context-sensitive infill development. The standards also facilitate the replacement or improvement of post-war development that eliminated the pedestrian orientation of various downtown blocks (for example: parking structures with no features of pedestrian interest along their entire lengths). The landscape style is urban, emphasizing shading and accent street trees in sidewalk tree wells. Parking is accommodated on street, and may also be in structures with liner buildings, underground, and within block centers in surface lots not visible from streets.

Urban (UC) Zone—This zone is applied to the area surrounding Downtown, which services as a transitional area to the surrounding lower-intensity neighborhoods, and to other areas where mixed-use and multi-unit residential buildings create a pedestrian-oriented urban fabric. The zone provides for a variety of non-residential uses and a mix of housing types at medium intensities and densities. Besides accommodating community-serving businesses, this zone may also serve the daily convenience shopping and service needs of nearby residents. Building types include mixed-use commercial blocks, stacked flats, live-work, rowhouses, and courtyard housing. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells. Parking is accommodated on street and may also be in structures with liner buildings and underground in areas adjacent to the DT zone, and in surface lots away from street frontages.

Corridor (CDR) Zone—This zone is applied to properties fronting existing commercial corridors and provides standards to improve pedestrian orientation in a transit-supportive, mixed-use area. Mixed-use commercial block and live-work building types are at or near the sidewalk, and accommodate street level retail, service, and office, uses with office and residential above. The landscape style is urban, emphasizing shading street trees in sidewalk tree wells. Parking is accommodated on street, and in screened surface lots between buildings, or away from streets, with no more than half of the site frontage occupied by parking.

Urban Neighborhood 2 (UN-2) Zone—This zone is applied to primarily residential areas intended to accommodate a variety of housing types with some opportunities for live-work, neighborhood-serving retail, and dining establishments. Appropriate building types include single dwellings, duplexes, triplexes, and quadplexes, courtyard housing, rowhouses, and live-work. In some areas, the more intense, hybrid building type is allowed where additional intensity is warranted while maintaining compatibility with neighboring properties. The landscape is appropriate to a neighborhood, with shading street trees in parkway strips, and shallow depth landscaped front yards separating buildings from sidewalks. Parking is on street, and in garages located away from street frontages.

Urban Neighborhood 1 (UN-1) Zone—This zone is applied to existing primarily residential areas and is intended to strengthen and stabilize the low intensity nature of these neighborhoods by accommodating housing types at lower densities. Appropriate building types include single dwellings, duplexes, triplexes, and quadplexes, and live-work. The landscape is appropriate to a neighborhood, with shading street trees in parkway strips and landscaped front yards separating buildings from sidewalks. Parking is on street, and in garages located away from street frontages.

Industrial Overlay (IO) Zone—This zone is applied to areas currently zoned Light Industrial (M1) and Heavy Industrial (M2) to allow the types of land use activity and development permitted by M1 and M2 zoning to continue until such time that the owner chooses to apply the new zones identified in the Transit Zoning Map (Figure ES-2). Until the property is rezoned as described above, property in the IO Zone shall be regulated by the existing provisions of the M1 and M2 zones contained within the Santa Ana Municipal Code (SAMC 41, Article III, Divisions 18 and 19), as applicable.

Open Space (OS)—This zone identifies areas reserved for community parks and other open spaces. Allowable structures in this zone are limited to those necessary to support the specific purposes of the particular open space area (e.g., sport-court enclosures and multi-purpose buildings in active parks and trails within passive parks.

1.4 PROJECT DESCRIPTION

The Transit Zoning Code was initially drafted as a component of the larger Santa Ana Renaissance Specific Plan (SARSP). The community process to draft the SARSP included over 100 outreach meetings and interviews held from April 2006 through February 2008. Following the completion of the community outreach process for the SARSP, but prior to the release of the revised draft plan to the public, the City was awarded a major transportation grant to study and design new transit infrastructure that would ultimately be constructed within the SARSP study area. Also during this time, the Santa Ana Redevelopment Agency (Agency) entered into a Predevelopment Agreement for planning and development purposes with The Related Companies of California, LLC and Griffin Realty Corporation, a California Corporation (jointly, the Developer) to redevelop Agency-owned properties generally located in the vicinity of Santa Ana Boulevard. Due to these major changes within the SARSP study area, and in response to community concerns regarding the scope of the SARSP itself, the Specific Plan was tabled. However, the zoning component of the SARSP (the Transit Zoning Code) was pulled out and further refined in order to provide the zoning necessary to support the long-term development of a successful transit program, as well as to provide a development framework for the redevelopment of the Agency

properties. This new document, the Transit Zoning Code, is the subject of this Draft Environmental Impact Report (DEIR).

The Transit Zoning Code provides new zoning for all of the properties contained within its boundary with the exception of those properties zoned M1—Light Industrial or M2—Heavy Industrial. These M1 and M2 properties would retain their existing zoning, but would be covered by an overlay zone that allows for the option of future mixed-use development to be exercised at the discretion of the property owner. The Transit Zoning Code provides for the integration of new infill development into existing neighborhoods, allows for the reuse of existing buildings, supports mixed-use development, provides a transit-supportive, pedestrian-oriented development framework to reduce vehicle trips, reduce greenhouse gas emissions, and support the addition of new transit infrastructure, and provides an economic development stimulus.

Within the boundary of the Transit Zoning Code the Agency owns forty-nine parcels comprising approximately seven noncontiguous acres. The Agency/City is pursuing the potential acquisition of sixteen additional properties within the immediate vicinity of the forty-nine parcels mentioned above for the purposes of completing the assemblage of properties on those blocks in which the Agency already has majority ownership, as well as to secure property to provide for additional open space. The acquisition of these additional properties may lead to demolition and/or relocation of existing structures, as well as the potential relocation of any existing residents.

The Agency and the Developer propose to redevelop these properties. The Developer concept for these properties includes the development of a maximum of 155 rental units (including a potential senior housing project) and a maximum of 65 for-sale units—a total of 220 new residential units. A component of this residential development will be affordable pursuant to the County of Orange's criteria for low-to-moderate income housing. The development proposal also includes the addition of approximately 1.5 acres of new public open space that would include a public park, a public tot lot, and a 10,000 square foot community building. The redevelopment of these properties requires the demolition of fifteen structures, totaling approximately 30,000 square feet of building area, on fifteen Agency-owned properties.

The City of Santa Ana is in the process of preparing the Santa Ana Fixed Guideway Corridor Study in order to apply for future grant funding that would support the construction of a new public transit system. This system would provide for the expansion of transit services originating at the Santa Ana Regional Transportation Center (SARTC) and serving the Lacy Neighborhood, Downtown and Civic Center areas. Future expansion of the system would link to the Pacific Electric Right-of-Way, located on the City's western side, in order to provide service into the City of Garden Grove and beyond. While the zoning standards contained within the Transit Zoning Code would provide a framework for the transit-supportive development necessary to generate adequate ridership for the successful development of the Fixed Guideway System, this EIR will not analyze the proposed Santa Ana Fixed Guideway Corridor Study and its potential alignments have not been completed. The specifics of that plan will be analyzed in a separate EIR as part of the Santa Ana Fixed Guideway Corridor Study.

To accommodate this objective, the City will need to amend the current General Plan to permit these new land uses and amend the Zoning Code to establish development standards that implement the project. These amendments will allow the City to provide a framework for the development of compact, transit-oriented development that contains a mix of residential, commercial, and professional uses in order to address the City's and the region's goals of providing sites for housing in already urbanized locations that are adjacent to transit, thereby reducing vehicle trips, stimulating investment in underutilized land, and improving the jobs/housing balance within the City. This will lead to potential development of approximately 4,075 residential units, 387,000 sf of retail development, and an additional 15.5 acres of open space within the City. Adoption of this project would allow the City to consider subsequent actions consistent with these updates in the General Plan and Land Use designations. Table 3-1 (Summary of Transit Zoning Code [SD84A and SD84B] Development Potential) lists the overall potential net change that would occur as a result of the proposed project area.

The Transit Zoning Code would rezone, or adopt an overlay zone, for the properties contained with the boundaries of the Code area. This new zoning would provide for the integration of new infill development into existing neighborhoods, to allow for the reuse of existing structures, and to provide a transit-supportive, pedestrian-oriented development framework to support the addition of new transit infrastructure.

The Transit Zoning Code area also includes 48 parcels (6.76 mostly non-contiguous acres) currently owned by the Santa Ana Redevelopment Agency (the "Agency"). The Agency has entered into a Predevelopment Agreement for planning and development purposes with The Related Companies of California, LLC, and a California limited liability company, and Griffin Realty Corporation, a California Corporation (jointly, the "Developer") to redevelop these properties and provide for new community open space, as well as to prepare the Station District Master Plan.

The redevelopment of these properties will also include the demolition of structures on 11 Agency-owned properties. The Agency is also pursuing the potential acquisition of a limited number of properties within the immediate vicinity of the 48 parcels mentioned above for the purposes of completing the assemblage of properties on those blocks in which the Agency already has majority ownership, as well as to secure property to provide for additional open space.

The City of Santa Ana is in the process of preparing the Santa Ana Fixed Guideway Corridor Study in order to apply for future grant funding that would support the construction of a new public transit system. This system would provide for the expansion of transit services originating at the SARTC and serving the Downtown and Civic Center areas. Future expansion of the system would link to the Pacific Electric Right-of-Way, located on the City's eastern side, in order to provide service into the City of Garden Grove and beyond. While the zoning standards contained within the Transit Zoning Code would provide a framework for the transit-supportive development necessary to generate adequate ridership for the successful development of the Fixed Guideway System, this EIR will not analyze the proposed Santa Ana Fixed Guideway Corridor Study or its potential alignments. The specifics of that plan will be analyzed in a separate EIR when the Study is completed.

In terms of net development, the Transit Zoning Code would allow for the potential development of approximately 351,000 square feet (sf) of retail development and the addition of new open space within the City. Creation of this Transit Zoning Code area would allow the City to consider subsequent actions consistent with these updates. Table ES-1 (Summary of Transit Zoning Code Potential Net Change) lists the overall potential net change that could occur as a result of any new construction built pursuant to the standards contained within the proposed Transit Zoning Code.

Table ES-1	Summary of Transit Zoning Code Potential Net Change		
Land Use Type	*Potential Gross Development*	*Existing Uses to be Converted*	*Potential Net Development*
Residential (units)	4,272	197	4,075
Retail (sf)	693,00	306,00	387,000
Industrial (sf)	90,000	1,080,000	(990,000)
Commercial (sf)	0	124,000	(124,000)
Civic (sf)	8,000	29,000	(21,000)
Open Space (sf)	680,000	0	680,000
Surface Parking Lot (sf)	67,000	1,839,00	(1,772,000)

1.5 COMMUNITY/AGENCY ISSUES

This EIR addresses issues that are known or were raised by agencies or interested parties during the NOP public review periods with respect to the environmental resources associated with the proposed project. These issues include:

- Traffic circulation and parking
- Availability of open space
- Safety
- Displacement and overcrowding
- Burdening of the public services and infrastructure
- Construction and operational air quality
- Construction-related noise
- Biological resources
- Historic resources

1.6 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires that a public agency adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures that have been incorporated into the project to reduce or avoid significant effects on the environment. The MMRP is designed to ensure compliance during project implementation, as required by Public Resources Code Section 21081.6.

This EIR discusses feasible mitigation measures (MMs) that would be implemented to reduce significant environmental impacts. In addition, existing City programs, practices, and procedures that currently

reduce environmental impacts will be continued throughout the Transit Zoning Code planning horizon. The MMRP for the Transit Zoning Code, which obligates the City to implement MMs, will be prepared and reviewed by the City in conjunction with consideration of the Transit Zoning Code and certification of the Final EIR.

1.7 ALTERNATIVES

In accordance with Section 15126.6 of the CEQA Guidelines, alternatives to the Transit Zoning Code, as proposed, are analyzed. Detailed information is provided in Section 5.0 of this EIR. A total of three alternatives were identified and would feasibly attain the most basic project objectives while avoiding or substantially lessening some of the significant effects of the project were analyzed. An environmentally superior alternative is also identified. These alternatives include the following:

- No Project/Development According to General Plan Alternative
- Higher Commercial Component Alternative
- Reduced (Low-Rise) Project

1.8 CLASSIFICATION OF ENVIRONMENTAL IMPACTS

Potential environmental impacts have been classified in the following categories:

- **Less Than Significant (LTS)**—Results in no substantial adverse change to existing environmental conditions
- **Potentially Significant (PS)**—Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less-than-significant levels by implementation of feasible mitigation measures or by the selection of an environmentally superior project alternative
- **Significant and Unavoidable (SU)**—Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures or by the selection of an environmentally superior project alternative

1.9 ENVIRONMENTAL IMPACTS

Table ES-2 (Summary of Environmental Effects and Mitigation Measures), provided at the end of this section, presents a summary of the environmental impacts resulting from the proposed Specific Plan. It has been organized to correspond with the environmental issues discussed in Chapter 4 (Environmental Setting, Impacts, and Mitigation Measures) and is arranged in four columns: the identified impact under each EIR issue area; the level of significance prior to mitigation; Transit Zoning Code EIR mitigation measures (MM) that would avoid or reduce the level of impacts; and the level of significance after implementation of mitigation measures, if applicable. The City programs, practices, and procedures are considered to be part of the Transit Zoning Code for purposes of determining the level of significance prior to mitigation. Where no mitigation is required, it is noted in the table.

While the City has evaluated a range of potential mitigation measures to reduce significant project impacts, and will implement all feasible mitigation measures, the long-term development potential of the

proposed zone change could result in the following significant and unavoidable impacts. It should be noted that, with the exception of the redevelopment of the forty-eight Agency-owned parcels, there are no specific development projects currently proposed within the Transit Zoning Code area. The following analysis reflects a future build-out scenario assuming that any development that occurred would do so at the most intense standard contained within the Code.

Aesthetics

- Development under the proposed Transit Zoning Code would allow for a variety of building heights from low (one to two stories) to high (up to ten or twenty-five stories in the Downtown and Rail Station District, respectively). Depending on the location of the proposed structures, shadows may be cast on sensitive receptors for extended periods of time (three to four hours) by the proposed high-rise structures.

Air Quality

- With adoption of the Transit Zoning Code (SD 84A and SD 84B, and under a long-term build-out scenario, population growth projections in the City would exceed current Southern California Association of Governments (SCAG) projections, which are used in the South Coast Air Quality Management District's (SCAQMD's) Air Quality Management Plan. Since the AQMP is based on SCAG growth projections, the proposed project would be inconsistent with the 2007 AQMP population growth projections.
- It is reasonably foreseeable that construction emissions for individual projects constructed within the Transit Zoning Code area may exceed the SCAQMD's recommended thresholds of significance and results in short-term air quality impacts. Further, since development under the Specific Plan may occur in multiple locations as part of multiple development projects, the cumulative emissions of those development projects may also exceed SCAQMD's thresholds of significance.
- Primarily due to the increase in residential uses under the Transit Zoning Code , mobile source (vehicular) emissions associated with the additional development would exceed SCAQMD thresholds of significance for four criteria pollutants (VOC, NO_X, CO, and PM_{10}) for which the air basin is in non-attainment.
- In conjunction with other development projects in the vicinity of the Transit Zoning Code, construction and operation of the proposed project would result in a cumulatively considerable net increase of criteria pollutants (VOC, NO_X, CO, and PM_{10}) for which the air basin is in nonattainment.

Cultural Resources

- Adoption of the Transit Zoning Code could result in new development, which, depending on the site chosen for development, may involve the reuse, relocation, or demolition of designated or potentially historic structures, including those identified as potentially eligible to the SARHP by the Historic Resource Survey conducted for the Transit Zoning Code or within identified historic districts. While the City of Santa Ana would implement the applicable General Plan policies and additional mitigation measures provided herein, the policies and mitigation measures afford only limited protection to historic structures and cannot ultimately prevent the demolition of a historic

building or structure. The feasibility of retaining a historic structure/resource is determined on a case-by-case basis, and within the planning horizon of the Transit Zoning Code, it is reasonably foreseeable that development may occur where the retention/preservation of a historic resource/structure may not be feasible.

Noise

- Instantaneous noise levels associated with train horns, which occur periodically throughout a given day and which must be used at at-grade crossings, would exceed the standards of the City of Santa Ana Noise Ordinance at sensitive receptors that could be located in the vicinity of the AT&SF rail line. With the establishment of a Quiet Zone, which the City is currently pursuing as part of a separate action, impacts would be mitigated.
- Should pile-driving be required during development within the Transit Zoning Code, construction activities associated with the proposed project could generate or expose persons or structures located in the vicinity to temporary levels of groundborne vibration in excess of established thresholds. It should be noted that pile-driving is not currently proposed within the Transit Zoning Code area, but it is reasonably foreseeable that pile-driving may occur.

Transportation and Traffic

- Adoption of the Transit Zoning Code could cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. All of the potential impacts attributable to the proposed project are mitigable. However, two mitigations require the approval/cooperation of the California Department of Transportation (Caltrans). Because two of the improvements require a discretionary action of an agency outside of the City's purview, the implementation of the two mitigations cannot be guaranteed. Should the mitigations be implemented in cooperation with Caltrans, the traffic impacts of the Transit Zoning Code would be reduced to less than significant.
- Adoption of the proposed project could result in impacts related to street segment capacity on roadways within and adjacent to the Transit Zoning Code. As described above, because two of the improvements require a discretionary action of an agency outside of the City's jurisdiction, the implementation of the two mitigations cannot be guaranteed. Should the mitigations be implemented in cooperation with Caltrans, the traffic impacts of the Transit Zoning Code would be reduced to less than significant.
- Adoption of the Transit Zoning Code could increase the level of traffic at the I-5 northbound off-ramp at Santa Ana Boulevard to an unacceptable level of service. The potential impact is mitigable but requires a discretionary action by Caltrans, which is outside the purview of the City's jurisdiction. Should the mitigation be implemented in cooperation with Caltrans, the traffic impacts of the Transit Zoning Code would be reduced to less than significant.

All other physical, project-specific environmental impacts (project-specific and cumulative) are either less than significant or can be mitigated to a less-than-significant level. Cumulative impacts are discussed within each respective section of the EIR.

Table ES-2 Summary of Environmental Effects and Mitigation Measures

Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Aesthetics			
Impact 4.1-1 The potential mix of development/redevelopment projects that combine residential and non-residential uses within the Transit Zoning Code (SD 84A and SD 84B) area would not cause an obstruction of significant public views or vistas.	LTS	No mitigation is required.	LTS
Impact 4.1-2 Long-term cumulative development within the project area, along with associated infrastructure improvements would alter the existing visual character or quality of the Transit Zoning Code (SD 84A and SD 84B) area.	LTS	No mitigation is required.	LTS
Impact 4.1-3 Long-term cumulative development occurring pursuant to the Transit Zoning Code, and associated infrastructure improvements could result in new sources of increased daytime glare.	PS	**MM4.1-1** Proposed new structures shall be designed to maximize the use of textured or other non-reflective exterior surfaces and non-reflective glass. Building materials shall be reviewed by the City of Santa Ana prior to issuance of building permits for each project.	LTS
Impact 4.1-4 Long-term cumulative development occurring pursuant to the Transit Zoning Code would result in new sources of spillover light.	PS	**MM4.1-2** All exterior lighting and advertising (including signage) shall be directed onto the specific location intended for illumination (e.g., parking lots, driveways, and walkways) and shielded away from adjacent properties and public rights-of-way to minimize light spillover onto adjacent areas. **MM4.1-3** Prior to issuance of a building permit for a specific development project, the applicant shall submit a lighting plan to the City for review and approval. The plan shall specify the lighting type and placement to ensure that the effects of security and other outdoor lighting are minimized on adjacent uses and do not create spillover effects. The plan shall specifically incorporate the following design features: ■ All projects shall incorporate project design features to shield light and/or glare from vehicles entering or exiting parking lots and structures that face sensitive uses (e.g., schools, hospitals, senior housing, or other residential properties) by providing barriers so that light from vehicle headlights would not illuminate off-site sensitive uses. ■ All projects shall incorporate project design features to provide landscaping, physical barriers, screening, or other buffers to minimize project-generated illumination from entering off-site areas and to prevent glare or interference with vehicular traffic, in accordance with the City's Municipal Code.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures

Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.1-5 Long-term cumulative development occurring pursuant to the Transit Zoning Code (SD 84A and SD 84B) could result in a substantial increase in shade/shadows over sensitive uses.	PS	**MM4.1-4** For any proposed structure that would exceed four stories in height, applicants shall submit a site-specific shade/shadow report with renderings representing the level of shade/shadows associated with the proposed development at the following times: 9:00 A.M., 12:00 P.M., 3:00 P.M. PST for the both the winter and summer solstices. An additional rendering for the 5:00 P.M. PST time period shall be prepared for the summer solstice period. Typically, a variety of criteria are used to determine the significance of a shadow impact, including the following: ■ Affected land use (criticality of direct sunlight for the use) ■ Duration (hours per day in shadow) ■ Time of day (critical time period for direct sunlight) ■ Season (time of year use would be shadowed) ■ Extent (percentage of use that would be shadowed) ■ Preexisting condition (shadow condition due to existing buildings, landscaping, or other features) ■ Type (solid or dappled shadow) The report shall include any feasible design considerations that would reduce the extent of shadows cast by a proposed structure. The analysis and the project design plans shall be forwarded to the Planning and Building Agency for review and approval.	SU
Air Quality			
Impact 4.2-1 Construction and operation of the proposed project would not create objectionable odors affecting a substantial number of people.	LTS	**MM4.2-1** Trash receptacles within the Transit Zoning Code (SD 84A and SD 84B) will be required to have lids that enable convenient collection and loading and will be emptied on a regular basis, in compliance with City of Santa Ana regulations for the collection of solid waste.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.2-2 Construction of the proposed project would not raise local ambient pollutant concentrations above the significance thresholds with the incorporation of mitigation measures MM4.2-2 through MM4.2-6.	LTS	**MM4.2-2** The construction contractor should ensure that no more than 5 acres per day are actively graded or developed. **MM4.2-3** The construction contractor should ensure that all active disturbed surfaces should be watered three times per day throughout the construction period. **MM4.2-4** The construction contractor should ensure that the mass grading, fine grading, and structure construction are conducted at separate time periods and do not overlap with one another. **MM4.2-5** The construction contractor should ensure that all haul roads are watered three (3) times per day. **MM4.2-6** The construction contractor should ensure that all traffic on unpaved roads is reduced to 15 mph or less.	LTS
Impact 4.2-3 Operation of the proposed project would increase local traffic volumes, but would not expose sensitive receptors to substantial localized carbon monoxide (CO) concentrations.	LTS	No mitigation is required.	LTS
Impact 4.2-4 Long-term cumulative development pursuant to the adoption of the Transit Zoning Code would not conflict with or obstruct implementation of the Air Quality Management Plan.	LTS	No mitigation is required.	SU
Impact 4.2-5 Construction activities associated with the construction of individual projects within the Transit Zoning Code area, including the Developer project, could contribute substantially to an existing or projected air quality violation for criteria air pollutants.	PS	**MM4.2-7** Project applicants shall require by contract specifications that all diesel-powered equipment used will be retrofitted with after-treatment products (e.g., engine catalysts) to the extent that they are readily available in the South Coast Air Basin. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Santa Ana prior to issuance of a grading permit. **MM4.2-8** Project applicants shall require by contract specifications that all heavy-duty diesel-powered equipment operating and refueling at the project site use low-NO_X diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of California Air Resources Board diesel) in the South Coast Air Basin (this does not apply to diesel-powered trucks traveling to and from the project site). Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Santa Ana prior to issuance of a grading permit. **MM4.2-9** Project applicants shall require by contract specifications that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) be utilized to the extent that the equipment is readily available and cost effective in the South Coast Air Basin. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of	SU

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		Santa Ana prior to issuance of a grading permit. **MM4.2-10** Project applicants shall require by contract specifications that construction equipment engines be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Santa Ana prior to issuance of a grading permit. **MM4.2-11** Project applicants shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent feasible. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Santa Ana prior to issuance of a grading permit. **MM4.2-12** As required by South Coast Air Quality Management District Rule 403—Fugitive Dust, all construction activities that are capable of generating fugitive dust are required to implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. These measures include the following: ■ Application of soil stabilizers to inactive construction areas ■ Quick replacement of ground cover in disturbed areas ■ Watering of exposed surfaces three times daily ■ Watering of all unpaved haul roads three times daily ■ Covering all stock piles with tarp ■ Reduction of vehicle speed on unpaved roads ■ Post signs on-site limiting traffic to 15 miles per hour or less ■ Sweep streets adjacent to the project site at the end of the day if visible soil material is carried over to adjacent roads ■ Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials prior to leaving the site to prevent dust from impacting the surrounding areas ■ Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site each trip **MM4.2-13** The developer shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use	

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		for more than 30 minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds shall be turned off when not in use for more than 5 minutes. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Santa Ana. **MM4.2-14** The developer shall require by contract specifications that construction parking be configured to minimize traffic interference during the construction period and, therefore, reduce idling of traffic. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Santa Ana. **MM4.2-15** The developer shall require by contract specifications that temporary traffic controls are provided, such as a flag person, during all phases of construction to maintain smooth traffic flow. Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Santa Ana. **MM4.2-16** The developer shall require by contract specifications that construction activities that affect traffic flow on the arterial system by scheduled to off-peak hours (9:00 A.M. to 3:00 P.M.). Contract specifications shall be included in the proposed project construction documents, which shall be approved by the City of Santa Ana. **MM4.2-17** Upon issuance of building or grading permits, whichever is issued earliest, notification shall be mailed to owners and occupants of all developed land uses within ¼ mile of any project within the Transit Zoning Code (SD 84A and SD 84B) boundaries greater than four stories in height or 25,000 sf in area providing a schedule for major construction activities that will occur through the duration of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available on site to monitor construction activities. The construction manager shall be responsible for complying with all project requirements related to PM_{10} generation. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contract information for the community liaison and construction manager will be located at the construction office, City Hall, the police department, and a sign on site. **MM4.2-18** The developer shall require by contract specifications that the architectural coating (paint and primer) products used would have a VOC rating of 125 grams per liter or less. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed and approved by the City of Santa Ana. **MM4.2-19** The developer shall require by contract specifications that materials that do not require painting be used during construction to the extent feasible. Contract specifications shall be included in the proposed	

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		project construction documents, which shall be reviewed and approved by the City of Santa Ana. **MM4.2-20** The developer shall require by contract specifications that pre-painted construction materials be used to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed and approved by the City of Santa Ana.	
Impact 4.2-6 Operation of the proposed project would exceed South Coast Air Quality Management District standards for VOC, NO_X, CO, and PM_{10} and would result in a projected air quality violation.	PS	**MM4.2-21** As individual components of the Transit Zoning Code (SD 84A and SD 84B) are implemented, an air quality impact analyses will be completed to determine their independent significance levels. Mitigation is to be incorporated at the individual component level to bring the individual components to less than significant on a site-by-site basis. **MM4.2-22** Prior to issuance of a building permit, the applicant shall demonstrate that the design of the proposed buildings or structures exceeds current Title 24 requirements (Title 24, Part 6 of the California Code of Regulations; The Energy Commission adopted the 2008 Standards on April 23, 2008, and the Building Standards Commission approved them for publication on September 11, 2008. The 2008 Residential Compliance Manual was adopted by the Commission on December 17, 2008, and the 2008 Non-residential Compliance Manual was adopted January 14, 2009.Energy Efficiency Standards for Residential and Non Residential Buildings, as amended November 1, 2005; Cool Roof Coatings performance standards as amended September 11, 2006) by a minimum of 20 percent, subject to review by the County Building Official. Documentation of compliance with this measure shall be provided to the Planning Department and Building Official for review and approval prior to issuance of the permit. Installation of the identified design features or equipment will be confirmed by the County Building Official prior to certificate of occupancy. Any combination of the following design features may be used to fulfill this mitigation provided that the total increase in efficiency meets or exceeds 20 percent: ■ Increase in insulation such that heat transfer and thermal bridging is minimized ■ Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption ■ Incorporate dual-paned or other energy efficient windows ■ Incorporate energy efficient space heating and cooling equipment ■ Incorporate energy efficient light fixtures ■ Incorporate energy efficient appliances ■ Incorporate energy efficient domestic hot water systems ■ Incorporate solar panels into the electrical system	SU

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		■ Incorporate cool roofs/light-colored roofing ■ Or other measures that will increase the energy efficiency of building envelope in a manner that when combined with the other options listed above exceeds current Title 24 Standards (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings, as amended November 1, 2005; Cool Roof Coatings performance standards as amended September 11, 2006) by a minimum of 20 percent **MM4.2-23** Prior to issuance of a building permit, the applicant shall provide a landscape plan for the Project that includes shade trees around main buildings, particularly along southern elevations where practical, and will not interfere with loading dock locations or other operational constraints. Documentation of compliance with this measure shall be provided to the City Building Official for review and approval. **MM4.2-24** Prior to issuance of a building permit, the applicant shall demonstrate that the proposed building or structure designs incorporate exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas. Documentation of compliance with this measure shall be provided to the City Building Official for review and approval. Installation of the identified design features or equipment will be confirmed by the City Building Official prior to issuance of certificate of occupancy. **MM4.2-25** The applicant shall provide education and publicity about reducing waste and available recycling services to future tenants. The education and publicity materials shall be provided to the City for review and approval by the Planning Department. **MM4.2-26** All showerheads, lavatory faucets, and sink faucets within the residential units shall comply with the California Energy Conservation flow rate standards. **MM4.2-27** Low-flush toilets shall be installed within all commercial and residential (including Congregate Care) units as specified in California State Health and Safety Code Section 17921.3. **MM4.2-28** All commercial/industrial/common area irrigation areas shall be capable of being operated by a computerized irrigation system which includes an onsite weather station/ET gage capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain, and wind. In addition, the computerized irrigation system shall be equipped with flow-sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failure due to mainline breaks, and eliminating over-watering and flooding due to pipe and/or head breaks. **MM4.2-29** Landscape designers shall ensure that Project landscaping of commercial/industrial/common areas uses drought-tolerant and smog-tolerant trees, shrubs, and groundcover to ensure long-term viability	

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		and conserve water and energy. **MM4.2-30** Landscape designers shall ensure that the landscape plan includes drought resistant trees, shrubs, and groundcover within the parking lot and perimeter. **MM4.2-31** Project designers shall ensure that design features incorporate light-colored roofing materials that will deflect heat away from the building and conserve energy. **MM4.2-32** The Project designers shall ensure that designs include all illumination elements to have controls to allow selective use as an energy conservation measure. **MM4.2-33** Prior to issuance of a building permit, the applicant shall demonstrate that measures have been included to promote ride sharing programs such as, but not necessarily including, publishing ride sharing information for all of the tenants, designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a website or message board for coordinating rides. Documentation of compliance with this measure shall be provided to the City Building Official for review and approval. Installation of the identified design features or equipment will be confirmed by the City Building Official prior to issuance of certificate of occupancy. **MM4.2-34** Prior to issuance of a building permit, the applicant shall demonstrate that measures have been included to provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Documentation of compliance with this measure shall be provided to the City Building Official for review and approval. Installation of the identified design features or equipment will be confirmed by the City Building Official prior to issuance of certificate of occupancy. **MM4.2-35** Prior to issuance of any certificate of occupancy, the applicant shall demonstrate that all interior building lighting supports the use of compact fluorescent light bulbs or equivalently efficient lighting to the satisfaction of the City Building Official. **MM4.2-36** Tenants shall be responsible to ensure that preferential parking spaces are allocated to ultra-low emission vehicles and alternative fueled vehicles to encourage the use of alternative fuels and ultra-low emission vehicles.	
Impact 4.2-7 Construction and operation of the proposed project could result in a cumulatively considerable net increase of criteria pollutants for which the proposed project region is in nonattainment under an applicable federal or state ambient air quality standard.	PS	**MM4.2-2 through MM4.2-39** would also apply to this impact.	SU

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Biological Resources			
Impact 4.3-1 Long-term cumulative development occurring pursuant to the Transit Zoning Code would not result in a potential reduction in nesting opportunities for resident and migratory avian species of special concern.	PS	**MM4.3-1** To ensure that avian species of concern, protected migratory species (e.g., MBTA), or raptors species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures: 1. Tree removal shall be restricted to the period between August 30 and February 15, to the extent feasible, to avoid the breeding season of any migratory species that could be using the area, and to discourage nesting in the vicinity of an upcoming construction area. If it is not feasible to remove trees outside this window then, prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees within 250 feet of any grading or earthmoving activity shall be surveyed for active nests by a qualified biologist no more than 30 days prior to disturbance. If active nests are found, and the site is within 250 feet of potential construction activity, a temporary fence shall be erected, where appropriate, around the tree(s) at a distance of up to 250 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined in consultation with the City of Santa Ana Park Naturalist or a designee. 2. No construction vehicles shall be permitted within restricted areas (i.e., protection zones), unless directly related to the management or protection of the legally protected species. 3. If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.	LTS
Cultural Resources			
Impact 4.4-1 Long-term cumulative development occurring pursuant to the Transit Zoning Code could cause a substantial adverse change in the significance of an archaeological resource or disturb human remains.	PS	**MM4.4-1(a)** Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine if the project could result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or disturb human remains. The investigation shall include, as determined appropriate by the archaeologist and the City of Santa Ana, an updated records search of the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS), updated Native American consultation, and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any archaeological resources within the development area and includes recommendations and methods for eliminating or avoiding impacts on archaeological resources or human remains. The measures shall include, as appropriate, subsurface testing of archaeological resources and/or construction monitoring by a qualified	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		professional and, if necessary, appropriate Native American monitors identified by the applicable tribe (e.g., the Gabrieliño Tongva Nation) and/or the Native American Heritage Commission. The methods shall also include procedures for the unanticipated discovery of human remains, which shall be in accordance with Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. The technical report or memorandum shall be submitted to the City of Santa Ana for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or avoiding impacts on archaeological resources identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain an archaeologist shall demonstrate non-disturbance to the City through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM4.4-2(b). **MM4.4-1(b)** If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities (including projects that would not encounter undisturbed soils), all earth-disturbing activity within 100 feet of the find shall be halted and the City of Santa Ana shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the SCCIC.	
Impact 4.4-2 Long-term cumulative development occurring pursuant to the Transit Zoning Code has the potential to directly or indirectly destroy a unique paleontological resource or unique geologic feature.	PS	**MM4.4-2(a)** Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project applicant shall retain a professional paleontologist to determine if the project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The investigation shall include, as determined appropriate by the paleontologist and the City of Santa Ana, a paleontology records check and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies the paleontological sensitivity of the development area and includes recommendations and methods for eliminating or avoiding impacts on paleontological resources or unique geologic features. The technical report or memorandum shall be submitted to the City for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or avoiding impacts on paleontological	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		resources or unique geologic features identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain a paleontologist shall demonstrate non-disturbance to the City through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM4.4-3(b). **MM4.4-2(b)** Should paleontological resources (i.e., fossil remains) be identified at a particular site during project construction, the construction foreman shall cease construction within 100 feet of the find until a qualified professional can provide an evaluation. Mitigation of resource impacts shall be implemented and funded by the project applicant and shall be conducted as follows: 1. Identify and evaluate paleontological resources by intense field survey where impacts are considered high 2. Assess effects on identified sites 3. Consult with the institutional/academic paleontologists conducting research investigations within the geological formations that are slated to be impacted 4. Obtain comments from the researchers 5. Comply with researchers' recommendations to address any significant adverse effects where determined by the City to be feasible In considering any suggested mitigation proposed by the consulting paleontologist, the City of Santa Ana staff shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, applicable policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.	

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.4-3 The adoption of the Transit Zoning Code (SD 84A and SD 84B) could result in substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.	PS	**MM4.4-3** Prior to development activities that would demolish or otherwise physically affect buildings or structures 50 years old or older or affect their historic setting, the project applicant shall retain a cultural resource professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to determine if the project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. The investigation shall include, as determined appropriate by the cultural resource professional and the City of Santa Ana, the appropriate archival research, including, if necessary, an updated records search of the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) and a pedestrian survey of the proposed development area to determine if any significant historic-period resources would be adversely affected by the proposed development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any historical resources within the development area and includes recommendations and methods for eliminating or reducing impacts on historical resources. The technical report or memorandum shall be submitted to the City Santa Ana for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or reducing impacts on historical resources identified in the technical report or memorandum. Such methods could include, but not be limited to, written and photographic recordation of the resource in accordance with the level of Historic American Building Survey (HABS) documentation that is appropriate to the significance (local, state, national) of the resource.	SU
Hazards and Hazardous Materials			
Impact 4.5-1 Long-term cumulative development occurring pursuant to the Transit Zoning Code could involve the transportation, use, storage, and/or disposal of hazardous materials, such as diesel exhaust.	LTS	No mitigation is required.	LTS
Impact 4.5-2 Construction activities associated with implementation of the proposed Transit Zoning Code (SD 84A and SD 84B) could result in the release of hazardous materials to the environment through reasonably foreseeable upset and accident conditions.	PS	**MM4.5-1** When sites that are listed in the EDR Report initiate project development, the project applicant shall prepare a Phase I ESA for the proposed site. The Phase I ESA shall be prepared in accordance with ASTM E-1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (November 1, 2006). The purpose of a Phase I ESA is to identify environmental conditions at a proposed project site that may suggest environmental contamination. The Phase I ESA report shall be prepared by a CA EPA Registered Environmental Assessor or similarly qualified individual prior to initiating any construction activities at the site. If recommended in the Phase I ESA, the project sponsor shall undertake (or require the responsible party to	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		undertake) a Phase II ESA soil sampling plan; or if any environmental contamination is identified by the Phase I ESA, the project sponsor shall implement (or require the responsible party to implement) the recommendations of the report to further investigate and to remove any soil contamination. **MM4.5-2** In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction in the Transit Zoning Code (SD 84A and SD 84B) area, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., Santa Ana Fire Department). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area. **MM4.5-3** Prior to the demolition of structures that were constructed before 1980, a thorough investigation shall be completed to determine if asbestos, lead, or PCBs exist on the site. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards.	
Impact 4.5-3 Construction activities associated with the implementation of the Transit Zoning Code could result in the handling of hazardous materials, substances, or waste within one-quarter mile of an existing school.	PS	**MM4.5-1** and **MM4.5-2** would apply to this impact.	LTS
Impact 4.5-4 The Transit Zoning Code (SD 84A and SD 84B) includes sites which are included on a list of hazardous materials sites and as a result, could create a significant hazard to the public or environment.	PS	**MM4.5-1** and **MM4.5-2** would apply to this impact.	LTS
Impact 4.5-5 Construction activities associated with the implementation of the Transit Zoning Code could result in a safety hazard for people residing or working in the project area.	PS	**MM4.5-4** For development of structures that exceed 200 feet in height above ground level at a development site, applicants shall file a Notice of Proposed Construction or Alteration with the FAA (FAA Form 7460-1). Following the FAA's nautical evaluation of the project, projects must comply with conditions of approval imposed or recommended by the FAA. Subsequent to the FAA findings, the project shall be reviewed by the ALUC for consistency analysis.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.5-6 The Transit Zoning Code could impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan resulting in a significant impact.	PS	**MM4.5-5** Prior to initiation of construction activities, any development within the Transit Zoning Code (SD 84A and SD 84B) Area shall have a completed traffic control plan, prepared by the project proponent that will be implemented during construction activities. This may include, but is not limited to, the maintenance of at least one unobstructed lane in both directions on surrounding roadways. At any time if only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the developer shall provide appropriate signage indicating alternative routes. **MM4.5-6** The City Public Works Department shall consult with the Santa Ana Police Department and the Santa Ana Fire Department to disclose temporary closures and alternative travel routes in order to ensure adequate access for emergency vehicles when construction of future projects would result in temporary land or roadway closures. **MM4.5-7** The Santa Ana Fire Department, in consultation with other applicable City Departments (e.g., Police), shall update their Emergency Preparedness Plan prior to occupancy of the first project developed under the Renaissance Transit Zoning Code (SD 84A and SD 84B), to address the potential for the accidental release of hazardous materials that may be used, stored, and/or transported in association with operation of project implementation. **MM4.5-8** Project applicants shall submit evacuation plans on a project by project basis that shall be reviewed and approved by the City Police and Fire Departments.	LTS
Hydrology and Water Quality			
Impact 4.6-1 Implementation of the Transit Zoning Code would not violate water quality standards, waste discharge, or otherwise substantially degrade water quality.	PS	**MM4.6-1** In order to comply with the current version of the DAMP, future development projects in the Transit Zoning Code (SD 84A and SD 84B) area shall prepare Storm Drain Plans, Stormwater Pollution Prevention Plans (SWPPP), and Water Quality Management Plans (WQMP) conforming to the current National Pollutant Discharge Elimination System (NPDES) requirements, prepared by a Licensed Civil Engineer or Environmental Engineer, shall be submitted to the Public Works Agency for review and approval. a. A SWPPP shall be prepared and updated as needed during the course of construction to satisfy the requirements of each phase of the development. The plan shall incorporate all necessary Best Management Practices (BMPs) and other City requirements to eliminate polluted runoff until all construction work for the project is completed. The SWPPP shall include treatment and disposal of all dewatering operation flows, and for nuisance flows during construction. The SWPPP may include, but would not necessarily be limited to, the following applicable measures: ■ Minimum required pavement widths for residential streets needed to comply with all zoning and	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		applicable ordinances ■ Use permeable materials for private sidewalks, driveways, parking lots, or interior roadway surfaces ■ Reduce the overall imperviousness associated with parking lots by using pervious materials in spillover parking areas ■ Direct rooftop runoff to pervious areas and avoid routing rooftop runoff to the roadway or the stormwater conveyance system ■ Biofilters including vegetated swales and strips ■ Extended/dry detention basins ■ Infiltration basin ■ Infiltration trenches or vaults ■ Catch basin inserts ■ Continuous flow deflection/separation systems ■ Storm drain inserts ■ Media filtration ■ Foundation planting ■ Catch basin screens ■ Normal flow storage/separation systems ■ Clarifiers ■ Filtration systems ■ Primary waste water treatment systems ■ Dry Wells ■ Cistern b. A WQMP shall be prepared, maintained, and updated as needed to satisfy the requirements of the adopted NPDES program. The plan shall incorporate water quality measures for all improved phases of the project.	

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Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.6-2 Long-term cumulative development occurring pursuant to the Transit Zoning Code (SD 84A and SD 84B) would not interfere substantially with groundwater recharge.	LTS	No mitigation required.	LTS
Impact 4.6-3 Development under the Transit Zoning Code (SD 84A and SD 84B) could alter the existing drainage pattern of the area and potentially result in erosion and siltation.	PS	**MM4.6-1** would apply to this impact.	LTS
Impact 4.6-4 Future development in the Transit Zoning Code (SD 84A and SD 84B) could alter the existing drainage pattern and potentially result in increased downstream flooding through the addition of impervious surfaces, or exceeding the capacity of existing or planned stormwater drainage systems.	PS	**MM4.6-1** would apply to this impact. **MM4.6-2** Prior to issuance of grading permits for future development projects in the Transit Zoning Code (SD 84A and SD 84B) area, applicants shall submit site-specific Hydrology and Hydraulic Studies to the Public Works Department for review and approval. If existing facilities are not adequate to handle runoff that may be generated by the proposed development, then the applicant shall propose feasible remedies to assure that adequate drainage facilities will be available prior to issuance of occupancy permits. The applicant may propose storm drain improvements to be constructed in order to meet project needs. If necessary storm drain upgrades cannot be implemented prior to issuance of occupancy permits, on site detention facilities or other methods acceptable to the City shall be included with new development projects to ensure that post-construction runoff does not exceed pre-development quantities. **MM4.6-3** During the design of individual projects, applicants shall minimize impervious area by incorporating landscaped areas over substantial portions of a proposed project area. Furthermore, impervious areas shall be directly connected to landscaped areas or bioretention facilities to promote filtration and infiltration of stormwater. **MM4.6-4** During the design of individual projects, applicants shall control structural source through storm drain stenciling and signage, coverage of trash area to minimize direct precipitation, efficient irrigation to minimize runoff into stormwater conveyance system, slope and channel protection to decrease potentials for erosions of slopes, and use of deep-rooted, drought tolerant plant species for erosion control.	LTS
Land Use and Planning			
Impact 4.7-1 The Transit Zoning Code (SD 84A and SD 84B) would not result in conflicts of use.	LTS	No mitigation is required.	LTS
Impact 4.7-2 The proposed Transit Zoning Code (SD 84A and SD 84B) would not physically divide an established community.	LTS	No mitigation is required.	LTS

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Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.7-3 The proposed Transit Zoning Code (SD 84A and SD 84B) would conflict with the Santa Ana General Plan by adopting standards and land uses not currently allowed within the proposed Transit Zoning Code (SD 84A and SD 84B) area; however, as part of the proposed project, the General Plan would be amended to incorporate the proposed land uses and development standards.	LTS	No mitigation is required.	LTS
Noise			
Impact 4.8-1 Construction activities associated with the proposed project would generate noise levels that exceed the noise standards established by the City of Santa Ana Municipal Code.	PS	**MM4.8-1** All construction activity within the City shall be conducted in accordance with Section 18-314(e) of the City of Santa Ana Municipal Code. **MM4.8-2** Each project applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels: ■ Two weeks prior to the commencement of construction, notification must be provided to property owners within 300 feet of a project site disclosing the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period ■ Ensure that construction equipment is properly muffled according to industry standards and be in good working condition ■ Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible ■ Schedule high noise-producing activities between the hours of 8:00 A.M. and 5:00 P.M. to minimize disruption on sensitive uses ■ Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources ■ Use electric air compressors and similar power tools rather than diesel equipment, where feasible ■ Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes ■ Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. **MM4.8-3** Each project applicant shall require by contract specifications that construction staging areas along with the operation of earthmoving equipment within the project area would be located as far away from vibration and noise sensitive sites as possible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. **MM4.8-4** Each project applicant shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.	
Impact 4.8-2 Operation of the proposed project could expose noise-sensitive land uses to noise levels that exceed the standards established by the City of Santa Ana General Plan.	PS	**MM4.8-5** When residential uses would be located in areas with noise levels in excess of 60 dBA CNEL (either through conversion of use/structure or new construction), the project applicant shall provide noise barriers around private open space areas, including patios and balconies, as necessary. The height and density of the barriers shall be sufficient to reduce the exterior noise levels within private open space areas to a CNEL of 65 dBA or less. **MM4.8-6** Prior to issuance of building permits, building plans shall specify the STC rating of windows and doors for all residential land uses. Window and door ratings shall be sufficient to reduce the interior noise level to a CNEL of 45 dBA or less, and shall be determined by a qualified acoustical consultant as part of the final engineering design of the project. **MM4.8-7** Each project applicant shall provide proper shielding for all new HVAC systems used by the proposed residential and mixed use buildings to achieve an attenuation of 15 dBA at 50 feet from the equipment.	LTS
Impact 4.8-3 Operation of the proposed project would not generate and expose sensitive receptors on site or off site to excessive groundborne vibration or groundborne noise levels.	LTS	No mitigation is required.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.8-4 Operation of the Southern California Regional Rail Authority's rail line would not generate and expose sensitive receptors located within the Transit Zoning Code (SD 84A and SD 84B) area to excessive groundborne vibration or groundborne noise levels.	LTS	No mitigation is required.	LTS
Impact 4.8-5 Construction activities associated with the proposed project would result in a substantial temporary or periodic increase in ambient noise levels. However, the project's construction noise impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the exemption for construction noise that exists in the Municipal Code.	LTS	No mitigation is required.	LTS
Impact 4.8-6 Operation of the proposed project would not result in temporary or periodic increases in ambient noise levels. There would not be a substantial temporary or periodic increase.	LTS	No mitigation is required	LTS
Impact 4.8-7 Operation of the proposed project would not generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in the project vicinity.	LTS	No mitigation is required.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.8-8 Operation of the Southern California Regional Rail Authority's (SCRRA) rail line would potentially expose noise-sensitive land uses located within the Transit Zoning Code (SD 84A and SD 84B) area to noise levels that exceed the standards established by the City of Santa Ana General Plan.	SU	**MM4.8-8** The City shall provide a written statement to each applicant for projects located within 400 feet of the SCRRA tracks that shall be provided for each residential unit and resident, notifying them of potential noise and vibration issues associated with the railroad tracks, including the following: **Notice of Disclosure** Each owner's [or renter's] interest is subject to the fact that trains operate at different times of the day and night on the railway tracks immediately adjacent to a project site; and that by accepting the conveyance of an interest [or lease agreement] in that project, owner [or renter] accepts all impacts generated by the trains. **Posting of Notice of Disclosure in each residential unit** Prior to offering the first residential unit for purchase, lease, or rent, the property owner or developer shall post a copy of the Notice of Disclosure in every unit in a conspicuous location. Also, a copy of the Notice of Disclosure shall be included in all materials distributed for the Project, including but not limited to: the prospectus, informational literature, and residential lease and rental agreements.	SU
Impact 4.8-9 Construction activities associated with the proposed project could generate or expose persons or structures to excessive groundborne vibration.	PS	**MM4.8-1 through MM4.8-4** would apply to this impact.	SU
Population and Housing			
Impact 4.9-1 Implementation of the proposed project would accommodate projected population and housing growth.	LTS	No mitigation is required.	LTS
Impact 4.9-2 Construction of development projects pursuant to the Transit Zoning Code (SD 84A and SD 84B) could displace existing people or housing. However, this displacement would not necessitate the construction of additional replacement housing elsewhere.	LTS	No mitigation is required.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Public Services			
Impact 4.10-1 Construction of new projects pursuant to the Transit Zoning Code (SD 84A and SD 84B) would increase the demand for fire protection services, but it would not require the construction of new or physically altered facilities to accommodate the increased demand or maintain acceptable response times.	PS	**MM4.10-1** Prior to an issuance of a building permit, individual projects in the Transit Zoning Code (SD 84A and SD 84B) area shall perform a water supply, fire flow test and fire protection system design analysis to ensure that proposed projects are in accordance to meet standard fire protection design requirements.	LTS
Impact 4.10-2 Operation of the proposed project would increase the demand for police services, thereby requiring additional staffing, although it would not require the construction of new or physically altered facilities or personnel to accommodate the increased demand.	PS	**MM4.10-2** Any development that would exceed two stories in height shall submit site-specific security plans to the SAPD for review prior to issuance of a building permit. **MM4.10-3** No developer within the Transit Zoning Code (SD 84A and SD 84B) boundaries shall utilize a frequency of 800 MHz, which is reserved for emergency services.	LTS
Impact 4.10-3 Construction of new residential units within the project area would generate new students that could require the addition of new classroom facilities, thereby requiring new or physically altered facilities to accommodate additional students in Santa Ana Unified School District (SAUSD) schools.	PS	**MM4.10-4** Individual project developers shall pay school impact fees prior to the issuance of occupancy permits.	LTS
Impact 4.10-4 Construction of new residential units within the project area would generate new library users that could require the addition of new library facilities, thereby resulting in the need for new or physically altered library facilities in order to maintain acceptable service ratios.	LTS	No mitigation is required.	LTS
Impact 4.10-5 Were all properties identified as having new development potential to be built out pursuant to the provisions of the Transit Zoning Code (SD 84A and SD 84B) these new projects would generate a need for new or physically altered park facilities in order to maintain acceptable service ratios.	LTS	**MM4.10-5** Prior to issuance of a building permit for a residential development project, or change of use from non-residential to residential within the Transit Zoning Code (SD 84A and SD 84B) area, project applicants shall pay to the City of Santa Ana the Park Acquisition and Development Fee.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Transportation			
Impact 4.11-1 Operation of the proposed project could result in impacts related to neighborhood traffic in the adjacent residential areas to the Transit Zoning Code (SD 84A and SD 84B) area.	PS	**MM4.11-1** The City of Santa Ana shall, during any roadway improvement within the Transit Zoning Code boundaries, evaluate, consider, and implement as appropriate the traffic calming measure(s), including but not limited to the following: ■ Curb extensions at local intersections ■ Short medians at entries to wide streets ■ Traffic circles at oversized intersections ■ Speed humps ■ Turn restrictions	LTS
Impact 4.11-2 Long-term cumulative development pursuant to the implementation of the Transit Zoning Code would exceed standards established by the Orange County Transportation Authority within the study area.	LTS	No mitigation is required.	LTS
Impact 4.11-3 Development projects constructed pursuant to the standards contained within the Transit Zoning Code would not result in a change in air traffic patterns.	LTS	No mitigation is required.	LTS
Impact 4.11-4 Development projects constructed pursuant to the Transit Zoning Code would not increase hazards due to a design future or incompatible uses.	LTS	No mitigation is required.	LTS
Impact 4.11-5 Development projects constructed pursuant to the Transit Zoning Code could result in inadequate emergency access.	LTS	No mitigation is required.	LTS
Impact 4.11-6 Long-term cumulative development under the implementation of the Transit Zoning Code would not result in inadequate parking capacity.	LTS	No mitigation is required.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures

Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.11-7 The Transit Zoning Code would not conflict with adopted policies, plans, or programs supporting alternative transportation.	PS	**MM4.11-2** As part of the project, the City of Santa Ana and the project sponsors shall work with the transit providers to implement various transit-related measures to improve and expand bus system service within the Transit Zoning Code (SD 84A and SD 84B) area. These measures may include, but are not limited to, the following: ■ Adding bus stops to the Transit Zoning Code (SD 84A and SD 84B) area along existing roadways ■ Changing bus service headways to respond to increased demand ■ Changing bus service destinations to respond to changing demand ■ Adding local shuttle service for employees and patrons of the Transit Zoning Code (SD 84A and SD 84B) area The details of bus service improvements shall be determined in coordination with OCTA. The following recommendations would help encourage public transit patronage for project-related trips: ■ *Bus Stop Locations*—Relocation of existing bus stops and the provision of additional bus stops should be considered to accommodate transit users at convenient locations. ■ *Days of Operation*—The City should work with OCTA to consider changes to route times to serve nighttime and weekend project visitors and employees. ■ *Headway*—The City should work with OCTA to review route headways to determine if it would be appropriate to reduce them to accommodate transit riders within the Transit Zoning Code (SD 84A and SD 84B) area.	LTS
Impact 4.11-8 Long-term cumulative development under implementation of the Transit Zoning Code would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.	PS	**MM4.11-3** The City of Santa Ana Public Works Agency shall monitor the traffic signals within the Transit Zoning Code study area once every five years to ensure that traffic signal timing is optimized. **MM4.11-4** The City of Santa Ana shall institute a program for systematic mitigation of impacts as development proceeds within the Transit Zoning Code to ensure mitigation of the individual improvements. The program shall prescribe the method of participation in the mitigation program by individual projects and guide the timely implementation of the mitigation measures. The program shall include the following elements: ■ A funding and improvement program should be established to identify financial resources adequate to construct all identified mitigation measures in a timely basis. ■ All properties that redevelop within the Transit Zoning Code should participate in the program on a fair share per new development trip basis. The fair share should be based upon the total cost of all identified mitigation measures, divided by the peak hour trip generation increase forecast. This rate per peak hour	SU

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		trip should be imposed upon the incremental traffic growth for any new development within the Transit Zoning Code. ■ The program should raise funds from full development of the Transit Zoning Code to fund all identified mitigation measures. ■ The program should monitor phasing development of the Transit Zoning Code and defer or eliminate improvements if the densities permitted in the Transit Zoning Code are not occurring. ■ Program phasing should be monitored through preparation of specific project traffic impact studies for any project that is expected to include more than 100 dwelling units or 100,000 sf of non-residential development. Traffic impact studies should use traffic generation rates that are deemed to be most appropriate for the actual development proposed. ■ Properties within Santa Ana and within one-half mile of the Transit Zoning Code that redevelop to result in higher traffic generation should also participate in the program to insure equity. ■ The City may elect to implement appropriate mitigation measures as a condition of approval of the proposed developments, where appropriate. All or part of the costs of these improvements may be considered to be a negotiated credit toward the program, however the program must be administered in a manner that assures that it can fund necessary improvements to maintain adequate level of service at all intersections within this study. If funding of priority improvements cannot be assured, credit for construction of lower priority improvements may not be assured or may be postponed until more program funds are available. The following mitigation measure would be implemented in conformance with mitigation measure **MM4.11-4**, above. **MM4.11-5** *Main Street at First Street*—Install a second northbound and southbound left-turn lanes and a dedicated northbound right-turn lane for 2030 and 2035 conditions. **MM4.11-6** *Lacy Street at Santa Ana Boulevard*—Install a traffic signal and provide exclusive left-turn lane for both northbound and southbound directions for both 2030 and 2035 conditions. **MM4.11-7** *Lacy Street at First Street*—Install a traffic signal for both 2030 and 2035 conditions, a traffic signal, and provide exclusive left-turn lane for both northbound and southbound directions for both 2030 and 2035 conditions. **MM4.11-8** *Santiago Street at Washington Avenue*—Install a traffic signal and provide one exclusive left-turn lane for both eastbound and westbound traffic for 2035 conditions only. **MM4.11-9** *Santiago Street at Civic Center Drive*—Install a traffic signal and provide: one exclusive left-turn	

Table ES-2 Summary of Environmental Effects and Mitigation Measures

Impact(s)	Level of Significance Prior to Mitigation	Transit Zoning Code Mitigation Measures	Level of Significance After Mitigation
		lane, one through lane, and one shared through and right-turn lane on northbound and southbound approaches; and one exclusive left-turn lane and one shared through and right lane on eastbound and westbound approaches. The improvement is only needed for 2035 conditions. **MM4.11-10** *Santiago Street at Santa Ana Drive*—Construct a second southbound left-turn lane for 2035 conditions. The improvement is only needed for 2035 conditions. **MM4.11-11** *Santiago Street a Fourth Street*—Install a traffic signal. The lane configuration for the signal is recommended as 1 Left, 1 Through, 1 Through+ Right for all approaches. **MM4.11-12** *Standard Street at First Street*—Construct third eastbound and westbound shared through-right lanes for 2035 conditions. The improvement is only needed for 2035 conditions. **MM4.11-13** *Grand Avenue at Santa Ana Boulevard*—Construct a third southbound through lane and eastbound right-turn overlap signal phasing. **MM4.11-14** *Grand Avenue at First Street*—Construct a third eastbound shared through/right-turn lane, a third westbound shared through/right-turn lane, and a third northbound through lane with dedicated northbound right-turn lane for 2035 conditions. The improvement is only needed for 2035 conditions. **MM4.11-15** *Grand Avenue at I-5 Northbound Ramps*—Construct a second westbound right-turn lane and for the I-5 northbound off ramp under both 2030 and 2035 conditions.	
Impact 4.11-9 Long-term cumulative development under implementation of the Transit Zoning Code could result in impacts related to freeway ramps in the vicinity of the Transit Zoning Code area.	PS	**MM4.11-16** *I-5 at Santa Ana Blvd.—Northbound Off-Ramp*—The City of Santa Ana Department of Public Works shall coordinate with Caltrans for the installation of a second ramp lane for the I-5 northbound off ramp. The improvement shall be implemented to mitigate 2035 conditions.	SU
Utilities and Service Systems			
Impact 4.12-1 Long-term cumulative development pursuant to the Transit Zoning Code (SD 84A and SD 84B) would generate an additional demand for water, but would not require water supplies in excess of existing entitlements and resources or result in the need for new or expanded entitlements.	LTS	No mitigation is required.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.12-2 Long-term cumulative development pursuant to the Transit Zoning Code (SD 84A and SD 84B) would not require or result in the construction of new or expanded water treatment facilities, the construction of which could cause significant environmental effects.	LTS	No mitigation is required.	LTS
Impact 4.12-3 Long-term cumulative development pursuant to the Transit Zoning Code (SD 84A and SD 84B) would not exceed wastewater treatment requirements of the Orange County Sanitation District.	LTS	No mitigation is required.	LTS
Impact 4.12-4 Long-term cumulative pursuant to the Transit Zoning Code (SD 84A and SD 84B) could require the construction of new or expanded wastewater conveyance systems, the construction of which would not cause significant environmental effects.	PS	**MM4.12-2** Individual project applicants shall prepare site-specific sewer evaluations, including flow monitoring and modeling, during the project design to determine the adequacy of the existing sewer pipe capacity in the affected project area lines. The evaluation shall be submitted to the City of Santa Ana or OCSD, as appropriate, for review and approval prior to issuance of building permits. Any recommendations made in the site-specific sewer evaluations shall be incorporated into the design of each individual project.	LTS
Impact 4.12-5 Long-term cumulative development pursuant to the Transit Zoning Code (SD 84A and SD 84B) would not increase wastewater generation such that treatment facilities would be inadequate to serve the project's projected demand in addition to the provider's existing commitments.	LTS	No mitigation is required.	LTS
Impact 4.12-6 Long-term cumulative development pursuant to the Transit Zoning Code would not generate solid waste that exceeds the permitted capacity of landfills serving the area.	LTS	No mitigation is required.	LTS
Impact 4.12-7 Long-term cumulative development under the implementation of the Transit Zoning Code (SD 84A and SD 84B) would comply with all applicable federal, state, and local statutes and regulations related to solid waste.	LTS	No mitigation is required.	LTS

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
Impact 4.12-8 Long-term cumulative development pursuant to the Transit Zoning Code (SD 84A and SD 84B) could increase the demand for electricity and gas, but would not require or result in the construction of new energy production or transmission facilities.	PS	**MM4.12-3** Individual non-residential project applicants are encouraged to apply for Southern California Edison's "Savings By Design" program. The program is aimed at generating an overall reduction in energy use through design methods and incentive programs by maintaining a 15% or greater exceedance of Title 24. **MM4.12-4** Individual development projects within the boundaries of the Transit Zoning Code (SD 84A and SD 84B) shall implement energy conservation measures (such as energy-efficient lighting and microprocessor controlled HVAC equipment) to reduce the demand for electricity and natural gas as part of the project design. The energy conservation measures shall be subject to modification as new technologies are developed, or if current technology becomes obsolete, through replacement and shall be reviewed by the Planning and Building Agency prior to issuance of a building permit.	LTS
Climate Change			
Impact 4.13-1 Long-term cumulative development pursuant to the Transit Zoning Code at full build-out would result in significant localized air quality impacts for operational level emissions. As a whole, this impact is significant for operational emissions due to the size of the Transit Zoning Code (SD 84A and SD 84B) area.	PS	**MM4.13-1** All diesel fueled construction equipment shall be classified EPA Tier II or better emission efficiencies. **MM4.13-2** All construction equipment shall be shut off when not in use and shall not idle for more than five minutes, unless actively engaged in construction activities. **MM4.13-3** Queuing of trucks on- and offsite shall be limited to periods when absolutely necessitated by grading or construction activities. **MM4.13-4** All on-road construction trucks and other vehicles greater than 10,000 pounds shall be shut off when not in use and shall not idle for more than 5 minutes. **MM4.13-5** To the extent feasible, all diesel- and gasoline-powered construction equipment shall be replaced with equivalent electric equipment. **MM4.13-6** Project plans and specifications shall include policies and procedures for the reuse and recycling of construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). **MM4.13-7** Project plans and specifications shall include education for construction workers about reducing waste and using available recycling services. **MM4.13-8** Prior to issuance of a building permit, the applicant shall demonstrate that the design of the proposed buildings or structures meets or exceeds the most recent Title 24 requirements (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings; Cool Roof Coatings performance standards), subject to review by the City Building Official. Documentation of compliance with this measure shall be provided to the Planning and Building Agency and	SU

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		Building Official for review and approval prior to issuance of the permit. Installation of the identified design features or equipment will be confirmed by the City Building Official prior to certificate of occupancy. The following design features should be considered by the applicant as a way to achieve Title 24 compliance in excess of the minimum requirement: ■ Increase in insulation such that heat transfer and thermal bridging is minimized ■ Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption ■ Incorporate dual-paned or other energy efficient windows ■ Incorporate energy efficient space heating and cooling equipment ■ Incorporate energy efficient light fixtures ■ Incorporate energy efficient appliances ■ Incorporate energy efficient domestic hot water systems ■ Incorporate solar panels into the electrical system ■ Incorporate cool roofs/light-colored roofing ■ Or other measures that will increase the energy efficiency of building envelope in a manner that when combined with the other options listed above exceeds current Title 24 Standards (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings, as amended September 11, 2008; Cool Roof Coatings performance standards as amended September 11, 2006) by a minimum of 20 percent **MM4.13-9** Prior to issuance of a building permit, applicants for individual projects shall provide a landscape plan that includes shade trees around main buildings, particularly along southern elevations where practical, and will not interfere with loading dock locations or other operational constraints. Documentation of compliance with this measure shall be provided to the Planning and Building Agency for review and approval. **MM4.13-10** All showerheads, lavatory faucets, and sink faucets within the residential units, and where feasible within non-residential developments, shall comply with the California Energy Conservation flow rate standards. **MM4.13-11** Low-flush toilets shall be installed within all Congregate Care units as specified in California State Health and Safety Code Section 17921.3. **MM4.13-12** Project designers should consider design features to incorporate light-colored roofing materials	

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		that will deflect heat away from the building and conserve energy. **MM4.13-13** Landscape designers shall ensure that landscaping of common areas for Industrial/Commercial projects uses drought-tolerant and smog-tolerant trees, shrubs, and groundcover to ensure long-term viability and conserve water and energy. **MM4.13-14** Landscape designers shall ensure that the landscape plan for Industrial/Commercial projects includes drought resistant trees, shrubs, and groundcover within the parking lot and perimeter. **MM4.13-15** Individual project applicants shall ensure that designs for Industrial/Commercial projects include all illumination elements to have controls to allow selective use as an energy conservation measure. **MM4.13-16** The applicant for Industrial/Commercial projects should promote ride sharing programs such as, but not necessarily including, publishing ride sharing information for all of the tenants, designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a website or message board for coordinating rides. Prior to issuance of a building permit, the applicant shall demonstrate that measures have been included to provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience pursuant to SAMC Chapter 41 regarding bicycle parking standards and Chapter 16 of the Santa Ana Citywide Design Guidelines regarding Bikeway Support Facilities Guidelines . Documentation of compliance with this measure shall be provided to the City Building Official for review and approval. Installation of the identified design features or equipment will be confirmed by the City Building Official prior to issuance of certificate of occupancy. **MM4.13-17** Prior to issuance of any certificate of occupancy, the applicant shall demonstrate that all Multi-family/Industrial/Commercial projects' interior building lighting supports the use of compact fluorescent light bulbs or equivalently efficient lighting to the satisfaction of the Building Official. **MM4.13-18** Applicants for Multi-family/Industrial/Commercial projects shall consider providing preferential parking spaces for ultra-low emission vehicles and alternative fueled vehicles to encourage the use of alternative fuels and ultra-low emission vehicles. **MM4.13-19** Prior to issuance of a building permit, the applicant shall demonstrate that the proposed Multi-family/ Industrial/Commercial uses building or structure designs incorporate exterior storage areas for recyclables and green waste and adequate recycling containers located in public/common areas pursuant to the adopted standards. Documentation of compliance with this measure shall be provided to the Planning and Building Agency for review and approval. Installation of the identified design features or equipment will be confirmed by the City Building Official prior to issuance of certificate of occupancy. **MM4.13-20** All common area irrigation areas for Multi-family/Industrial/Commercial projects shall consider	

Table ES-2 Summary of Environmental Effects and Mitigation Measures			
Impact(s)	*Level of Significance Prior to Mitigation*	*Transit Zoning Code Mitigation Measures*	*Level of Significance After Mitigation*
		systems that are capable of being operated by a computerized irrigation system which includes an onsite weather station/ET gage capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain, and wind. In addition, the computerized irrigation system shall also consider the ability to be equipped with flow-sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failure due to mainline breaks, and eliminating over-watering and flooding due to pipe and/or head breaks. **MM4.13-21** Consideration of installation of solar roofs on homes and businesses to offset the increasing demand for energy and natural gas. **MM4.13-22** Project applicants shall, where feasible, incorporate passive solar design features into the buildings, which may include roof overhangs or canopies that block summer shade, but that allow winter sun, from penetrating south facing windows. **MM4.13-23** Use Energy Efficient Roofing Materials. All roofing materials used in commercial/retail buildings at the Mixed-Use Retail Development shall be Energy Star® certified. All roof products shall also be certified to meet American Society for Testing and Materials (ASTM) high emissivity requirements. **MM4.13-24** All commercial/industrial projects shall, where feasible, include up to 10% renewable energy sources within the project.	
Impact 4.13-2 Long-term cumulative development pursuant to the Transit Zoning Code at full build-out has the potential to conflict with AB 32. The Project as a whole is significant for operational emissions due to the size of the Transit Zoning Code (SD 84A and SD 84B) area.	PS	No feasible mitigation is available.	SU