Meredith International Centre Specific Plan Amendment

Draft Environmental Impact Report

Prepared for:
City of Ontario
303 East B Street
Ontario, CA 91764

January 2015

applied planning inc

DRAFT ENVIRONMENTAL IMPACT REPORT

for the

Meredith International Centre SPA

State Clearinghouse Number:
2014051020

January 2015

Prepared for:

The City of Ontario
303 East B Street
Ontario, CA 91764

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1.0 EXECUTIVE SUMMARY

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1.1 INTRODUCTION

Pursuant to the requirements of the California Environmental Quality Act (CEQA), this Environmental Impact Report (EIR) evaluates and discloses the potential environmental effects resulting from construction and operation of the proposed Meredith International Centre Specific Plan Amendment Project (Project, Meredith SPA). The Project proposes a mix of industrial, commercial, and residential land uses on approximately 257 acres located in the southeast portion of the City of Ontario, within San Bernardino County. The site is generally located north of Interstate 10 (I-10), between Vineyard Avenue on the west, and Archibald Avenue on the east. The northern boundary of the site, between Vineyard Avenue and Cucamonga Creek Channel, is formed by 4th Street. Existing San Bernardino County Flood Control facilities form the northern boundary for the portion of the site located east of Deer Creek Channel. Please refer also to EIR Section 3.0, "Project Description," and Figure 3.2-1, "Project Location."

This EIR Section summarizes relevant Project background issues, provides a brief description of the Project and its Objectives, and summarizes the potential environmental impacts of the Project. Table 1.10-1, "Impacts and Mitigation Summary," presented at the conclusion of this Section, lists these impacts and presents the mitigation measures recommended to eliminate or reduce the effects of those impacts which have been determined to be potentially significant. Alternatives to the Project which could reduce the extent or severity of the Project's identified environmental impacts are also briefly described within this Section. For a full description of the Project, its impacts, recommended mitigation measures, and considered Alternatives, please refer to EIR Sections 3.0, 4.0, and 5.0, respectively.

1.2 PROJECT ELEMENTS

Primary elements comprising the Project are summarized below. Please refer also to the expanded characterization of Project facilities and operations presented at EIR Section 3.0, "Project Description," and the *Meredith International Centre Specific Plan Amendment* document presented at EIR Appendix B.

1.2.1 Site Preparation

The Project site slopes gently toward the south at an estimated gradient of approximately 2 percent. The elevation of the site ranges from approximately 980 to 1,030 feet above mean sea level (msl). The site would be cleared prior to the commencement of grading and utility installation. Any debris generated by site preparation activities would be disposed of and recycled consistent with provisions of the California Integrated Waste Management Plan Act (AB 939) and the City's Solid Waste Department *Refuse and Recycling Planning Manual*.[1] The Project grading concept provides for on-site balanced cut/fill.

1.2.2 Development Concept

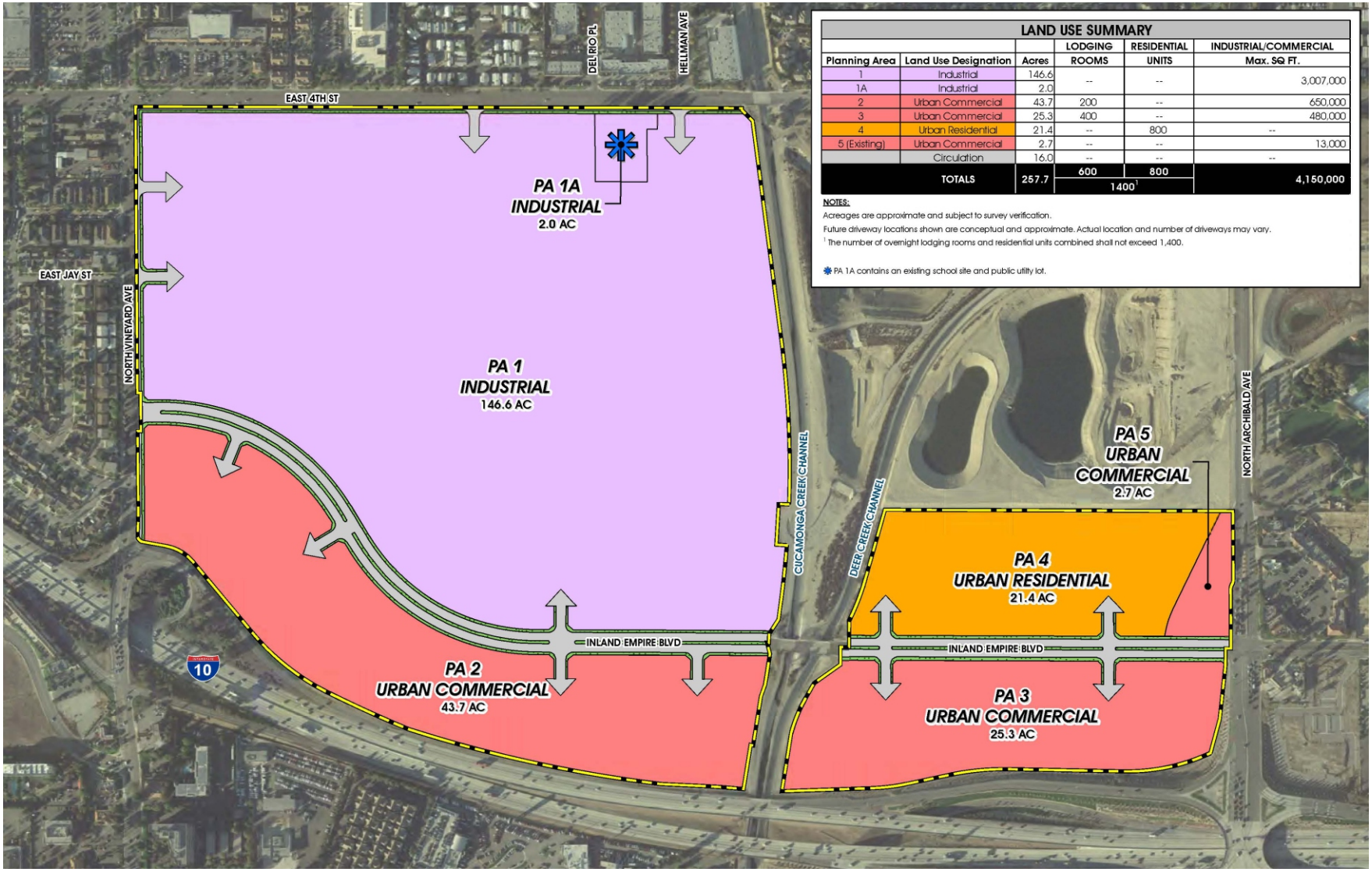
The Meredith SPA proposes a mix of industrial, commercial, and residential land uses within five (5) planning areas, as detailed in Table 1.2-1 and presented graphically at Figure 1.2-1. Descriptions of the Planning Areas are presented subsequently. It is noted here that the location and sizes of proposed uses within the Project site are approximate, but considered accurate for planning and environmental evaluation purposes. Ultimate configuration and orientation of uses proposed by the Project are subject to City review and approval.

[1] City of Ontario, California: Solid Waste Department Refuse and Recycling Manual, Updated May 1, 2013. http://www.ci.ontario.ca.us/modules/showdocument.aspx?documentid=4704

Table 1.2-1
Meredith International Centre SPA
Proposed Land Uses

Planning Area	Land Use[1]	Acreage	Square Footage	Residential Units	Overnight Lodging Units
1	Industrial	146.6	3,007,000	-	-
1A[2]	Industrial	2.0			-
2	Urban Commercial	43.7	650,000	-	200[3]
3	Urban Commercial	25.3	480,000	-	400[3]
4	Urban Residential	21.4	-	800	-
5 (Existing)	Urban Commercial	2.7	13,000[4]	-	-
Roadway Modifications		16.0	-	-	-
Total		*257.7*	*4,150,000*	*800[5]*	*600[5]*

Source: Conceptual Land Use Plan for the Meredith International Centre (T&B Planning) January 2015.
Notes:
[1] Please refer to Table 5-1 of the Meredith SPA for uses permitted within these land use categories.
[2] The Meredith SPA assumes continuation of educational/school activities at the Italo M. Bernt Elementary School site within Planning Area 1A. Should the Planning Area be redeveloped at a later date, the maximum allowable building area square footage would not exceed that of the existing School building (6,767 square feet). In the event that Planning Area 1A redevelops in conjunction with the development of Planning Area 1, the total combined building area of both Planning Areas shall not exceed 3,007,000.
[3] The number of lodging units is included in the square footage totals of Planning Areas 2 and 3.
[4] Approximate square footage of existing uses.
[5] The maximum number of overnight lodging units and residential units combined shall not exceed 1,400.



LAND USE SUMMARY

Planning Area	Land Use Designation	Acres	LODGING ROOMS	RESIDENTIAL UNITS	INDUSTRIAL/COMMERCIAL Max. SQ FT.
1	Industrial	146.6	--	--	3,007,000
1A	Industrial	2.0			
2	Urban Commercial	43.7	200	--	650,000
3	Urban Commercial	25.3	400	--	480,000
4	Urban Residential	21.4	--	800	--
5 (Existing)	Urban Commercial	2.7	--	--	13,000
	Circulation	16.0	--	--	--
	TOTALS	257.7	600	800	4,150,000
			1400[1]		

NOTES:

Acreages are approximate and subject to survey verification.

Future driveway locations shown are conceptual and approximate. Actual location and number of driveways may vary.

[1] The number of overnight lodging rooms and residential units combined shall not exceed 1,400.

* PA 1A contains an existing school site and public utility lot.

N

NOT TO SCALE

Source: T&B Planning, Inc.

applied planning inc

Figure 1.2-1
Land Use Plan

Planning Areas 1/1A

Encompassing 146.6 acres in the northwesterly corner of the Project site, Planning Area 1 is the largest of the Planning Areas. Uses allowed within this Planning Area would include a range of general light industrial, and warehouse/distribution operations. Detailed types of Industrial uses that would be permitted or conditionally permitted within Planning Area 1 are detailed at Meredith SPA Section 5. D., *Permitted, Conditional, and Ancillary Land Uses*.

The Project development concept would allow for implementation of up to 3,007,000 square feet of general light industrial, and warehouse/distribution uses within Planning Area 1. Planning Area 1A is a 2.0-acre area located in the northerly portion of the Specific Plan area, along Fourth Street. Planning Area 1A is surrounded on its south, east, and west boundaries by Planning Area 1. The property currently contains the 6,767-square-foot former Italo M. Bernt Elementary School[2] (located on a 1.9-acre lot) and an adjacent 0.1-acre vacant lot planned for a water treatment facility use established by Ontario Municipal Utilities Company. The Meredith SPA allows for the continuation of these uses; and also includes an option that allows Planning Area 1A to redevelop in conjunction with the development of Planning Area 1. Under this scenario, the maximum building intensity of Planning Area 1 and Planning Area 1A combined would not exceed 3,007,000 square feet.

Planning Area 2

Planning Area 2 encompasses approximately 43.7 acres within the southwesterly portion of the Specific Plan area. It is bordered on the north by Inland Empire Boulevard, on the south by Interstate 10, on the west by North Vineyard Avenue, and on the east by the Cucamonga Creek Channel. The Project development concept provided for development of Planning Area 2 with up to 650,000 square feet of Urban Commercial uses, and up to 200 overnight lodging (hotel) rooms.

The Urban Commercial designation of Planning Area 2 allows for a range of commercial uses that benefit from the property's adjacency to Interstate 10 and Ontario International

[2] The Italo M. Bernt Elementary School, formerly operated by and under the jurisdiction of the Ontario-Montclair Elementary School District, is now operated as a private educational facility and leased by Applied Behavior Consultants.

Airport. Planning Area 2 is designed as a highly active area offering a variety of market-driven commercial uses. Up to 200 overnight lodging rooms also are permitted in Planning Area 2, with the intention of serving the surrounding community and region, such as visitors to the nearby Ontario Convention Center and Ontario International Airport. Detailed types of Urban Commercial uses that would be permitted or conditionally permitted within Planning Area 2 are detailed at Meredith SPA Section 5. D., *Permitted, Conditional, and Ancillary Land Uses*.

Planning Area 3

Planning Area 3 comprises approximately 25.3 acres within the southeasterly portion of the Specific Plan property. The Urban Commercial designation of Planning Area 3 allows for up to 480,000 square feet of various commercial uses, and up to 400 overnight lodging (hotel) rooms. Detailed types of Urban Commercial uses that would be permitted or conditionally permitted within Planning Area 3 are detailed at Meredith SPA Section 5. D., *Permitted, Conditional, and Ancillary Land Uses*.

Planning Area 4

Planning Area 4 comprises approximately 21.4 acres within the northeasterly portion of the Specific Plan area, and would be developed with Urban Residential uses. The Urban Commercial designation of Planning Area 3 allows for up to 800 multi-family residential units. Detailed types of Urban Residential uses that would be permitted or conditionally permitted within Planning Area 4 are detailed at Meredith SPA Section 5. D., *Permitted, Conditional, and Ancillary Land Uses*.

1.2.3 Project Development Scenario

Development of the Meredith SPA is expected to occur incrementally, in response to market demands and with a logical and orderly extension of supporting infrastructure (roadways, public utilities, etc.). Supporting infrastructure would be provided throughout Project development, as determined necessary by the City. Please refer also to EIR Section 3.4.3, *Project Development Scenario*.

1.2.4 Access and Circulation

1.2.4.1 Vehicular Access and Circulation

Vehicular access and circulation improvements that would be constructed by the Project are described in detail at EIR Section 3.4.4.1, *Vehicular Access and Circulation* and are schematically presented at Figure 3.4-8. Design and implementation of all improvements would be subject to review and approval by the City.

1.2.4.2 Non-Vehicular Access and Circulation

A network of sidewalks, walkways, and bikeways would be provided within the Specific Plan area. The non-vehicular circulation plan promotes pedestrian movement, bicycle use, encourages the use of available mass transit opportunities, and reduces reliance on personal vehicles. Please refer also to EIR Section 3.4.4.2**,** *Non-Vehicular Access and Circulation***.**

1.2.5 Utilities Infrastructure

As elements of the Project, utility infrastructure systems, including water/recycled water, sanitary sewer, storm drainage, and dry utilities (gas, electricity, and communications) would be modified or extended to serve the Project facilities. Such modifications may include, but are not limited to: new service connections, service/distribution line upgrades, and realignment(s) of existing service/distribution lines. Please refer also to EIR Section 3.4.5**,** *Utilities Infrastructure.*

1.2.6 Landscape Concept

The plant palette for Meredith SPA includes shrubs and groundcovers, ornamental grasses and succulents, and evergreen and deciduous trees that are commonly used throughout Southern California. Many of the plant materials are water-efficient species native to Southern California or naturalized to the arid Southern California climate. Please refer to Table 6-1 of the Specific Plan for a complete plant palette.

Landscaping is proposed throughout the Specific Plan area, but would most prominently occur at street corners and along roadways. Street corners would include

landscaping and identification monuments. Streetscape landscaping would consist of a combination of evergreen and deciduous trees, low shrubs, and masses of groundcovers. Landscaping would be designed in a manner that will adhere to City engineering sight line standards and not interfere with, or compromise, vehicular and pedestrian visibility. Please refer also to EIR Section 3.4.6**,** *Landscape Concept*.

1.2.7 Design Concepts

The Specific Plan area is envisioned as a contemporary mixed-use center containing Industrial, Urban Commercial, and Urban Residential land uses that take advantage of the property's location near regional transportation corridors. The Meredith SPA proposes a contemporary design aesthetic, which provides architectural styling with attractive detailing, a light-toned color palette, and timeless features. Signs are modern, lighting is focused and directed, landscaping is colorful and drought-tolerant and design features are applied that lower energy use demands of building operations.

Design elements throughout the Specific Plan area would be compatible in character, massing, and materials in order to promote a clean and contemporary feel. Development would not be overly "trendy" or strongly historical; however, subtle references to the history of the region are acceptable. The design theme of the Meredith SPA is meant to complement the City of Ontario's character and comply with the City's Development Code. Please refer also to EIR Section 3.4.7**,** *Design Concepts.*

1.2.8 Lighting

Thematic lighting for the entire Project area is established within the Meredith SPA. All lighting within the Meredith SPA area would be designed and implemented in a manner that precludes potential adverse effects of light overspill. All decorative and security lighting plans would be submitted for required City review and approval prior to, or concurrent with, application for building permits. Final design of the Project's lighting is subject to the City's Design Review processes. Lighting within the public street right of way shall conform to city engineering standards. Please refer also to EIR Section 3.4.8**,** *Lighting.*

1.2.9 Signs

All signs within the Meredith SPA area would comply with City of Ontario signage requirements and a Master Sign Program will be prepared and submitted to the City for review and approval. Subsequent development projects within the Project site will be required to adhere to the approved Master Sign Program. All traffic control signs within public and private rights of way shall conform to applicable California Manual on Uniform Traffic Control Devices (CA-MUTCD) standards. Please refer also to EIR Section 3.4.9**,** *Signs.*

1.2.10 Energy Efficiency/Sustainability

Energy-saving and sustainable design features and operational programs would be incorporated into all facilities developed pursuant to the Meredith SPA. Planning Areas 1 through 4 would provide sustainable design features necessary to achieve a "Certified" rating under the United States Green Building Council's Leadership in Energy & Environmental Design (LEED) programs. The Project also incorporates and expresses the design features and attributes promoting energy efficiency and sustainability. Notably, the developer of the industrial phase of the Project (Planning Area 1) will install on the roof of the warehouse buildings a photo-voltaic electrical generation system (PV system) capable of generating 1,600,000 kilowatt hours per year.[3] The Project in total would surpass by a minimum of 5 percent, incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Title 24 Energy Efficiency Standards). Please refer also to EIR Section 3.4.10, *Energy Efficiency/Sustainability*.

1.3 PROJECT OBJECTIVES

The primary goal of the Project is the development of the subject site with a productive mix of industrial, commercial/retail, and residential uses. Complementary Project Objectives include the following:

[3] This electricity generation estimate is based on the amount of electricity to be consumed within Planning Area 1 at buildout and full occupancy.

- Create an integrated development that provides a full range of employment opportunities near residential uses.
- Create a planned development wherein commercial uses would benefit from the site's freeway visibility.
- Develop industrial uses that would support the Ontario International Airport and that would benefit from the Airport's proximity.
- Construct residential uses proximate to employment opportunities and commercial services.
- Provide an industrial park supporting varied warehouse distribution and industrial tenants.
- Provide safe and convenient access for trucks in a manner that minimizes any potential disruption to residential areas.
- Cluster industrial uses near existing roadway and freeways to reduce traffic congestion and air emissions.
- Facilitate goods movement locally, regionally, nationally, and internationally.
- Provide land uses that are compatible with surrounding land uses and that would not conflict with the policies and environmental constraints identified in the Policy Plan.
- Complete the urbanization of the area north of I-10 and east of Vineyard Avenue with necessary infrastructure while incorporating high quality, consistent design standards.
- Provide infrastructure and public improvements necessary to support each increment of Project development, and the Project in total.
- Establish new development that would further the City's near-term and long-range fiscal goals.

1.4 PROJECT DISCRETIONARY ACTIONS, PERMITS, CONSULTATION

Discretionary actions, permits and related consultation(s) necessary to approve and implement the Project are summarized below.

1.4.1 Discretionary Actions

CEQA Section 15124 states in pertinent part that if "a public agency must make more than one decision on a Project, all its decisions subject to CEQA should be listed . . ." Requested decisions, or discretionary actions, necessary to realize the Project include, but may not be limited to, the following:

- Certification of the Meredith International Centre Specific Plan Amendment EIR;
- Adoption of the Meredith International Centre Specific Plan Amendment;
- Approval of Policy Plan (General Plan) Amendments including, but not limited to:
    - Amendment(s) to narrative descriptions for the "Mixed Use – Meredith" land use area to reflect the type and scope of uses proposed by the Project; and
    - Amendment of the Land Use Map to incorporate the Italo M. Bernt Elementary School site (approximately 2.0 acres) within the boundaries of the "Meredith Mixed Use Area."
    - Amendment of TOP Exhibit LU-04 to remove Project site from the Ontario Airport Metro Center growth area.
- Approval of Zone Change;
- Approval of Parcel Maps;
- Development Plan Approval for Planning Areas 1 and 1A;
- Approval of Development Plan Entitlements for other Meredith SPA Planning Areas, contingent on their consistency with the adopted SPA;
- Adoption of a Development Agreement; and
- Approval of Conditional Use Permit(s) for certain uses identified by the Meredith SPA. Please refer to the Meredith SPA document (EIR Appendix B) Section 5.D., "Permitted, Conditional and Ancillary Uses."

1.4.2 Consultation and Permits

CEQA Section 15124 also states that the EIR should, to the extent known, include a list of all the agencies expected to use the EIR in their decision-making (Responsible Agencies) and a list other permits or approvals required to implement the Project. Based on the current Project design concept, anticipated permits necessary to realize the proposal would likely include, but are not limited to the following:

- Permitting through the Regional Water Quality Control Board (RWQCB) pursuant to requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit;

- Permitting through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented within the Project area;

- Permitting may be required by/through Caltrans to allow for any necessary modifications to Caltrans facilities, including but not limited to work within or encroachment upon Caltrans rights-of-way; and

- Various construction, grading, and encroachment permits allowing implementation of the Project facilities.

1.5 INITIAL STUDY

The City of Ontario, through the Initial Study process, has determined that the Project has the potential to cause or result in significant environmental impacts, and warranted further analysis, public review, and disclosure through the preparation of an EIR. The Initial Study (IS) and associated EIR Notice of Preparation (NOP), dated May 2014, were forwarded to the California Office of Planning and Research, State Clearinghouse (SCH), and circulated for public review and comment. The State Clearinghouse established the public comment period for the NOP/IS as May 6, 2014 through June 4, 2014. The assigned State Clearinghouse reference for the Project is SCH No. 2014051020. The Initial Study, NOP, and NOP responses are presented at Appendix A of this EIR.

1.6 IMPACTS NOT FOUND TO BE POTENTIALLY SIGNIFICANT

The following discussions identify those environmental issues that have been determined pursuant to the IS/NOP preparation and public review processes to pose no potentially significant impacts. Specific issues considered to pose no potentially significant impacts are not substantively discussed within the body of this EIR. Please refer also to related discussions and analyses presented within the Initial Study, EIR Appendix A, and EIR Table 1.10-1, "Impacts and Mitigation Summary."

Aesthetics

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Substantial damage to scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a state scenic highway;

Agriculture

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

- Conflict with existing zoning for agricultural use, or a Williamson Act contract;

- Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production;

- Result in the loss of forest land or conversion of forest land to non-forest use; or

- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Biological Resources

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, polices, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Cultural Resources

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Disturbance of any human remains, including those interred outside of formal cemeteries.

Geology and Soils

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; or landslides;

- Substantial soil erosion or the loss of topsoil; or

- Soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

Hazards and Hazardous Materials

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment;

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Hydrology and Water Quality

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

- Inundation by seiche, tsunami, or mudflow.

Land Use

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Conflict with any applicable habitat conservation plan or natural communities conservation plan.

Mineral Resources

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Loss of availability of a known mineral resource that would be of value to the region and to the residents of the state; and

- Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Noise

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Population and Housing

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Public Services and Utilities

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Result in potentially significant impacts related to the provision of new or physically altered parks or other public facilities; and

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

Traffic and Circulation

The Project Initial Study concluded the Project would not result in potentially significant impacts under the following topic(s):

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

1.7 AREAS OF CONCERN OR CONTROVERSY

Section 15123 of the *CEQA Guidelines* requires that the EIR summary identify areas of potential concern or controversy known to the lead agency, including issues raised by other agencies and the public. Issues of concern were identified by the Lead Agency, through responses to the Project Initial Study (IS)/Notice of Preparation (NOP), and other communications addressing the Project and the Project EIR.

Responses received pursuant to distribution of the NOP and Public Scoping Meeting are presented at EIR Appendix A. Table 1.7-1 presents a list of NOP respondents, and a corresponding summary of NOP comments, indicated by *italicized text*. Responses to comments, together with correlating EIR references are indicated in subsequent

statements. Unless otherwise noted, all NOP respondent comments are addressed within the body of the EIR.

Table 1.7-1
List of NOP Respondents and Summary of NOP Comments

Respondent	Summary of Comments
State Agencies	
State of California Office of Planning and Research, State Clearinghouse (SCH)	*SCH provided receipt and record of distribution of the NOP/IS and established the NOP review and comment period of May 6, 2014 through June 4, 2014.* EIR Appendix A includes a copy of the Project IS/NOP and NOP Responses.
State of California Native American Heritage Commission (NAHC)	*The NAHC response provides procedural guidance in determining the Project's potential to impact cultural resources.* As discussed at EIR Section 4.11, "Cultural Resources," a comprehensive Cultural Resources Investigation was conducted for the Project site, and no cultural resources were identified within the Project site or vicinity. To avoid impacts to potential archaeological, prehistoric, or paleontological (fossil) resources that may be present onsite in a buried context, EIR mitigation measures require monitoring by a professional archaeologist during earth-moving activities; appropriate disposition of any recovered artifacts; and provisions for discovery of any Native American human remains. Representatives of the appropriate Indian tribes shall also be consulted with respect to the treatment of these resources.
County/Regional Agencies	
San Bernardino County, Department of Public Works (DPW)	*DPW requests a copy of the EIR.* DPW has been provided a copy of the EIR.
Southern California Association of Governments (SCAG)	*SCAG requests a copy of the EIR.* SCAG has been provided a copy of the EIR. Consistency with SCAG *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* Goals is provided at EIR 4.1, *Land Use*.
South Coast Air Quality Management District (SCAQMD)	*SCAQMD provides detailed guidance in regard to the preparation of the Project air quality impact analysis, health risk assessment, and greenhouse gas (GHG) analysis, and requests an electronic copy of these technical studies to be provided with the EIR.* The Project Air Quality Impact Analysis and Health Risk Assessment are presented at EIR Appendix D. The Project Greenhouse Gas Analysis is presented at EIR Appendix E. Air quality analysis topics referenced by the SCAQMD in their NOP response are addressed at EIR Section 4.3, *Air Quality*. The Project's potential GHG impacts are addressed at EIR Section 4.4, *Global Climate Change and Greenhouse Gas Emissions.*

Table 1.7-1
List of NOP Respondents and Summary of NOP Comments

Respondent	Summary of Comments
	All modeling files, technical studies and supporting air quality documentation have been provided to SCAQMD in electronic format(s) as requested. [4]
Utilities/Public Services	
Omnitrans	*The commentor expresses concerns regarding potential impacts to Omnitrans transit operations and facilities in general and Omnitrans Route 61 transit operations and facilities in specific.* The proposed Meredith SPA requires that subsequent developers coordinate transit service options and provision of transit facilities with the local mass transit provider (Omnitrans). Adequate area for any bus turnouts would be provided consistent with City and Omnitrans requirements. Please refer also to EIR Section 4.2, *Traffic and Circulation*, and the Meredith SPA presented at EIR Appendix B.
Southern California Edison (SCE)	*SCE expresses concerns regarding potential impacts to SCE sub-transmission line(s) on the northerly edge of 4th Street. And further, that the Project not impose constraints on SCE's ability to access, maintain, and operate its current and future facilities.* The Project does not propose facilities or require actions that would adversely affect SCE facilities or operations. Any Project actions that would potentially would affect SCE facilities and/or operations would be coordinated with SCE through the City's development review processes and would be subject to review and approval by SCE; and as required, the California Public Utilities Commission (PUC).
Individuals and Organizations: Scoping Meeting Comments	
P. Bacerra	*The commentor inquires about future plans for the improvements of 4th Street, and specifically whether NB turns will be accommodated for EB traffic at 2041 E. 4th Street.* The Project would implement 4th Street improvements along its frontage consistent with City of Ontario requirements. More specifically, the Project would implement the following improvements: • Construct 4th Street bordering the Project site in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include two-travel lanes in each direction separated by a landscaped median (100-foot right-of-way section, 72-foot paved width, and 14-foot sidewalk/landscape areas on either side). The improvements associated with 4th Street also include the installation of a traffic signal at the intersection of 4th Street and Hellman Avenue.

[4] Supplementing the above analyses, and as a point of reference, Project mobile-source emissions air quality impacts have also been evaluated employing assumptions and protocols reflected in the South Coast Air Quality Management District (SCAQMD) *Draft Warehouse Truck Trip Study* (SCAQMD) December 2014 (*Draft Warehouse Truck Trip Study).* Please refer to *Meredith International Centre Supplemental Assessment* (Urban Crossroads) January 22, 2015 (supplemental air quality impact analyses) reflecting assumptions and protocols of the *Draft Warehouse Truck Trip Study*, also included at Draft EIR Appendix D.

Table 1.7-1
List of NOP Respondents and Summary of NOP Comments

Respondent	Summary of Comments
	Please refer also to EIR Section 4.2, *Traffic and Circulation*, and the Project Traffic Impact Analysis (TIA) presented at EIR Appendix C.
S. Ganda	*The commentor expresses concerns regarding the change in land use proposed by the Project. Implementation of the Project would be contingent on City approval of the Proposed Meredith SPA and associated land use discretionary actions identified at EIR Section 3.6* Project Discretionary Actions, Permits, Consultation. Potential land and planning impacts of the Project are evaluated at EIR Section 4.1, *Land Use and Planning*.
K. Guzman	*The commentor expresses concerns regarding the change in land use proposed by the Project. Implementation of the Project would be contingent on City approval of the Proposed Meredith SPA and associated land use discretionary actions identified at EIR Section 3.6* Project Discretionary Actions, Permits, Consultation. Potential land and planning impacts of the Project are evaluated at EIR Section 4.1, *Land Use and Planning*.

1.8 EIR TOPICAL ISSUES

Based upon the Initial Study analysis, comments received pursuant to circulation of the NOP, and other public/agency input, the analysis of the EIR addresses the following topics:

- Aesthetics;
- Air Quality;
- Greenhouse Gas (GHG) Emissions and Global Climate Change (GCC) impacts;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hazards/Hazardous Materials;
- Hydrology/Water Quality;
- Land Use;
- Noise;
- Population and Housing;
- Public Services and Utilities; and
- Transportation and Circulation.

Additionally, EIR Section 5.0, "Other CEQA Considerations," presents discussions of other mandatory CEQA topics including:

- Cumulative Impact Analysis;
- Alternatives Analysis;
- Growth-Inducing Impacts of the Proposed Action;
- Significant Environmental Effects;
- Significant and Irreversible Environmental Changes; and
- Energy Conservation.

1.9 SUMMARY OF SIGNIFICANT PROJECT IMPACTS

Implementation of the Project as proposed will result in certain impacts which are determined to be significant. These impacts are discussed in detail in the body of the EIR text under their associated topical headings, and are summarized below.

1.9.1 Significant Traffic/Circulation Impacts

The Project's potential traffic/circulation impacts are evaluated in the detail in the Project TIA (EIR Appendix C), and are summarized at EIR Section 4.2, "Traffic and Circulation." As discussed within that Section, pending the completion of required improvements, Project traffic impacts at the following Study Area intersections are considered cumulatively significant and unavoidable under at least one of the traffic impact analytic scenarios (Existing Conditions, Year 2017 Conditions, Year 2020 Conditions, and/or Year 2035 Conditions).

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- Baker Avenue at 8th Street (Study Area Intersection 3);
- Hellman Avenue at 6th Street (Study Area Intersection 9);
- Haven Avenue at 6th Street (Study Area Intersection 12);
- I-10 EB Ramp at 4th Street (Study Area Intersection 14);[5]
- Vineyard Avenue at 4th Street (Study Area Intersection 20);

[5] Significant impacts at I-10 EB Ramp at 4th Street (Study Area Intersection 14) under the "Existing Plus Project" traffic impact analytic scenario are considered Project-specific.

- Archibald Avenue at 4th Street (Study Area Intersection 23);
- Haven Avenue at 4th Street (Study Area Intersection 25);
- Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and
- Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32).

The intersections identified above are either not under the City's plenary control, and/or are subject to right-of-way constraints. In these instances, timely implementation of improvements required as mitigation for potentially significant cumulative traffic impacts cannot be assured, and impacts are therefore considered cumulatively significant and unavoidable pending completion of the required improvements.

Project traffic would also contribute to cumulatively significant impacts affecting analyzed freeway facilities within the Study Area. There are no feasible means for the Project Applicant or the City of Ontario to mitigate cumulatively significant freeway facilities impacts, and these impacts are accordingly recognized as cumulatively significant and unavoidable.6

1.9.2 Significant Air Quality Impacts

EIR Section 4.3 details the Project's potential air quality impacts. As discussed within that Section, even after compliance with applicable regulations and requirements, and application of mitigation measures, the Project would result in the following significant and unavoidable air quality impacts:

- Project maximum daily construction-source emissions of VOC, NO_x, and CO would exceed applicable SCAQMD regional thresholds. These are significant individual and cumulative air quality impacts.

- Under Interim Development Conditions in 2017, Project maximum daily operational-source emissions of VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ would exceed

[6] Under Existing Plus Project Conditions (Project Buildout) Project-specific traffic contributions to eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21) would be considered significant.

applicable SCAQMD regional thresholds.[7] These are significant individual and cumulative air quality impacts.

- Under Project Buildout Conditions in 2020, Project maximum daily operational-source emissions of VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ would exceed applicable SCAQMD regional thresholds. These are significant individual and cumulative air quality impacts.

- Project construction-source VOC and NO_x emissions regional threshold exceedances would result in a cumulatively considerable net increase in criteria pollutants (ozone and $PM_{10}/PM_{2.5}$) for which the Project region is non-attainment.[8] These are cumulatively significant air quality impacts.

- Project operational-source VOC, NO_x, PM_{10}, and $PM_{2.5}$ emissions regional threshold exceedances would result in a cumulatively considerable net increase in criteria pollutants (ozone and $PM_{10}/PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.

1.9.3 Significant Noise Impacts

EIR Section 4.4 details the Project's potential noise impacts. As discussed within that Section, even after compliance with applicable regulations and requirements, and application of mitigation measures, the Project would result in the following significant and unavoidable noise impacts:

- Project's construction-source noise and vibration levels, as received at certain adjacent off-site properties, would exceed applicable City standards.

[7] Under 2017 Interim Development Conditions, the Project Air Quality Impact Analysis indicates the operational-source $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds. If employing the SCAQMD *Draft Warehouse Truck Trip Study* protocols and assumptions, there would be a $PM_{2.5}$ emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source $PM_{2.5}$ emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions.

[8] VOC and NO_x are both ozone precursors; NO_x is a precursor to $PM_{10}/PM_{2.5}$.

- Project-vehicular-source noise contributions to ambient noise conditions along certain Study Area roadway segments would be individually significant and cumulatively considerable.

All other potential environmental effects of the Project are determined to be less-than-significant as substantiated within this EIR and accompanying Initial Study, or are reduced below levels of significance with application of mitigation measures identified herein. A summary of all Project impacts and proposed mitigation measures is presented at EIR Section 1.10, "Summary of Impacts and Mitigation Measures."

1.10 ALTERNATIVES TO THE PROJECT

Consistent with provisions of the CEQA Guidelines, the EIR Alternatives Analysis (EIR Section 5.2) presents and evaluates alternatives to the Project that would lessen its significant environmental effects while allowing for attainment of the basic Project Objectives. The rationale underlying the selection of alternatives is presented together with a summary description of each alternative. Merits of the alternatives compared with the Project are described and evaluated.

1.10.1 Alternatives Overview

Descriptions of, and the rationale underlying, the alternatives considered in this EIR are presented below. As provided for under CEQA, the ultimate rationale underlying the development and selection of alternatives to the Project is the reduction or avoidance of otherwise resulting significant environmental impacts, while allowing for attainment of the basic Project Objectives. Alternatives considered within this analysis include:

- CEQA-mandated "No Project" Alternative;
- Alternative Sites;
- "No Threshold Exceedance" Alternative for Significant Traffic Impacts;
- "No Threshold Exceedance" Alternative for Significant Air Quality Impacts;
- "No Threshold Exceedance" Alternative for Significant Noise Impacts;
- Reduced Intensity Alternative-Meredith SPA Land Use Plan;
- Reduced Intensity Alternative-No Industrial Land Uses;

- Reduced Intensity Alternative-No Residential Land Uses; and
- Ontario Plan EIR Development Scenario Alternative.

1.10.2.1 No Project Alternative

The *CEQA Guidelines* specifically require that the EIR include in its evaluation a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this regard, the subject site is a predominantly vacant and available property absent any significant environmental or physical constraints; is designated and planned for urban Specific Plan uses pursuant to the Ontario Policy Plan Land Use Plan and the 1981 Meredith International Centre Specific Plan; is fully served by proximate available utilities and supporting public services; and is provided appropriate access. As such, it is unlikely that the subject site would remain vacant or in a "No Build" condition. That is, failure to proceed with the Project would not result in preservation of existing environmental conditions, and the practical result of the Project's non-approval would be the development of some other variety or configuration of urban Specific Plan uses within the subject site. Accordingly, for the purposes of the EIR Alternatives Analysis, it is presumed that if the Project were not constructed, the No Project Alternative would comprise another proposal representing a foreseeable development scenario for the subject site; in this case, development of the site pursuant to the currently approved 1981 Meredith International Centre Specific Plan (1981 Specific Plan).

1.10.2.2 Reduced Intensity Alternative-Meredith SPA Land Use Plan

Under the Reduced Intensity Alternative Meredith SPA Land Uses (hereafter referred to as the Reduced Intensity Alternative) the subject site would be developed with the types and configurations of land uses currently proposed but at an aggregate intensity scoped to eliminate or substantively reduce the Project's identified significant and unavoidable air quality impacts, and in so doing would also reduce significant traffic and vehicular-source noise impacts otherwise resulting from the Project. The Reduced Intensity Alternative considered here would reduce the Project's aggregate air quality impacts and would achieve the least restrictive criteria pollutant threshold ($PM_{2.5}$). In this

manner, the Reduced Intensity Alternative would avoid operational-source $PM_{2.5}$ emissions exceedances otherwise occurring under the Project.

1.10.2.3 Alternatives Considered and Rejected

Alternative Sites Considered and Rejected

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." *Guidelines* §15126.6 (f)(1) also provides that when considering the feasibility of potential alternative sites, the factors that may be taken into account are "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context) and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives."

The Project considered herein is not subject to relocation to an alternative site. That is, the Project is in large part defined by its location. In this respect, the Project would implement an Amendment to the Meredith International Centre Specific Plan currently approved for, and applicable only to, the subject site. Moreover, there is not another available property within the City of sufficient acreage and appropriate configuration, with available utilities, access, and provision of public services. Additionally, at a different location, the development would be something other than the Project considered herein. Further, relocation of the Project would likely compromise certain of the basic Project Objectives.

"No Threshold Exceedance" Alternative for Significant Traffic Impacts Considered and Rejected

Specific improvements identified in the Project TIA (EIR Appendix C) and summarized at Draft EIR Section 4.2 would provide a physical solution to identified potentially significant traffic impacts. Notwithstanding, at certain intersections that are either not under the City's plenary control, and/or are subject to right-of-way constraints, timely implementation of improvements required as mitigation for potentially significant cumulative traffic impacts cannot be assured, and impacts are therefore considered cumulatively significant and unavoidable pending completion of the required improvements. Likewise, for all Study Area freeway facilities receiving Project traffic contributions, mitigation of potentially significant cumulative impacts affecting these facilities cannot be autonomously implemented and timely assured by the City or the Project Applicant, and impacts are therefore considered cumulatively significant and unavoidable pending completion of the required improvements. Project traffic impacts at all other Study Area intersections would be less-than-significant, or less-than-significant as mitigated. Please refer also to the discussions of intersection LOS impacts presented at EIR Section 4.2, "Traffic and Circulation."

Any measurable additional traffic contributed to the above-noted facilities would result in significant traffic impacts similar to those occurring under the Project, requiring some manner of currently infeasible mitigation. In that any viable development of the subject site would generate trips likely affecting some or all of the above-referenced facilities, an alternative to the Project developed specifically to alleviate cumulatively significant traffic impacts at Study Area intersections and freeway facilities was not further evaluated. Notwithstanding, the Reduced Intensity Alternative considered herein would act to generally reduce traffic volumes within the Study Area, and would act to diminish the magnitude of traffic impacts, but would not avoid significant traffic impacts affecting extra-jurisdictional facilities.

"No Threshold Exceedance" Alternative for Significant Air Quality Impacts Considered and Rejected

Significant Project construction-source air quality impacts reflect maximum daily emissions generated by site disturbance and construction equipment operations. The acreage disturbed per day and associated construction equipment operations reflect adopted SCAQMD CalEEmod parameters, and would be consistent with any viable development of the subject site. There are no feasible alternative construction scenarios that would substantively reduce emissions and thereby avoid significant Project construction-source air quality impacts. As such, potential alternatives with the specific goal of avoiding significant construction-source air quality impacts resulting from the Project were rejected from consideration, and are not further evaluated in this discussion.

In order to reduce Project operational-source air quality emissions to levels that would preclude exceedance of all SCAQMD thresholds, the Project scope would need to be reduced by approximately 92.5 percent (this would achieve the most restrictive threshold [NO_x] and all subordinate thresholds). At such a reduction in scope, however, the Project Objectives would not be realized in any meaningful sense. As such, potential alternatives with the specific goal of avoiding all significant operational-source air quality impacts resulting from the Project were rejected from consideration, and are not further evaluated in this discussion. Notwithstanding, the Reduced Intensity Alternative would achieve the least restrictive, $PM_{2.5}$ emissions threshold, and would thereby avoid the Project's otherwise significant operational-source $PM_{2.5}$ emissions impacts.

"No Threshold Exceedance" Alternative for Significant Noise Impacts Considered and Rejected.

Project construction-source noise/vibration impacts reflect maximum noise levels generated by likely operations of typical construction equipment. The types and quantities of equipment employed, and associated maximum noise levels generated, would not differ substantively under any reasonable development scenario for the subject site. As such, potential alternatives with the specific goal of avoiding significant

construction-source noise/vibration impacts resulting from the Project were rejected from consideration, and are not further evaluated in this discussion.

Project vehicular-source noise contributions to ambient noise conditions along certain Study Area roadway segments would be individually significant and cumulatively considerable. In these instances, Project vehicular-source noise contributions would range from 1.5 dBA to 1.8 dBA CNEL and would affect roadway segments already subject to unacceptable ambient noise conditions. There is no feasible means to mitigate off-site vehicular-source noise impacts that would result from the addition of Project traffic to the area roadway system. This conclusion is consistent with the findings of The Ontario Plan Environmental Impact Report (TOP EIR) which states in pertinent part: "Buildout of the Proposed Land Use Plan would result in an increase in traffic on local roadways in the City of Ontario, which would substantially increase the noise Environment" . . . and continuing . . . "No mitigation measures are available that would prevent noise levels along major transportation corridors from increasing as a result of substantial increases in traffic volumes"(TOP EIR, p. 5.12-40). As such, potential alternatives with the specific goal of avoiding significant vehicular-source noise impacts resulting from the Project were rejected from consideration, and are not further evaluated in this discussion. It is, however, noted that the projected decrease in traffic volumes resulting from the Reduced Intensity Alternative considered herein would tend to diminish the magnitude of vehicular-source noise impacts otherwise occurring under the Project; and could potentially avoid significant Project-specific vehicular-source noise impacts projected to affect Vineyard Avenue south of Inland Empire Boulevard. Notwithstanding, even absent the Project, significant ambient vehicular-source noise conditions would persist along this roadway segment.

Reduced Intensity Alternative–No Industrial Land Uses Considered and Rejected

Under a Reduced Intensity Alternative–No Industrial Land Uses scenario, the subject site would be developed with only retail/commercial and residential uses and at a development intensity that would (as with the Reduced Intensity Alternative described at Section 5.2.2.2) achieve the least restrictive ($PM_{2.5}$) emissions thresholds, and thereby avoid significant $PM_{2.5}$ emissions impacts otherwise occurring under the Project. Other

significant impacts otherwise occurring under the Project would also tend to be diminished, but would likely remain significant. While this Alternative could avoid or reduce certain of the Project's otherwise significant impacts it was ultimately rejected because it would not substantively achieve certain of the basic Project Objectives. Based on the preceding, the Reduced Intensity Alternative-No Industrial Land Uses is rejected from consideration, and is not further analyzed.

Reduced Intensity Alternative–No Residential Land Uses Considered and Rejected

Under a Reduced Intensity Alternative–No Residential Land Uses scenario, the subject site would be developed with only industrial and retail/commercial uses, and at a development intensity that would (as with the Reduced Intensity Alternative described at Section 5.2.2.2) achieve the least restrictive ($PM_{2.5}$) emissions thresholds, and thereby avoid significant $PM_{2.5}$ emissions impacts otherwise occurring under the Project. Other significant impacts otherwise occurring under the Project would also tend to be diminished, but would likely remain significant. While this Alternative could avoid or reduce certain of the Project's otherwise significant impacts it was ultimately rejected because it would not substantively achieve certain of the basic Project Objectives.

Ontario Plan EIR Development Scenario Alternative Considered and Rejected

As described in The Ontario Plan EIR, the Meredith Mixed Use Area [Project site] is . . . "[e]nvisioned as one of the most intensive developments in Ontario and intended to accommodate an intensive horizontal and vertical mixture of commercial, office, and residential uses based around a transit station . . . (Ontario Plan EIR, p. 3-37, Table 3-3).

Within the context of the Meredith Mixed Use Area development intensities described in The Ontario Plan EIR (>14.0 to 125.0 dwelling units per acre; 3.0 FAR for office and retail uses), the Meredith Mixed Use Area would be developed with up to 7.5 million square feet of commercial/retail/office uses; and up to 2,958 residential units at an average density of 40 dwelling units per acre. In contrast, the Project proposes approximately 3.0 million square feet of industrial uses; up to 800 residential units, and commercial/retail/office uses totaling approximately 1.1 million square feet.

When compared to the Project, the substantively greater development intensities envisioned for the Meredith Mixed Use Area under The Ontario Plan EIR would tend to increase the severity and extent of significant environmental impacts otherwise occurring under the Project. This is contrary to the intent of alternatives analyses under CEQA, which is to identify alternatives to the Project that would avoid or reduce its significant environmental impacts. Moreover, under the Ontario Plan EIR Development Scenario Alternative, no industrial land uses would be permitted or implemented. As noted above at Section 5.2.3.5, exclusion of industrial uses from the site would conflict with or restrict attainment of certain of the basic Project Objectives.

1.10.3 Environmentally Superior Alternative

For the purposes of CEQA, the EIR Alternatives Analysis has identified the Reduced Intensity Alternative-Meredith SPA Land Use Plan as the environmentally superior alternative. Please refer also to EIR Section 5.2 for the complete Alternatives Analysis.

1.11 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.11-1 summarizes potential impacts resulting from implementation and operations of the Project. The impacts identified at Table 1.11-1 correspond with environmental topics and impacts discussed at EIR Section 4.0 "Environmental Impact Analysis." Table 1.10-1 also lists measures proposed to mitigate potentially significant environmental impacts of the Project, and indicates the level of significance after application of proposed mitigation.

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
4.1 Land Use and Planning			
Physically divide an established community or result in land use incompatibilities.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.2 Traffic and Circulation			
Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	Potentially Significant at Study Area Intersections.	*4.2.1* • *Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of the improvements summarized at Table 4.2-21 at the intersection of: I-10 EB Ramp at 4th Street (Study Area Intersection 14);* • *Prior to the issuance of the first Certificate of Occupancy for the Project, the Project Applicant shall construct the improvements summarized at Table 4.2-21 at the intersection of: Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30;*	**Less-Than-Significant Impacts.** The Project Applicant would timely construct required improvements at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30), reducing impacts to levels that are less-than-significant. **Significant and Unavoidable Impacts.** The Project would pay requisite fees toward mitigation of potentially significant

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.2.2 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of Year 2017 improvements as summarized at Table 4.2-21 at the intersections of: • *Archibald Avenue at Arrow Route (Study Area Intersection 2);* • *I-10 EB Ramp at 4th Street (Study Area Intersection 14); and* • *Haven Avenue at 4th Street (Study Area Intersection 25).* *4.2.3 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of Year required 2020 improvements as summarized at Table 4.2-21 at the intersections of:* • *Archibald Avenue at Arrow Route (Study Area Intersection 2);* • *I-10 EB Ramp at 4th Street (Study Area Intersection 14);* • *Archibald Avenue at 4th Street (Study Area Intersection 23)* • *Haven Avenue at 4th Street (Study Area Intersection 25);* • *Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and* • *Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32)*	cumulative traffic impacts, thereby fulfilling the Project's mitigation requirements. Notwithstanding, due to jurisdictional limitations and/or right(s)-of-way constraints, Project traffic impacts at the following Study Area intersections are considered cumulatively significant and unavoidable under at least one of the TIA analysis scenarios (Existing Conditions, Year 2017 Conditions, Year 2020 Conditions, and/or Year 2035 Conditions): • *Archibald Avenue at Arrow Route (Study Area Intersection 2);* • *Baker Avenue at 8th Street (Study Area Intersection 3);* • *Hellman Avenue at 6th Street (Study Area Intersection 9);* • *Haven Avenue at 6th Street (Study Area Intersection 12);* • *I-10 EB Ramp at 4th Street*

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.2.4 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of Year 2035 improvements as summarized at Table 4.2-24 at the intersections of: • *Archibald Avenue at Arrow Route (Study Area Intersection 2);* • *Baker Avenue at 8th Street (Study Area Intersection 3);* • *Hellman Avenue at 6th Street (Study Area Intersection 9);* • *Haven Avenue at 6th Street (Study Area Intersection 12);* • *Vineyard Avenue at 4th Street (Study Area Intersection 20);* • *Archibald Avenue at 4th Street (Study Area Intersection 23);* • *Haven Avenue at 4th Street (Study Area Intersection 25); and* • *Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28)*	*(Study Area Intersection 14);*[1] • *Vineyard Avenue at 4th Street (Study Area Intersection 20);* • *Archibald Avenue at 4th Street (Study Area Intersection 23);* • *Haven Avenue at 4th Street (Study Area Intersection 25);* • *Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and* • *Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32).*

[1] Significant impacts at I-10 EB Ramp at 4th Street (Study Area Intersection 14) under the "Existing Plus Project" analytic scenario are considered Project-specific.

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.2.5 Prior to the issuance of building permits, the Project applicant shall participate in the City's DIF program and in addition shall pay the Project's fair share for the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 in the amount(s) agreed to by the City and Project Applicant. The City shall ensure that the improvements specified at Mitigation Measures 4.2.1 through 4.2.4 which are under the City of Ontario jurisdiction be constructed pursuant to the fee program at that point in time necessary to avoid identified potentially significant impacts. *4.2.6 Certain of the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 are proposed for intersections that either share a mutual border with the City of Rancho Cucamonga or are wholly located within the City of Rancho Cucamonga. Because the City of Ontario does not have plenary control over intersections that share a border with the City of Rancho Cucamonga or are wholly located within the City of Rancho Cucamonga, the City of Ontario cannot guarantee that such improvements will be constructed. Thus, the following additional mitigation is required: The City of Ontario shall participate in a multi-jurisdictional effort with the City of Rancho Cucamonga to develop a study to identify fair share contribution funding sources*	

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		attributable to and paid from private and public development to supplement other regional and State funding sources necessary to implement the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 that are located in the City of Rancho Cucamonga. The study shall include fair-share contributions related to private and or public development based on nexus requirements contained in the Mitigation Fee Act (Govt. Code § 66000 et seq.) and 14 Cal. Code of Regs. §15126.4(a)(4) and, to this end, the study shall recognize that impacts attributable to City of Rancho Cucamonga facilities that are not attributable to development located within the City of Ontario are not paying in excess of such developments' fair share obligations. The fee study shall also be compliant with Government Code § 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other agreed-upon relevant criteria for implementation of the recommendations contained within the study to the extent the other agencies agree to participate in the fee study program. Because the City of Ontario and the City of Rancho Cucamonga are responsible to implement this mitigation measure, the Project Applicant shall have no compliance obligations with respect to this Mitigation Measure.	

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.2.7 Fair-share amount(s) agreed to by the City and Project Applicant for non-DIF improvements at intersections that share a mutual border with the City of Rancho Cucamonga, or are wholly located within the City of Rancho Cucamonga, shall be paid by the Applicant to the City of Ontario prior to the issuance of the Project's final certificate of occupancy. The City of Ontario shall hold the Project Applicant's Fair Share Contribution in trust and shall apply the Project Applicant's Fair Share Contribution to any fee program adopted or agreed upon by the City of Ontario and the City of Rancho Cucamonga as a result of implementation of Mitigation Measure 4.2.6. If, within five (5) years of the date of collection of the Project Applicant's Fair Share Contribution the City of Ontario and the City of Rancho Cucamonga do not comply with Mitigation Measure 4.2.6, then the Project Applicant's Fair Share Contribution shall be returned to the Project Applicant. *4.2.8 Certain of the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 are proposed for intersections under shared City of Ontario/Caltrans jurisdiction. Because the City of Ontario does not have plenary control over intersections under shared City of Ontario/Caltrans jurisdiction, the City of*	

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		Ontario cannot guarantee that such improvements will be constructed. Thus, the following additional mitigation is required: The City of Ontario shall participate in a multi-jurisdictional effort with Caltrans to develop a study to identify fair share contribution funding sources attributable to and paid from private and public development to supplement other regional and State funding sources necessary to implement the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 that are under shared City of Ontario/Caltrans jurisdiction. The study shall include fair-share contributions related to private and or public development based on nexus requirements contained in the Mitigation Fee Act (Govt. Code § 66000 et seq.) and 14 Cal. Code of Regs. §15126.4(a)(4) and, to this end, the study shall recognize that impacts attributable to Caltrans facilities that are not attributable to development located within the City of Ontario are not paying in excess of such developments' fair share obligations. The fee study shall also be compliant with Government Code § 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other agreed-upon relevant criteria for implementation of the recommendations contained within the study to the extent the other agencies agree to participate in the fee study program. Because	

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Summary of Impacts and Mitigation

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		the City of Ontario and Caltrans are responsible to implement this mitigation measure, the Project Applicant shall have no compliance obligations with respect to this Mitigation Measure. *4.2.9 Fair-share amount(s) agreed to by the City and Project Applicant for non-DIF improvements at intersections that are under City of Ontario/Caltrans jurisdiction, shall be paid by the Applicant to the City of Ontario prior to the issuance of the Project's final certificate of occupancy. The City of Ontario shall hold the Project Applicant's Fair Share Contribution in trust and shall apply the Project Applicant's Fair Share Contribution to any fee program adopted or agreed upon by the City of Ontario and Caltrans as a result of implementation of Mitigation Measure 4.2.8. If, within five (5) years of the date of collection of the Project Applicant's Fair Share Contribution the City of Ontario and Caltrans do not comply with Mitigation Measure 4.2.8, then the Project Applicant's Fair Share Contribution shall be returned to the Project Applicant.*	

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	Potentially Significant at Study Area freeway facilities.	Mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. Germane to the Project, 1-10 Corridor Project and I-15 Corridor Project and Comprehensive Corridor Study would, when implemented, act to improve regional freeway operations, including freeways serving the Project. However, all freeway facilities within the Study Area are under Caltrans jurisdiction, and there is no mechanism by which the Lead Agency (City of Ontario) or the Project Applicant can autonomously construct, or guarantee the construction of, any improvements to these freeways segments. Traditional funding mechanisms used to improve the freeway mainline include San Bernardino County's Measure "I" retail sales tax revenue for transportation, state and federal gas tax, and formula distributions from vehicle registration fees. Future employees/patrons of the project contribute indirectly to freeway improvements through these sources. State Highway improvements are programmed pursuant to the State Transportation Improvement Program (STIP).	**Significant and Unavoidable.** Project traffic would contribute to cumulatively significant impacts affecting at analyzed freeway facilities within the Study Area. There are no feasible means for the Project Applicant or the City of Ontario to mitigate cumulatively significant freeway facilities impacts, and these impacts are accordingly recognized as cumulatively significant and unavoidable.[2]

[2] Under Existing Plus Project Conditions (Project Buildout) Project-specific traffic contributions to eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21) would be considered significant.

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Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	Potentially Significant.	Please refer to Mitigation Measures 4.2.1 through 4.2.9.	**Significant and Unavoidable.** The Project would pay all requisite fees for improvements at Study Area CMP facilities. However, based on jurisdictional constraints and/or right(s) of way limitations, timely completion of improvements required for mitigation of cumulatively significant impacts at CMP facilities within the Study Area cannot be assured. Pending completion of required improvements, Project contributions to impacts affecting Study Area CMP facilities are therefore considered cumulatively considerable.
Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.3 Air Quality			
Conflict with or obstruct implementation of the applicable air quality plan.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	Potentially Significant.	*4.3.1 The following requirements shall be incorporated into Project plans and specifications in order to ensure implementation of SCAQMD Rule 403 and limit fugitive dust emissions:* • *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour;* • *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day;*	**Significant and Unavoidable.** Even with the application of mitigation, the following impacts would remain significant: • Project construction-source emissions would exceed applicable SCAQMD regional thresholds for VOC, NO_x, and CO. • Under 2017 conditions, Project operational-source VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions would

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		• *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less; and* • *Only "Zero-Volatile Organic Compounds" paints (no more than 150 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used.* *4.3.2 Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.* *4.3.3 During grading activity, all rubber tired dozers and scrapers (≥ 150 horsepower) shall be CARB Tier 3 Certified or better. Additionally, during grading activity, total horsepower-hours per day for all equipment shall not exceed 149,840; and the*	exceed applicable regional thresholds. [4] • Under 2020 conditions, Project operational-source VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions would exceed applicable regional thresholds.

[4] Under 2017 Interim Development Conditions, the Project AQIA indicates the operational-source $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds. If employing the *Draft Warehouse Truck Trip Study* protocols and assumptions, there would be a $PM_{2.5}$ emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source $PM_{2.5}$ emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions. Please refer also to the supplemental air quality analyses presented at EIR Appendix D.

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		maximum (actively graded) disturbance area shall not exceed 26 acres per day. 4.3.4 *Prior to the issuance of building permits, the Project Applicant shall submit energy demand calculations to the City (Planning and Building Departments) demonstrating that the increment of the Project for which building permits are being requested would achieve a minimum 5% increase in energy efficiencies beyond incumbent California Building Code Title 24 performance standards. Representative energy efficiency/energy conservation measures to be incorporated in the Project would include, but would not be limited to, those listed below (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that would comparably reduce energy consumption and promote energy conservation would also be acceptable):* • *Increase in insulation such that heat transfer and thermal bridging is minimized;* • *Limit air leakage through the structure and/or within the heating and cooling distribution system;* • *Use of energy-efficient space heating and cooling equipment;*	

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		• *Installation of electrical hook-ups at loading dock areas;* • *Installation of dual-paned or other energy efficient windows;* • *Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards;* • *Installation of automatic devices to turn off lights where they are not needed;* • *Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;* • *Design of buildings with "cool roofs" using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;* • *Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; and* • *Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.*	

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		4.3.5 The developer of the industrial phase of the Project (Planning Area 1) will install on the roofs of the warehouse buildings a photo-voltaic electrical generation system (PV system) capable of generating 1,600,000 kilowatt hours per year.[3] The developer may install the required PV system in phases on a pro rata square foot basis as each building is completed; or if the PV system is to be installed on a single building, all of the PV system necessary to supply the PV estimated electrical generation shall be installed within two years (24 months) of the first building that does not include a PV system receives a certificate of occupancy.	
Expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant. (Project exposure to freeway-source pollutants)	*4.3.6 Residential units within the Project site shall include the installation and maintenance of air filtration systems with efficiencies equal to or exceeding a Minimum Efficiency Reporting Value (MERV) 16 as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2.*	**Less-Than-Significant.** Application of Mitigation Measure 4.3.6 would ensure that Project sensitive receptors (Project residential uses) would not be exposed to substantial pollutant concentrations
Create objectionable odors affecting a substantial number of people.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-	Potentially Significant.	Please refer to Mitigation Measures 4.3.1 through 4.3.5.	**Significant and Unavoidable.** Mitigation Measures 4.3.1 through 4.3.5 would reduce

[3] This electricity generation estimate is based on the amount of electricity to be consumed within Planning Area 1 at buildout and full occupancy.

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attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.			Project construction-source and operational-source emissions to the extent feasible. However, construction-source VOC and NOx emission exceedances, and operational-source VOC, NOx, PM_{10}, and $PM_{2.5}$ emissions exceedances would persist, and would result in a cumulatively considerable net increase in ozone, PM_{10}, and $PM_{2.5}$ for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. These impacts would be cumulatively considerable even with the application of mitigation.
4.4 Global Climate Change and Greenhouse Gas Emissions			
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less-Than-Significant.	No mitigation is necessary. GHG emissions would nonetheless be reduced coincident with criteria pollutant emissions reductions achieved by Mitigation Measures 4.3.1 through 4.3.6.	Not applicable.
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant.	No mitigation is necessary. GHG emissions would nonetheless be reduced coincident with criteria pollutant emissions reductions achieved by Mitigation Measures 4.3.1 through 4.3.6.	Not applicable.

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Summary of Impacts and Mitigation

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4.5 Noise			
Project construction activities and associated noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Potentially Significant.	4.5.1 *Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating Project construction activities shall occur between the permitted hours of 7:00 a.m. and 6:00 p.m. on weekdays, or Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays. The Project construction supervisor shall ensure compliance with the note and the City shall conduct periodic inspection at its discretion.* 4.5.2 *Install temporary noise control barriers that provide a minimum noise level attenuation of 10.0 dBA when Project construction occurs near existing noise-sensitive structures. The noise control barrier must present a solid face from top to bottom. The noise control barrier must be high enough and long enough to block the view of the noise source. Unnecessary openings shall not be made.* • *The noise barriers must be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired.*	**Significant and Unavoidable.** Even with the incorporation of Mitigation Measures 4.5.1 through 4.5.5, construction-source noise levels would likely exceed applicable standards at certain receptors.

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		• *The noise control barriers and associated elements shall be completely removed and the site appropriately restored upon the conclusion of the construction activity.* 4.5.3 *During all Project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receivers nearest the Project site.* 4.5.4 *The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receivers nearest the Project site (i.e., to the south) during all Project construction.* 4.5.5 *The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, or Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays). The Project Applicant shall prepare a haul route exhibit*	

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		for review and approval by the City of Ontario Planning Division prior to commencement of construction activities. The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.	
Project construction activities and associated noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Construction noise is not considered a source of permanent noise increases, and associated threshold questions are not germane.	Not Applicable.	Not Applicable.
Project construction activities and associated noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Potentially Significant.	Please refer to Mitigation Measures 4.5.1 through 4.5.5.	**Significant and Unavoidable.** While the preceding Mitigation Measures 4.5.1 through 4.5.5 will reduce construction noise to the extent feasible, it is anticipated that noise associated with the construction of the Project would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

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Project vehicular source noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the City's General Plan or Noise Ordinance, or other applicable standards of other agencies.	Potentially Significant.	*4.5.6 First floor residential patio areas adjacent to Inland Empire Boulevard shall include the construction of 6-foot high noise barriers.* *4.5.7 All residential uses proposed within the Specific Plan shall be equipped with a means of mechanical ventilation (e.g., air conditioning).* *4.5.8 All second floor residential façades facing Inland Empire Boulevard shall require upgraded windows with a minimum STC rating of 29.*	**Less-Than-Significant Impacts.** Implementation of Mitigation Measures 4.5.6 through 4.5.8 would reduce on-site exterior and interior noise to less-than-significant levels consistent with applicable standards. **Significant and Unavoidable Impacts.** Project vehicular-source noise contributions to ambient noise conditions affecting certain Study Area roadways would exceed applicable standards, and would be individually significant and cumulatively considerable. No mitigation measures are available that would prevent noise levels along major transportation corridors from increasing as a result of substantial increases in traffic volumes.

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Project vehicular source noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Vehicular-source noise is addressed as a permanent source of noise, rather than a temporary or periodic source of noise increases. As such, associated threshold questions are not germane.	Not Applicable.	Not Applicable.
Project vehicular source noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Potentially Significant.	Please refer to Mitigation Measures 4.5.6 through 4.5.8.	**Less-Than-Significant Impacts.** Implementation of Mitigation Measures 4.5.6 through 4.5.8 would reduce on-site exterior and interior noise to levels not considered to be a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. **Significant and Unavoidable Impacts.** Project vehicular-source noise contributions to ambient noise conditions along affecting certain Study Area roadways

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			would represent a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. No mitigation measures are available that would prevent noise levels along major transportation corridors from increasing as a result of substantial increases in traffic volumes.
Project operational noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the City's General Plan or Noise Ordinance.	Less-Than-Significant.	*4.5.9 If the Project is developed under the Option A scenario:* • *Construct the recommended 8-foot high noise barriers at the western and eastern boundaries of Planning Area 4, as shown on Exhibit 10-A of the Noise Impact Analysis.* *4.5.10 If the Project is developed under the Option B scenario:* • *Construct the recommended 8-foot high noise barriers at the western and eastern boundaries of Planning Area 4, as shown on Exhibit 10-B of the Noise Impact Analysis.* • *Construct the recommended 8-foot high noise barrier at the southern property boundary at the existing school, as shown on Exhibit 10-B of the Noise Impact Analysis.*	To further reduce potential operational noise levels received at adjacent residential land uses, Project Noise Impact Analysis recommendations are incorporated here as mitigation.

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		4.5.11 All trucks, tractors, and forklifts shall be operated with proper operating and well maintained mufflers. *4.5.12 Maintain quality pavement conditions that are free of bumps to minimize truck noise.* *4.5.13 The truck access gates and loading docks within the truck court on the project site shall be posted with signs which state:* • *Truck drivers shall turn off engines when not in use;* • *Diesel trucks servicing the Project shall not idle for more than five (5) minutes; and* • *Post telephone numbers of the building facilities manager to report violations.*	
Project operational noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Project operational noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would expose people residing or working in the project area to excessive noise levels.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise.	Potentially Significant.	4.5.14 *The operation of heavy equipment shall only occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, or Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays, and avoided at the Project site boundary nearest receiver location R4 whenever feasible.*	**Significant and Unavoidable.** Even with the incorporation of Mitigation Measures 4.5.14 construction-source vibration levels would likely exceed applicable standards at certain receptors.
4.6 Hazards/Hazardous Materials			
Create a significant hazard to the public or the environment through emitting hazardous emissions or handling acutely hazardous materials, substances, or waste within one-quarter of a mile of an existing or proposed school.	Potentially Significant.	4.6.1 *Prior to the issuance of grading permits, soil samples shall be taken from various areas of the Project site. Any soils found to contain pesticide levels in excess of the residential and/or industrial/commercial soil screening levels (presented in Table 4.6-1 of this EIR) shall be treated onsite or disposed of offsite, consistent with Section 4.6.4.5 of this EIR. Additional samples shall be collected from the perimeter and bottom of the excavation to confirm that pesticide concentrations in excess of the screening levels do*	**Less-Than-Significant.** Application of Mitigation Measures 4.6.1 and 4.6.2 would ensure that the potential for the Project to create a significant hazard to the public or the environment through emitting hazardous emissions or handling acutely hazardous materials, substances, or waste within one-quarter of a mile of

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		not remain. Any additional impacted soil identified during this process shall be removed and additional confirmatory samples shall be obtained until non-actionable concentrations are obtained. 4.6.2 *Prior to demolition or major renovations to the Italo M. Bernt School, a comprehensive asbestos and LBP survey shall be completed of suspect materials. If discovered, ACMs and peeling LBP shall be removed and disposed of by a State-licensed abatement contractor prior to demolition/renovation. Similarly, if during grading activities, buried asbestos-containing transite pipes are discovered, these materials shall also be removed and disposed of by a State-licensed abatement contractor.* *The Project developer shall submit documentation to the City Building Department that asbestos and lead-based paint issues are not applicable to their property, or that appropriate actions, as detailed in Section 4.6.4.5 of this EIR, will be taken to abate asbestos or lead-based paint issues prior to development of the site.*	an existing or proposed school is reduced to a level that is less-than-significant.

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Result in a safety hazard for people residing or working in the project area for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.7 Public Services and Utilities			
Result in or cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire or police protection services or schools.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; Comply with federal, state, and local statutes and regulations related to solid waste.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.8 Hydrology and Water Quality			
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or substantial erosion or siltation on- or off-site; Create or contribute runoff water which would exceed the capacity of the existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.9 Biological Resources			
Substantially affect, either directly or through habitat modifications, any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife	Potentially Significant.	*4.9.1 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable*	**Less-Than-Significant.** Application of Mitigation Measures 4.9.1 through 4.9.7 would ensure that the potential for the Project to substantially affect, either directly or through habitat modifications, any

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
(CDFW) or United States Fish and Wildlife Service (USFWS).		*habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Project Biologist). The Project Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Project Applicant to the City Planning Department. If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Project Biologist, the nesting cycle is complete or it is concluded that the nest has failed. In addition, the Project Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.* 4.9.2 *Burrowing Owl Avoidance: Breeding season avoidance measures for the burrowing owl including, but not limited to, those that follow shall be implemented. A pre-construction survey for resident burrowing owls shall be conducted by a qualified Project Biologist within 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site will*	species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS) is reduced to a level that is less-than-significant.

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Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		be resurveyed for owls. Pre-construction survey methodology shall be based on Appendix D (Breeding and Non-breeding Season Surveys and Reports) of the CDFW Staff Report on Burrowing Owl Mitigation (CDFW) March 7, 2012 (CDFW Burrowing Owl Mitigation Staff Report). Results of the pre-construction survey shall be provided to CDFW and the City. If the pre-construction survey does not identify burrowing owls on the Project site, then no further mitigation shall be required. If burrowing owls are found to be utilizing the Project site during the pre-construction survey, measures shall be developed by the Project Biologist in coordination with CDFW to avoid impacting occupied burrows during the nesting period. These measures shall be based on the most current CDFW protocols and would minimally include establishment of buffer setbacks from occupied burrows and owl monitoring during Project construction activities. 4.9.3 *Burrowing Owl Passive Exclusion: During the non-breeding season (September 1 through January 31), if burrows occupied by migratory or non-migratory resident burrowing owls are detected during a pre-construction survey, then burrow exclusion and/or closure may be used to passively exclude owls from*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		those burrows. Burrow exclusion and/or closure shall only be conducted by the Project Biologist in consultation and coordination with CDFW employing incumbent CDFW guidelines. *4.9.4 Mitigation for Displaced Owls: In consultation with the City, Project Applicant, Project Biologist, and CDFW, and consistent with mitigation strategies outlined in the CDFW Burrowing Owl Mitigation Staff Report, a mitigation plan shall be developed for the "take" of any owls displaced through Project construction activities. Strategies may include, but are not limited to, participation in the permanent conservation of off-site habitat replacement area(s), and/or purchase of available burrowing owl conservation bank credits.* *4.9.5 Prior to the issuance of any grading permits and prior to any physical disturbance of any possible jurisdictional areas, the Applicant shall obtain a Regional Board 401 Certification, or a written waiver of the requirement for such an agreement or permit, from the California Regional Water Quality Control Board. Written verification of such a permit or waiver shall be provided to the City of Ontario Planning Department.*	

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.9.6 Prior to the issuance of any grading permits and prior to any physical disturbance of any possible jurisdictional areas, the Applicant shall obtain a stream bed alteration agreement or permit, or a written waiver of the requirement for such an agreement or permit, from the California Department of Fish and Wildlife. Information to be provided as part of the Streambed Alteration Agreement (if required) shall include but not be limited to the following: • *Delineation of lakes, streams, and associated habitat that will be temporarily and/or permanently impacted by the proposed project (include an estimate of impact to each habitat type);* • *Discussion of avoidance measures to reduce project impacts; and,* • *Discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance.* *Written verification of such a streambed alteration agreement/permit, or waiver, shall be provided to the City of Ontario Planning Department.*	

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.9.7 Prior to the issuance of any grading permits and prior to any physical disturbance of any possible jurisdictional areas, the Applicant shall obtain a 404 permit, or a written waiver of the requirement for such an agreement or permit, from the U.S. Army Corps of Engineers. Written verification of such a permit or waiver shall be provided to the City of Ontario Planning Department.	
4.10 Geology and Soils			
Exposure of people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction; Location on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	Potentially Significant.	*4.10.1 Design and development of the Project shall comply with recommendations and performance standards identified within the Final Geotechnical Study. Where the Project Geotechnical Study is silent, requirements of the California Building Code as adopted and implemented by the City shall prevail.*	**Less-Than-Significant.** Application of Mitigation Measure 4.10.1 would ensure that the potential for the Project to result in exposure of people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction; Location on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is reduced to a level that is less-than-significant.

Table 1.11-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
Location on expansive soil, as defined in Table 18-1-B of the California Building Code (2010), thereby creating substantial risks to life or property.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.11 Cultural Resources			
Cause a substantial adverse change in the significance of historic and archaeological resources as defined in §15064.5.	Less-Than-Significant.	*4.11.1 Prior to development approval on the Project site and issuance of any grading, building, or other permit authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:* *"If during grading or construction activities, cultural resources are discovered on the Project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and any affected Tribes (Tribes). Any unanticipated cultural resources that are discovered shall be evaluated and a final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe determines the*	Although the likelihood for archaeological and historic resources to exist onsite is considered extremely low, Mitigation Measures 4.11.1 through 4.11.7 have been incorporated to fully ensure the protection of cultural resources that may be present in a buried context within the Project area.

Table 1.11-1
Summary of Impacts and Mitigation

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required under Mitigation Measure 4.9.2." 4.11.2 *At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact potentially affected Tribes to notify the Tribes of grading, excavation, and the monitoring program and to coordinate with the City of Ontario and the Tribes to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; Project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.*	

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Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.11.3 Prior to development approval on the Project site and issuance of any grading, building, or other permit authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation: *"If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the San Bernardino County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98"*	

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Summary of Impacts and Mitigation

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.11.4 All cultural materials, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by Mitigation Measure 4.9.2, that are collected during the grading monitoring program and from any previous archeological studies or excavations on the Project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the affected Tribe's/Tribes' curation facility(ies), which meets the standards set forth in 36 CRF Part 79 for federal repositories. *4.11.5 All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the affected Tribe(s). To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.*	

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Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.11.6 Prior to development approval on the Project site and issuance of any grading, building, or other permit authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation: *"If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the Project archeologist, and the Tribe(s) shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Ontario Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Tribe(s). Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Ontario. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to*	

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Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4." *4.11.7 To address the possibility that cultural resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural and/or paleontological resources.*	
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Potentially Significant	*4.11.8 Any excavation exceeding eight feet below the current grade shall be monitored by a qualified paleontologist. If older alluvial deposits are encountered at shallower depths, monitoring shall be initialed once these deposits are encountered. A qualified paleontologist is defined as an individual with an M.S. or a Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques. A paleontological monitor may be retained to perform the on-site monitoring in place of the qualified paleontologist.*	**Less-Than-Significant.** Application of Mitigation Measure 4.11.8 would ensure that the potential for the Project to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature is reduced to a level that is less-than-significant.

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Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		The paleontological monitoring program should follow the local protocols of the Western Center (Hemet) and/or the San Bernardino County Museum and a paleontological monitoring plan should be developed prior to the ground altering activities. The extent and duration of the monitoring can be determined once the grading plan is understood and approved. The paleontological monitor shall have the authority to halt any Project-related activities that may be adversely impacting potentially significant resources. If paleontological resources are uncovered or otherwise identified, they shall be recovered, analyzed in accordance with standard guidelines, and curated with the appropriate facility (e.g., the Western Center at the Diamond Valley Reservoir, Hemet).	
4.12 Aesthetics			
Project would have a substantial adverse effect on a scenic vista.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Project would substantially degrade the existing visual character or quality of the site and its surroundings	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Summary of Impacts and Mitigation

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
4.13 Population and Housing			
Induce substantial population growth in the area, either directly or indirectly.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Substantively affect applicable City of Ontario Policy Plan Goals and Policies addressing employment/housing balance.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Conflict with or obstruct implementation of the Policy Plan Housing Element.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

2.0 INTRODUCTION

2.0 INTRODUCTION

2.1 OVERVIEW

This Environmental Impact Report (DEIR or EIR) evaluates and discloses potential environmental impacts of the proposed Meredith International Centre Specific Plan Amendment Project (Project, SPA). In summary, the Project proposes a mix of industrial, commercial, and residential land uses on approximately 257 acres located in the northern portion of the City of Ontario, within San Bernardino County. Elements of the Project are further described at EIR Section 3.0, "Project Description."

An EIR is an informational document intended to inform decision-makers and the general public of potentially significant environmental impacts of a Project. An EIR also identifies possible ways to preclude or minimize these potentially significant impacts (referred to as mitigation) and describes reasonable alternatives to the Project that may also reduce or avoid significant impacts. Having the authority to take action on the Project, the City of Ontario will consider the information in this EIR in their evaluations of the proposal. The findings and conclusions of the EIR regarding environmental impacts do not control the City's discretion to approve, deny, or modify the Project, but instead are presented as information to aid the decision-making process.

2.2 AUTHORIZATION

This EIR has been prepared by the City of Ontario in accordance with the *Guidelines for the Implementation of the California Environmental Quality Act (CEQA Guidelines)*, (Sections 15000-15387 of the California Code of Regulations), and the City *CEQA Guidelines*. The Meredith International Centre SPA considered in this EIR is a "project," as defined by Section 15378 of the *CEQA Guidelines*. The *CEQA Guidelines* stipulate that an EIR must be prepared for any project that may have a significant impact on the environment.

Upon initial environmental review of the Project, the City determined that the Meredith International Centre may have a significant adverse impact on the environment and, therefore, the preparation of an EIR was required.

2.3 LEAD AND RESPONSIBLE AGENCIES

CEQA defines a "lead agency" as the public agency which has the principal responsibility for carrying out or approving a Project which may have a significant effect upon the environment. Other agencies, e.g., the California Department of Transportation (Caltrans), the South Coast Air Quality Management District (SCAQMD) or the Regional Water Quality Control Board (RWQCB), which also have some authority or responsibility to issue permits for Project implementation, are designated as "responsible agencies." Both the lead agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving the Project. The City of Ontario is the lead agency for the Project.

The City's address is:	City of Ontario 303 East "B" Street Ontario, CA 91764
Contact Person:	Mr. Richard Ayala, Senior Planner

2.4 PROJECT APPLICANT

The Project Applicant is:	Sares-Regis Group Attention: Patrick Russell 18802 Bardeen Avenue Irvine, CA 92612

2.5 THE EIR PROCESS

When a public agency determines that there is substantial evidence that a Project may have a significant effect on the environment, the agency must prepare an EIR before a decision is made to approve or deny the Project. The purpose of the EIR is to disclose a project's potential environmental impacts and recommend measures to reduce or avoid significant impacts. The basic content of an EIR includes a description of the project under consideration and its objectives, a description of the existing project site and vicinity environmental conditions, a discussion of the potentially significant environmental effects of the project, recommended measures for reducing these effects, and identification and evaluation of feasible alternatives to the project which may also reduce potentially significant impacts of the proposal.

Typically, EIRs consist of two documents: a Draft EIR, distributed by the lead agency for review and comment by the general public and any interested governmental agencies; and a Final EIR, which consists of responses to comments received on, together with any necessary modifications to, the Draft EIR. After the Draft EIR has been circulated for review and the Final EIR has been prepared, the EIR must be certified by the lead agency as having complied with CEQA and considered by the agency's decision-making body before any action can be taken on a project.

When a public agency receives a complete project application or decides to undertake a Project of its own, it first determines if the project is subject to environmental review under CEQA and, if it is, the agency then typically prepares an Initial Study (IS) to determine if the project has the potential to cause significant adverse environmental effects. The IS serves as a tool to help the agency determine if an EIR is needed and also helps determine what issues should be examined in the EIR. An agency may skip the Initial Study process if it is evident in the preliminary assessment of a project that an EIR will be required.

The EIR process is initiated by the distribution of a Notice of Preparation (NOP). Together with the Initial Study, the NOP is sent to agencies and interested individuals

to solicit their suggestions for appropriate issues and types of analysis to be included in the Draft EIR. When preparation of the Draft EIR has been completed, it is circulated to responsible agencies, other affected or interested agencies, and interested members of the public for review and comment. The review period for a Draft EIR is typically 45 days. To provide for appropriate consideration in the Final EIR, all comments and concerns regarding the Draft EIR should be received by the lead agency during this 45-day period.

Responses to comments received on the Draft EIR are prepared by the lead agency and included in the Final EIR. The Final EIR may also contain some additional information about the project's potential impacts and minor corrections or modifications to the Draft EIR. The Final EIR must be certified by the lead agency's decision-making body before, or in conjunction with, any action to approve or deny a project.

CEQA requires that the EIR only address significant adverse impacts. The *CEQA Guidelines* suggest thresholds or standards which define the significance of various types of impacts. The *CEQA Guidelines* also state that the significance of impacts should be considered in relation to their severity and probability of occurrence. However, ultimately, the determination of the significance of impacts is at the discretion of the lead agency. The identification of significant impacts in the EIR does not prevent an agency from approving a project. A project may be approved if the lead agency determines that impacts cannot be feasibly mitigated below a level of significance and if the agency determines that there are important overriding considerations, such as social and economic benefits, which are sufficient to justify approval of the considered project.

2.6 EIR CONTENT AND FORMAT

This EIR is organized into seven Chapters or Sections, each addressing a separate aspect of the required content of an EIR as described in the *CEQA Guidelines*. A summary of the Project's impacts and recommended mitigation measures is provided at Chapter 1.0. An introduction and general overview of the environmental process and the format of this EIR can be found at Chapter 2.0. Chapter 3.0 contains a complete description of the

Project, including its location, objectives, and physical and operational characteristics. The complete and detailed environmental impact analysis is presented at Chapter 4.0. The topical issues mandated by CEQA dealing with cumulative impacts, alternatives, long-term implications of the Project, and energy conservation are found at Chapter 5.0. Chapter 6.0 lists and defines the acronyms and abbreviations contained in this document. Chapter 7.0 lists the information sources and persons consulted during the environmental analysis process, and presents a list of the persons who prepared the EIR. The Initial Study and responses to the NOP, with supporting technical studies, are appended to the primary EIR document.

Chapter 4.0, entitled "Environmental Impact Analysis," is the focal component of the EIR. The environmental impact analysis has been organized into a series of sections, each addressing an environmental topic or area of concern identified through the Initial Study process (e.g., Land Use and Planning, Traffic and Circulation, Air Quality, Noise, etc.). To assist the reader in understanding the organization and basis of the analysis, the sections covering each individual environmental topic are typically divided into the following subsections:

- **Reader's Abstract:** An introductory reader's abstract, summarizing content and findings, is provided at the beginning of each topical section.

- **Introduction:** The introduction summarizes the content of the section and references other important studies and reports, such as technical studies appended to the EIR.

- **Setting:** This subsection describes environmental conditions at the Project site and in its vicinity which may be subject to change as a result of implementation of the proposal. Separate descriptions of existing environmental conditions are provided for each environmental topic.

- **Existing Policies and Regulations:** Various relevant policies, regulations, and programs related to the environmental topic are briefly described. Often, these existing policies and regulations serve to reduce or avoid potential environmental impacts.

- **Standards of Significance:** Before potential impacts are evaluated, the standards which will serve as the basis for judging significance are presented.

- **Potential Impacts and Mitigation Measures:** This subsection states and explains potential impacts caused by the Project. Based on the standards of significance, impacts are categorized as either potentially significant or less-than-significant. If the impacts are considered to be potentially significant, mitigation measures are proposed to reduce the impacts. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of feasible mitigation measures. Impacts that cannot be reduced to levels that are less-than-significant are identified as "significant."

The summary presented at Chapter 1.0 provides a comprehensive overview of the Project's impacts. For a more detailed description of Project impacts, it is recommended that the reader review the Project description (Chapter 3.0), and then read the sections on the topics of interest in the environmental impact analysis (Chapter 4.0).

2.7 INTENDED USE OF THIS EIR

This EIR addresses the potential environmental effects of the implementation and operation of the proposed Meredith International Centre Specific Plan Amendment Project. The City of Ontario (City) is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for deciding whether or not to approve the Project, and how it will be implemented. As the Lead Agency, the City is also responsible for preparing the environmental documentation for the Project in compliance with CEQA.

The Lead Agency will employ this EIR in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Project, to include potential effects of the Project's component elements. It is anticipated that this EIR may also be employed by Responsible Agencies, e.g., Air Quality Management District(s), Regional Water Quality Control Board(s), *et al*.; as well as utilities and service providers for their related or dependent environmental analyses.

In employing this EIR, the City and other agencies need recognize that Project plans and development concepts identified herein are just that, plans and concepts which are subject to refinement and the Project is further defined. Recognizing the potential for these future minor alterations to the Project, this EIR in all instances evaluates likely maximum impact scenarios that would account for these minor alterations. These refinements and/or minor revisions to development proposals do not typically warrant modified or revised environmental documentation. Notwithstanding, at the discretion and direction of the City, substantive modifications to the Project described herein may warrant additional environmental evaluation.

2.8 DOCUMENTS INCORPORATED BY REFERENCE

Section 15150 of the State *CEQA Guidelines* permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant data. The documents summarized below are incorporated by reference, and the pertinent material is summarized throughout this EIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the City of Ontario Planning Department. Technical studies cited below were specifically developed in conjunction with the Project, and are appended to the EIR.

2.8.1 City of Ontario Policy Plan (General Plan)

The Policy Plan serves as the City's General Plan which is mandated by state law. The City of Ontario Policy Plan (General Plan) establishes Goals and Policies and provides guidance for future development of the City. The General Plan, which was updated and

adopted in 2010, incorporates and relies upon its Implementation Plan to provide the guidance necessary for successful implementation of General Plan Goals and Policies. Ontario's General Plan is made up of nine elements: Land Use, Housing, Mobility, Safety (including Noise), Environmental Resources (including Conservation), Parks and Recreation (including Open Space), Community Economics, Community Design, and Social Resources.

2.8.2 City of Ontario Development Code

The City of Ontario Development Code (Development Code) codifies and complements the City General Plan. The Development Code, in effect, provides the mechanism to implement and enforce the goals, objectives, policies and programs articulated in the General Plan. The City's Development Code was adopted by the Ontario City Council on July 7, 1998. It was completely revised and reprinted in May 2002.

2.8.3 Project Technical Studies/EIR Appendices

Following are summary descriptions of documents and supporting technical studies which are appended to the main body of the EIR. Working titles of these documents generically refer to the Project and its physical attributes, and may not necessarily reflect the currently assigned "Meredith International Centre Specific Plan Amendment" development title.

2.8.3.1 Initial Study, NOP, and NOP Responses - EIR Appendix A

The EIR Initial Study (IS), Notice of Preparation (NOP) and responses received pursuant to distribution of the IS/NOP are presented at EIR Appendix A. Based on the Initial Study and responses to the NOP, the EIR addresses the following environmental topics:

- Aesthetics;
- Air Quality;
- Biological Resources;
- Cultural Resources;

- Geology and Soils;
- Greenhouse Gas (GHG) Emissions and Global Climate Change (GCC);
- Hazards/Hazardous Materials;
- Hydrology/Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services and Utilities; and
- Traffic and Circulation.

2.8.3.2 Meredith International Centre Specific Plans - EIR Appendix B

The Meredith International Centre Specific Plan (approved by the City in 1981) establishes land use designations and development standards for all properties within its boundaries, and in this respect is the effective "zoning" for the affected area.

The proposed *Meredith International Centre Specific Plan Amendment* (Meredith SPA) would substantively affect the scope and type of uses that would otherwise be permitted or conditionally permitted under the 1981 Specific Plan. The 1981 Meredith International Centre Specific Plan and 2015 *Meredith International Centre Specific Plan Amendment* (T&B Planning, Inc.) are presented at EIR Appendix B.

2.8.3.3 Traffic Impact Analysis - EIR Appendix C

The detailed evaluation of Project-related traffic/transportation impacts is documented in *Traffic Impact Analysis, Meredith International Centre Specific Plan Amendment* (Linscott, Law & Greenspan, Engineers) January 22, 2015 (TIA). The traffic issues related to the Project have been evaluated within the TIA in the context of the California Environmental Quality Act (CEQA) and as directed by the City of Ontario, the lead agency responsible for preparation of the traffic impact analysis. The TIA also reflects and incorporates applicable guidance provided by the California Department of Transportation, District 8 (Caltrans District 8).

2.8.3.4 Air Quality Impact Analysis - EIR Appendix D

Air quality impact analyses germane to the Project are provided at EIR Appendix D. These analyses include: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015; *Meredith International Centre Specific Plan Amendment Mobile Source Diesel Health Risk Assessment, City of Ontario* (Urban Crossroads, Inc.) November 12, 2014; *Meredith International Centre Specific Plan Amendment Offsite Freeway-Source Air Toxic and Criteria Pollutant Health Risk Assessment, City of Ontario* (Urban Crossroads, Inc.) November 12, 2014; and *Meredith International Centre Supplemental Assessment* (Urban Crossroads, Inc.) January 22, 2015.

2.8.3.5 Greenhouse Gas Analysis - EIR Appendix E

Detailed analysis of the Project's potential Greenhouse Gas and Global Climate Change impacts are presented in *Meredith International Centre Specific Plan Amendment Greenhouse Gas Analysis*, City of Ontario (Urban Crossroads, Inc.) January 21, 2015.

2.8.3.6 Noise Impact Analysis - EIR Appendix F

Potential noise impacts of the Project, including construction-source and operational source noise impacts are assessed within *Meredith International Centre Specific Plan Amendment Noise Impact Analysis* (Urban Crossroads, Inc.) October 17, 2014.

2.8.3.7 Phase I Environmental Site Assessment - EIR Appendix G

An assessment of potential hazards associated with Project the site's historic uses, and the potential for hazardous materials to currently exist within or proximate to the Project site is provided in: *Phase I Environmental Site Assessment, Meredith Specific Plan Area, Ontario, California* (Ardent Environmental Group, Inc.) July 23, 2014.

2.8.3.8 Hydrology Report - EIR Appendix H

Drainage considerations are evaluated and addressed in: *Meredith Property Conceptual Hydrology Report* (RBF Consulting) April 2014.

2.8.3.9 Biological Resources Assessments - EIR Appendix I

Biological resources potentially affected by the Project are assessed in: *Biological Report for the Meredith International Centre Specific Plan Amendment* (Harmsworth Associates) August 2014; and *Biological Resources Study, Meredith Property, City of Ontario, San Bernardino County, California* (Michael Brandman Associates) May 21, 2012.

2.8.3.10 Geotechnical Investigation - EIR Appendix J

An assessment of the soils and geological conditions affecting the Project site and vicinity properties is presented in: *Geotechnical Feasibility Study, Proposed Mixed Use Development, SEC North Vineyard Avenue and East 4th Street, Ontario, California* (Southern California Geotechnical) April 3, 2014. The Geotechnical Investigation also provides recommendations pertaining to geotechnical aspects of constructing the Project.

2.8.3.11 Cultural Resources Investigation

A cultural resources investigation was also prepared for the Project: *Phase I Cultural Resources Investigation of the Meredith International Centre Project Area in the City of Ontario, San Bernardino County, California* (McKenna et al.) July 2014.

Due to the relative sensitivity of archaeological and historic sites to disturbance, cultural resource reports which identify the locations of potential resources are generally not circulated publicly. Although sensitive resources have not been identified within the Project site, other off-site sensitive resources are discussed in the Cultural Resources Investigation prepared for the Project. A copy of the Phase I Cultural Resources Investigation may be reviewed at the City of Ontario Planning Department.

2.8.3.12 Economic/Fiscal Impact Analysis - EIR Appendix K

An Economic/Fiscal Impact Analysis was conducted for the Project: *Analysis of Market Absorption Potentials and Related Socioeconomic Impacts* (The Natelson Dale Group, Inc.) January 26, 2015.

3.0 PROJECT DESCRIPTION

3.0 PROJECT DESCRIPTION

3.1 OVERVIEW

The Meredith International Centre Specific Plan Amendment Project (Project, Meredith SPA, SPA) proposes a mix of industrial, commercial, and residential land uses on approximately 257 acres located in the northern portion of the City of Ontario, within San Bernardino County. The Project also includes on-site supporting infrastructure, parking, landscaping/hardscaping, and signs. The Project would further implement those off-site improvements necessary to ensure safe and efficient operations. The Project and its context are further described below. Detailed information regarding land uses and development proposed under the Project is presented within the *Meredith International Centre Specific Plan Amendment* document included at EIR Appendix B, and the Specific Plan document is incorporated in this Project Description by reference. Analyses within this EIR reflect the range and types of uses permitted or conditionally permitted under the Specific Plan and as currently envisioned under the Project Development Concept. Should future development proposal differ substantively from the development concepts analyzed herein, the Lead Agency may require additional environmental analyses.

3.2 PROJECT LOCATION

The site is generally located north of Interstate 10 (I-10), between Vineyard Avenue on the west and Archibald Avenue on the east. The northern boundary of the site, between Vineyard Avenue and Cucamonga Creek Channel, is formed by Fourth Street. Existing San Bernardino County Flood Control facilities form the northern boundary for the portion of the site located east of Deer Creek Channel. Please refer also to Figure 3.2-1, "Project Location."

Source: Google Earth; Topo.com (Wildflower Productions); Applied Planning, Inc.

Figure 3.2-1

Project Location

3.3 EXISTING LAND USES and LAND USE DESIGNATIONS

The following discussions summarize existing land use conditions in the Project vicinity and provide general context for the Project.

3.3.1.1 Project Site Land Use

The Project site is an L-shaped parcel, totaling approximately 257 acres. As shown in Figure 3.3-1, the site remains largely vacant, with the exception of a small school use and existing commercial uses. Elevations within the Project site range from approximately 980 feet above mean sea level (MSL) to approximately 1,030 feet MSL.

Cucamonga Creek Channel and Deer Creek Channel, both concrete-lined flood control channels, traverse the central portion of the site in a north/south alignment. Inland Empire Boulevard crosses through the southern portion of the site in an east/west direction. The remainder of the Specific Plan area consists of relatively flat, vacant land.

No protected or intrinsically valuable biologic habitat exists within the Project site, and the Project area is generally disturbed by human activities (e.g., footpaths and tire tracks traverse the Project site). Limited vegetation that does exist within the Project site consists of sparse areas of nonnative ruderal grasses and low shrubs. However, the site does, at present, accommodate various common nesting birds. Please refer also to EIR Section 4.9, "Biological Resources."

The Gold Line Foothill Construction Authority is studying the extension of a light rail transit (LRT) line to Ontario International Airport, which is tentatively envisioned to traverse along the Cucamonga Creek Channel immediately west of Planning Areas 3 and 4. Although the LRT line and associated facilities are not part of the Project, this Specific Plan acknowledges the potential off-site LRT alignment and anticipates its use by employees, visitors, and residents of the Specific Plan.

Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 3.3-1
Existing Land Uses

3.3.1.2 Vicinity Land Uses

Single-family and multi-family residential uses are located to the west of the Project site, across Vineyard Avenue, as well as neighborhood commercial uses. Uses north of the Project site, across Fourth Street, include a wide range of commercial, industrial, and residential types. San Bernardino County Flood Control basins are located to the north/northeast of the site. Commercial uses and Cucamonga-Guasti Regional Park are located to the east of the Project site, across Archibald Avenue. The Interstate 10 (I-10) freeway is directly south of the Project site.

3.3.2 Existing Land Use Designations

Existing General Plan Land Use and Zoning designations for the Project site and vicinity properties are summarized below. Please also refer to Section 4.1, "Land Use."

3.3.2.1 Project Site Land Use Designation

The Policy Plan (General Plan) component of The Ontario Plan (TOP) currently designates the vast majority of the Project site as "Mixed Use – Meredith," with a zoning designation of "Specific Plan" (SP). Planning Area 1A (the school site) is designated as "Public School" in the Policy Plan Land Use Plan, and is zoned "Public Facility." Amendments to these designations would be necessary to provide for implementation of the Project, which are described in further detail within Section 3.4.11, presented subsequently.

3.3.2.2 Vicinity Land Use Designations

Properties northerly of the Project site, across Fourth Street, are designated Shopping Center (C1), Medium Density Residential (R2), Commercial Service (C3), High Density Residential (R3), and Industrial Park (M2). The San Bernardino County Flood Control basins located to the north/northeast of the site are designated as Open Space (OS). Easterly of the Project site, across Archibald Avenue, properties are designated Open Space (OS), Specific Plan (SP), Commercial Service (C3), and Airport Service Commercial (C4). I-10 forms the southern boundary of the site, beyond which are Airport Service Commercial (C4) designated properties. To the west of the site, across

Vineyard Avenue, properties are zoned Single Family Residential (R1), Medium Density Residential (R2), and Commercial Service (C3).

3.4 PROJECT ELEMENTS

3.4.1 Site Preparation

The site will need to be cleared prior to the commencement of grading and utility installation. Any debris generated by site preparation activities would be disposed of and recycled consistent with provisions of the California Integrated Waste Management Plan Act (AB 939) and the City's Solid Waste Department *Refuse and Recycling Planning Manual*.[1] The Project grading concept provides for on-site balanced cut/fill.

In order to avoid or minimize temporary construction-related traffic impacts, the Project Applicant is required to prepare and implement a construction traffic management plan. Typical elements and information incorporated in the Project construction traffic management plan would include but would not be limited to:

- **Name of on-site construction superintendent and contact phone number.**

- **Identification of Construction Contract Responsibilities** - For example for excavation and grading activities, describe the approximate depth of excavation, and quantity of soli import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description Material Storage Locations (if any).**

[1] City of Ontario, California: Solid Waste Department Refuse and Recycling Manual, Updated May 1, 2013. http://www.ci.ontario.ca.us/modules/showdocument.aspx?documentid=4704

- **Location and Description of Construction Trailer (if any).**

- **Identification and Description Traffic Controls - Traffic controls shall be provide per the** Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way will be maintained (including dust control).

The construction traffic management plan must be reviewed and approved by the City prior to the issuance of the building permit.

Utility service lines within, or connecting to, the Project site will also likely require relocation and/or modification to accommodate proposed development. Existing Southern California Edison distribution lines (12 kw) located on the east side of Vineyard Avenue will need to be relocated underground and out of the ultimate right-of-way. All new electrical connections would also be underground. All utilities will be realigned/reconfigured pursuant to City and purveyor requirements.

3.4.2 Development Concept

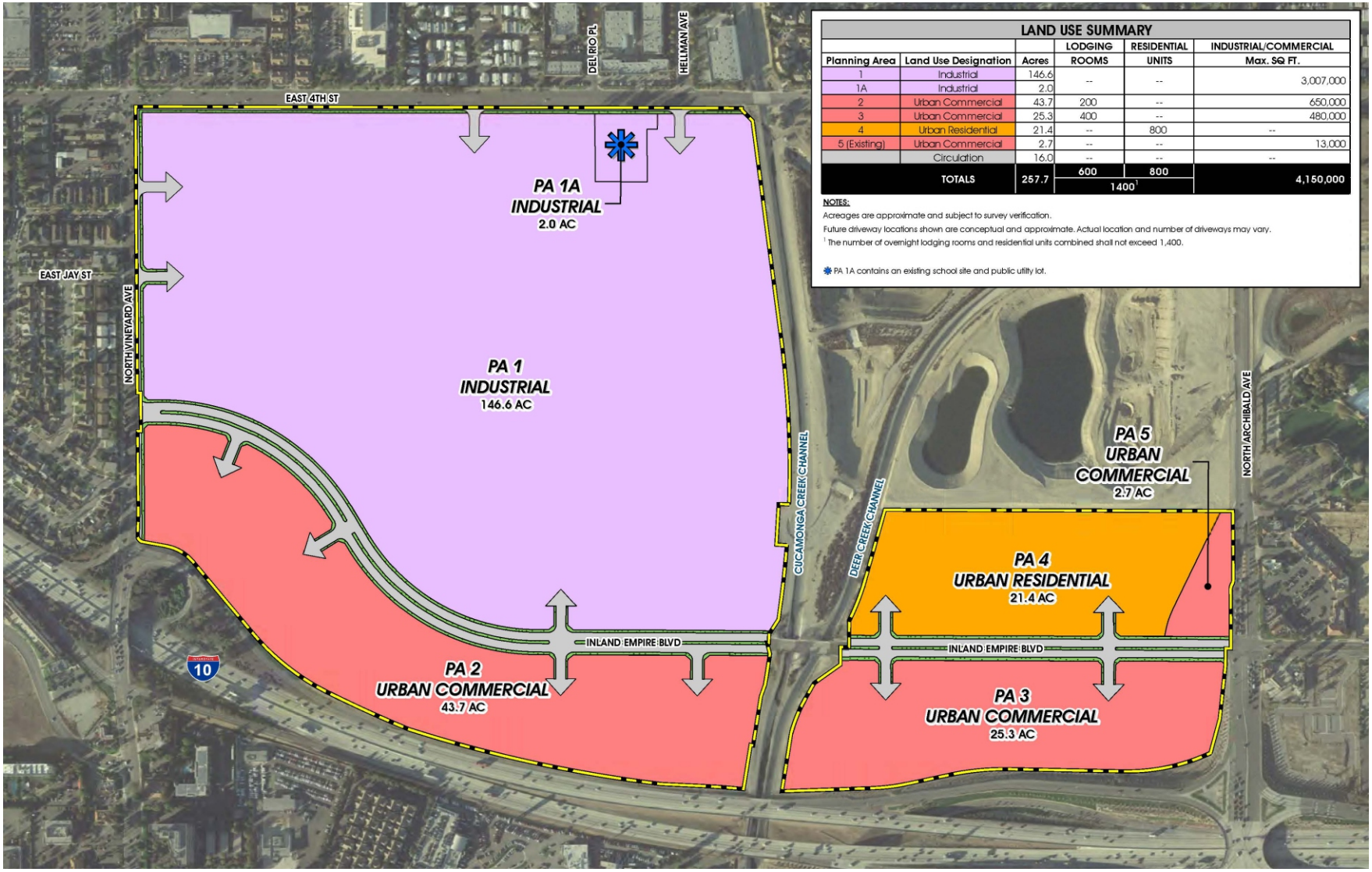
The Meredith SPA proposes a mix of industrial, commercial, and residential land uses within five (5) planning areas, as detailed in Table 3.4-1. The Planning Areas and associated land uses are discussed below, and presented graphically in Figure 3.4-1.

Table 3.4-1
Meredith International Centre SPA
Proposed Land Uses

Planning Area	Land Use[1]	Acreage	Square Footage	Residential Units	Overnight Lodging Units
1	Industrial	146.6	3,007,000	-	-
1A[2]	Industrial	2.0			-
2	Urban Commercial	43.7	650,000	-	200[3]
3	Urban Commercial	25.3	480,000	-	400[3]
4	Urban Residential	21.4	-	800	-
5 (Existing)	Urban Commercial	2.7	13,000[4]	-	-
Roadway Modifications		16.0	-	-	-
Total		*257.7*	*4,150,000*	*800[5]*	*600[5]*

Source: Conceptual Land Use Plan for the Meredith International Centre (T&B Planning) January 2015.
Notes:

[1] Please refer to Table 5-1 of the Meredith SPA for uses permitted within these land use categories.
[2] The Meredith SPA assumes continuation of educational/school activities at the Italo M. Bernt Elementary School site within Planning Area 1A. Should the Planning Area be redeveloped at a later date, the maximum allowable building area square footage would not exceed that of the existing School building (6,767 square feet). In the event that Planning Area 1A redevelops in conjunction with the development of Planning Area 1, the total combined building area of both Planning Areas shall not exceed 3,007,000.
[3] The number of lodging units is included in the square footage totals of Planning Areas 2 and 3.
[4] Approximate square footage of existing uses.
[5] The maximum number of overnight lodging units and residential units combined shall not exceed 1,400.



LAND USE SUMMARY

Planning Area	Land Use Designation	Acres	LODGING ROOMS	RESIDENTIAL UNITS	INDUSTRIAL/COMMERCIAL Max. SQ FT.
1	Industrial	146.6	--	--	3,007,000
1A	Industrial	2.0			
2	Urban Commercial	43.7	200	--	650,000
3	Urban Commercial	25.3	400	--	480,000
4	Urban Residential	21.4	--	800	--
5 (Existing)	Urban Commercial	2.7	--	--	13,000
	Circulation	16.0	--	--	--
	TOTALS	257.7	600	800	4,150,000
			1400[1]		

NOTES:

Acreages are approximate and subject to survey verification.

Future driveway locations shown are conceptual and approximate. Actual location and number of driveways may vary.

[1] The number of overnight lodging rooms and residential units combined shall not exceed 1,400.

* PA 1A contains an existing school site and public utility lot.

N

NOT TO SCALE

Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-1
Land Use Plan

The scope of development and mix of uses proposed by the Project Planning Areas are further described below.

Planning Area 1

Encompassing 146.6 acres in the northwesterly corner of the Project site, Planning Area 1 is the largest of the Planning Areas. Uses allowed within this Planning Area would include a range of general light industrial, and warehouse/distribution operations.

Table 3.4-2
Uses Permitted in Planning Area 1

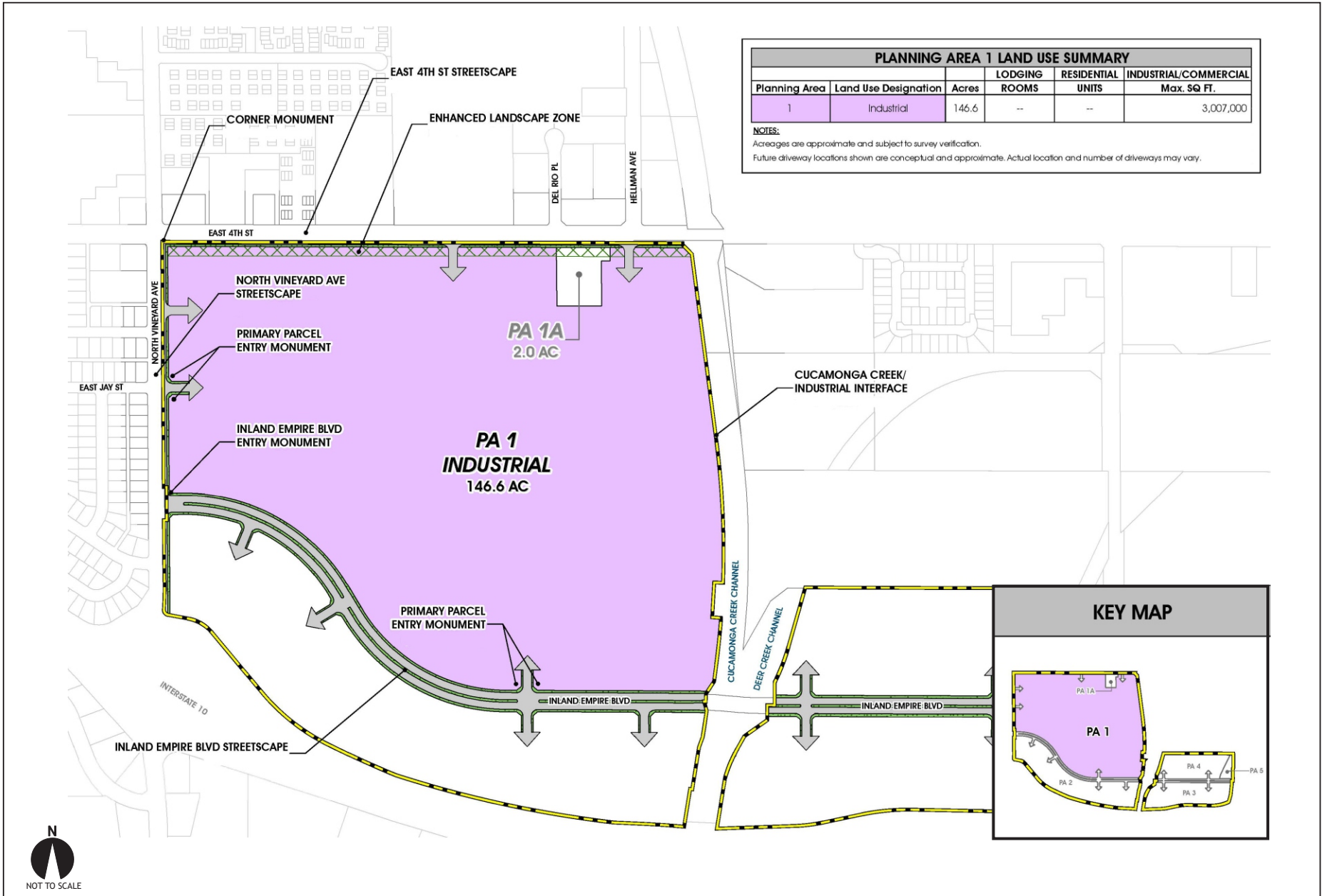
Use	Maximum Size
Industrial	3,007,000 sq. ft.

Source: T&B Planning

As shown in Table 3.4-2, the Specific Plan Amendment allows up to 3,007,000 square feet of industrial-type land uses within Planning Area 1. The range and types of Industrial that would be permitted and conditionally permitted within Planning Area 1 are detailed at Meredith SPA Section 5. D., "Permitted, Conditional, and Ancillary Land Uses."

To facilitate vehicular access to the Interstate 10 at Vineyard Avenue and Archibald Avenue interchanges, two local industrial streets, Del Rio Place and Jay Street, are proposed within Planning Area 1. Del Rio Place and Jay Street would traverse Planning Area 1 and provide an interior connection between Vineyard Avenue and Inland Empire Boulevard. Del Rio Place, a north-south oriented street, would provide access from the south via Inland Empire Boulevard. Jay Street, an east-west oriented street, would provide access from the west via Vineyard Avenue. Please refer to Figure 3.4-2.

The entire perimeter of Planning Area 1 will be landscaped, and loading bays would be screened to passing motorists along Fourth Street or Vineyard Avenue. Green spaces (water quality/detention basins and landscape pockets) would be located in the southern portion of the Planning Area, along Inland Empire Boulevard. These green spaces serve a practical purpose as part of the Project's storm drain system and assist in providing a landscape buffer along the roadway.



Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-2
Planning Area 1 Site Plan

It should also be noted that Inland Empire Boulevard, which would provide major east/west circulation within the Specific Plan area road would be widened and realigned as part of the development of Planning Area 1. Please refer also to Section 3.4.4, "Access and Circulation."

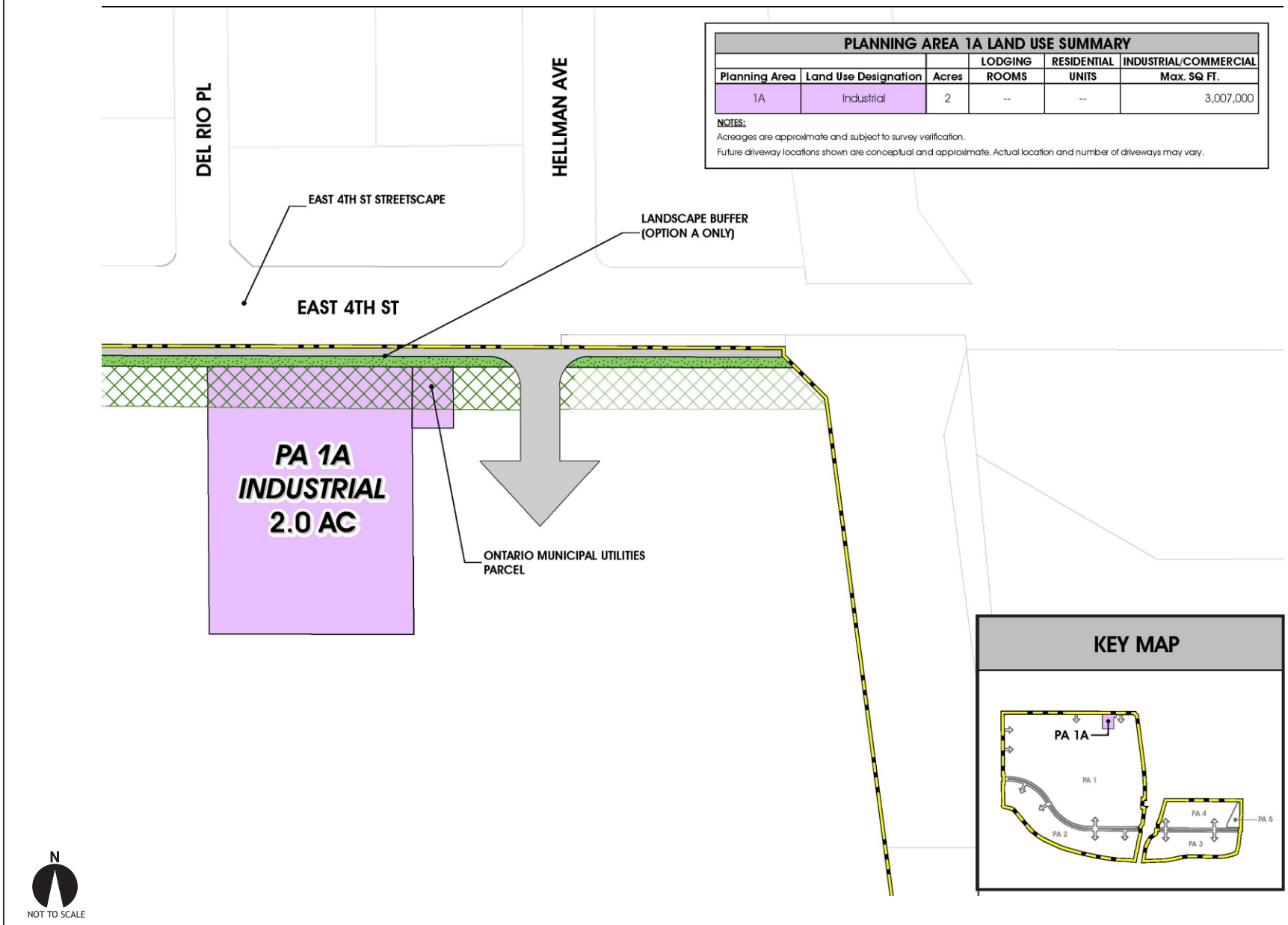
Planning Area 1A

Planning Area 1A is a 2.0-acre area located in the northerly portion of the Specific Plan area, along Fourth Street. Planning Area 1A is surrounded on its south, east, and west boundaries by Planning Area 1. The property currently contains the 6,767-square-foot former Italo M. Bernt Elementary School[2] (located on a 1.9-acre lot) and an adjacent 0.1-acre vacant lot planned for a water treatment facility use established by Ontario Municipal Utilities Company.

The Meredith SPA allows for the continuation of these uses; however, if Planning Area 1A redevelops independently at a later date, up to 6,767 square feet of building space is permitted to be developed in Planning Area 1A.

The Meredith SPA also includes an option that allows Planning Area 1A to redevelop in conjunction with the development of Planning Area 1. Under this scenario, no building square footage is allocated specifically to Planning Area 1A. The maximum building intensity of Planning Area 1 and Planning Area 1A combined would be 3,007,000 square feet. Planning Area 1A is illustrated in Figure 3.4-3.

[2] The Italo M. Bernt Elementary School, formerly operated by and under the jurisdiction of the Ontario-Montclair Elementary School District, is now operated as a private educational facility and leased by Applied Behavior Consultants.



Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-3
Planning Area 1A Site Plan

Planning Area 2

Planning Area 2 encompasses 43.7 acres of land located in the southwestern portion of the Specific Plan area. It is bordered on the north by Inland Empire Boulevard, on the south by Interstate 10, on the west by North Vineyard Avenue, and on the east by the Cucamonga Creek Channel.

Table 3.4-3

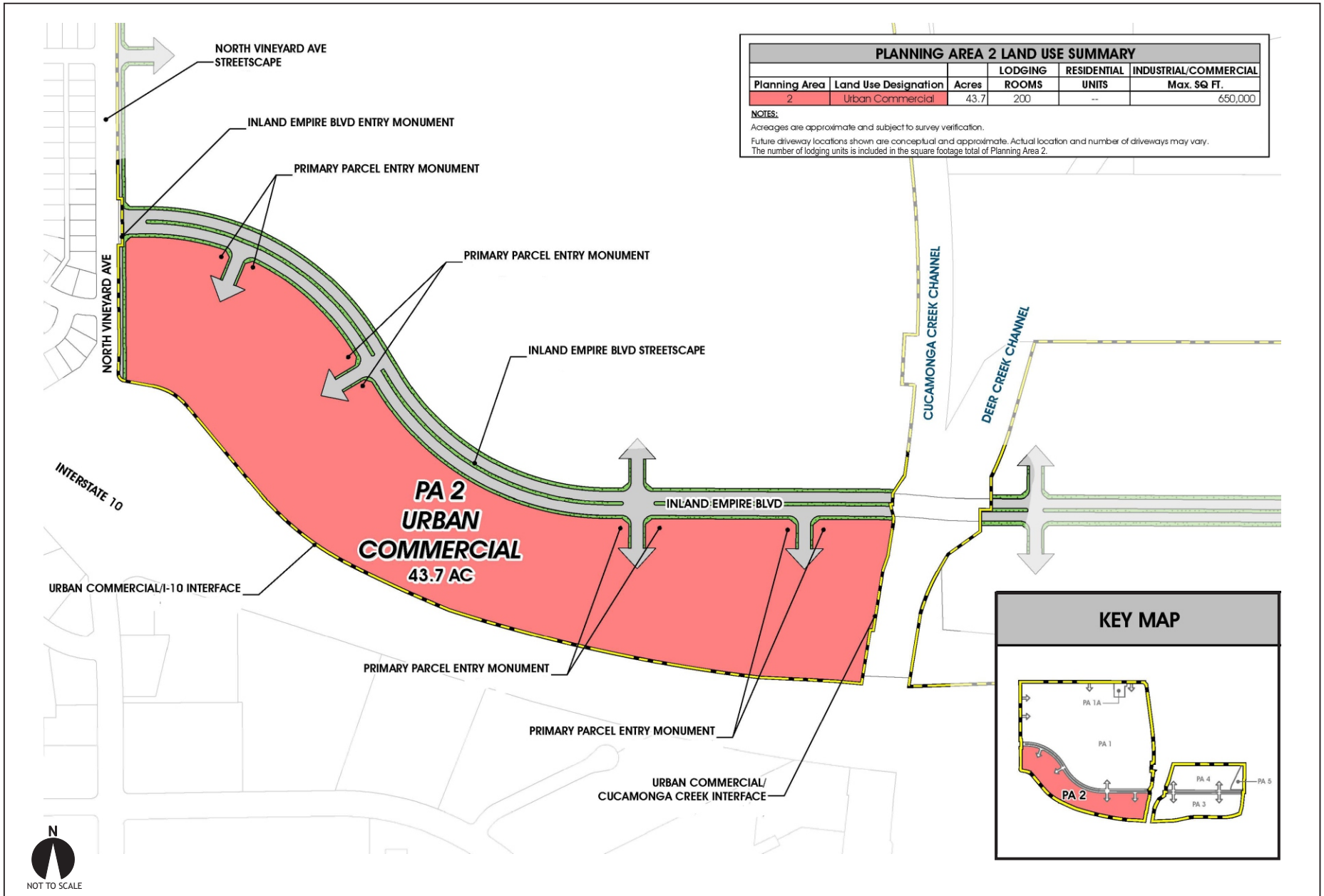
Uses Permitted in Planning Area 2

Use	Maximum Size
Urban Commercial	650,000 sq. ft./200 units

Source: T&B Planning

The Urban Commercial designation of Planning Area 2 allows for a range of commercial uses that benefit from the property's adjacency to Interstate 10 and Ontario International Airport. Planning Area 2 is designed as a highly active area offering a variety of market-driven commercial uses. Up to 200 overnight lodging rooms also are permitted in Planning Area 2, with the intention of serving the surrounding community and region, such as visitors to the nearby Ontario Convention Center and Ontario International Airport. Detailed types of Urban Commercial uses that would be permitted or conditionally permitted within Planning Area 2 are detailed at Meredith SPA Section 5. D., "Permitted, Conditional, and Ancillary Land Uses."

As illustrated in Figure 3.4-4, vehicular access into Planning Area 2 is provided via Inland Empire Boulevard. The 4-way intersection at Del Rio Place and Inland Empire Boulevard provides a primary entry point to Planning Area 2 from Inland Empire Boulevard.



PLANNING AREA 2 LAND USE SUMMARY

Planning Area	Land Use Designation	Acres	LODGING ROOMS	RESIDENTIAL UNITS	INDUSTRIAL/COMMERCIAL Max. SQ FT.
2	Urban Commercial	43.7	200	--	650,000

NOTES:

Acreages are approximate and subject to survey verification.

Future driveway locations shown are conceptual and approximate. Actual location and number of driveways may vary.
The number of lodging units is included in the square footage total of Planning Area 2.

Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-4
Planning Area 2 Site Plan

Planning Area 3

Planning Area 3 comprises approximately 25.3 acres within the southeasterly portion of the Specific Plan property. As shown in Figure 3.4-5, Planning Area 3 is bordered on the north by Inland Empire Boulevard, on the south by Interstate 10, on the west by the Deer Creek Channel, and on the east by Archibald Avenue.

Table 3.4-4

Uses Permitted in Planning Area 3

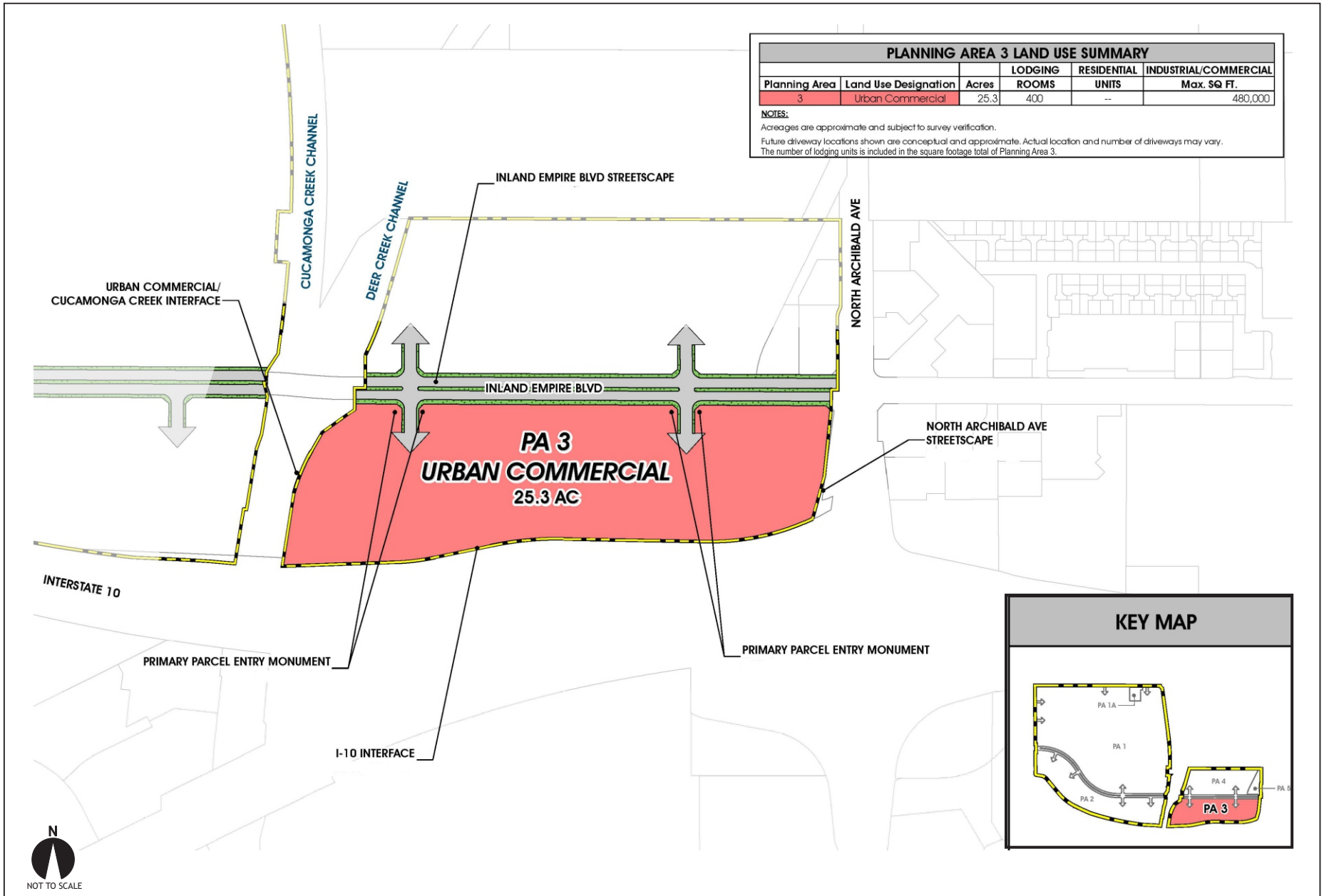
Use	Maximum Size
Urban Commercial	480,000 sq. ft./400 units

Source: T&B Planning

Similar to Planning Area 2, the Urban Commercial designation of Planning Area 3 allows for a range of commercial uses that benefit from proximity to transportation corridors. Located closer to the Meredith SPA's proposed Urban Residential area (within Planning Area 4), and proximate to the planned alignment of the Gold Line LRT corridor, Planning Area 3 is envisioned to offer smaller, pedestrian-oriented retail establishments. Up to 400 overnight lodging rooms also are permitted in Planning Area 3. Vehicular access into Planning Area 3 is provided via Inland Empire Boulevard. Detailed types of Urban Commercial uses that would be permitted or conditionally permitted within Planning Area 3 are detailed at Meredith SPA Section 5. D., "Permitted, Conditional, and Ancillary Land Uses."

Planning Area 4

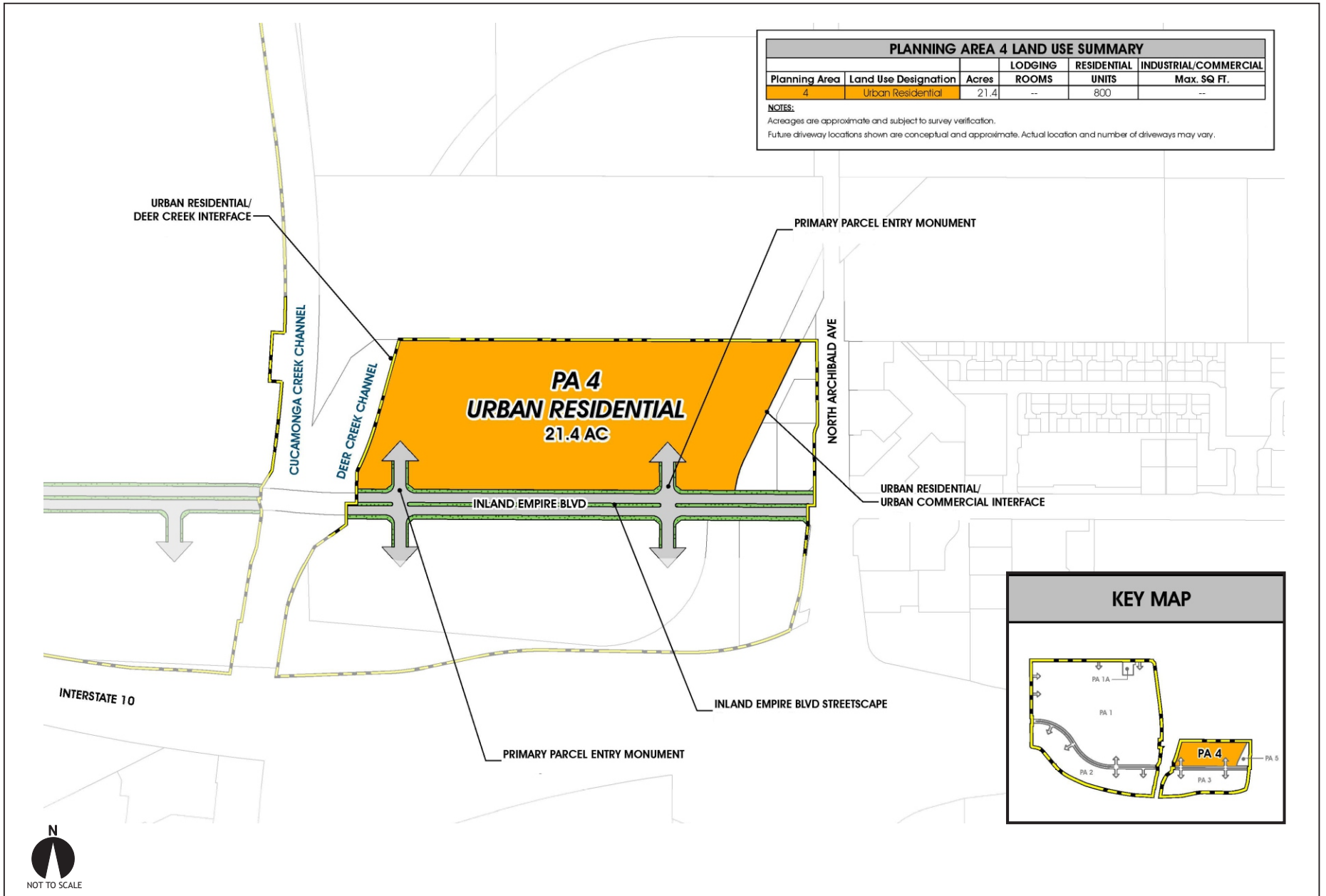
Planning Area 4 comprises 21.4 acres of land located in the northeastern portion of the Specific Plan area, and would contain Urban Residential uses. As shown on Figure 3.4-6, this area is bordered on the north by San Bernardino County Flood Control District (SBFCD) facilities, on the south by Inland Empire Boulevard, on the west by Deer Creek Channel, and on the east by Planning Area 5.



Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-5
Planning Area 3 Site Plan



Source: T&B Planning, Inc.

Figure 3.4-6
Planning Area 4 Site Plan

Table 3.4-5
Uses Permitted in Planning Area 4

Use	Maximum Units
Urban Residential	800

Source: T&B Planning

The Urban Residential designation of Planning Area 4 allows for high-density and medium-high density residential land uses (for-sale or for-rent multi-family residential units) within walking distance to a variety of shopping and employment opportunities, Cucamonga-Guasti Regional Park, and the planned Gold Line LRT corridor.

Amenities within Planning Area 4 may include a private recreation facility, pedestrian connections, and ancillary uses such as carports, garages, and leasing offices serving the residential development. Landscaping along the eastern boundary of Planning Area 4 would provide a transition between the residential units and the retail commercial uses in adjacent Planning Area 5. Vehicular access to Planning Area 4 is provided exclusively by driveway connections along Inland Empire Boulevard. Detailed types of Urban Residential uses that would be permitted or conditionally permitted within Planning Area 4 are detailed at Meredith SPA Section 5. D., "Permitted, Conditional, and Ancillary Land Uses."

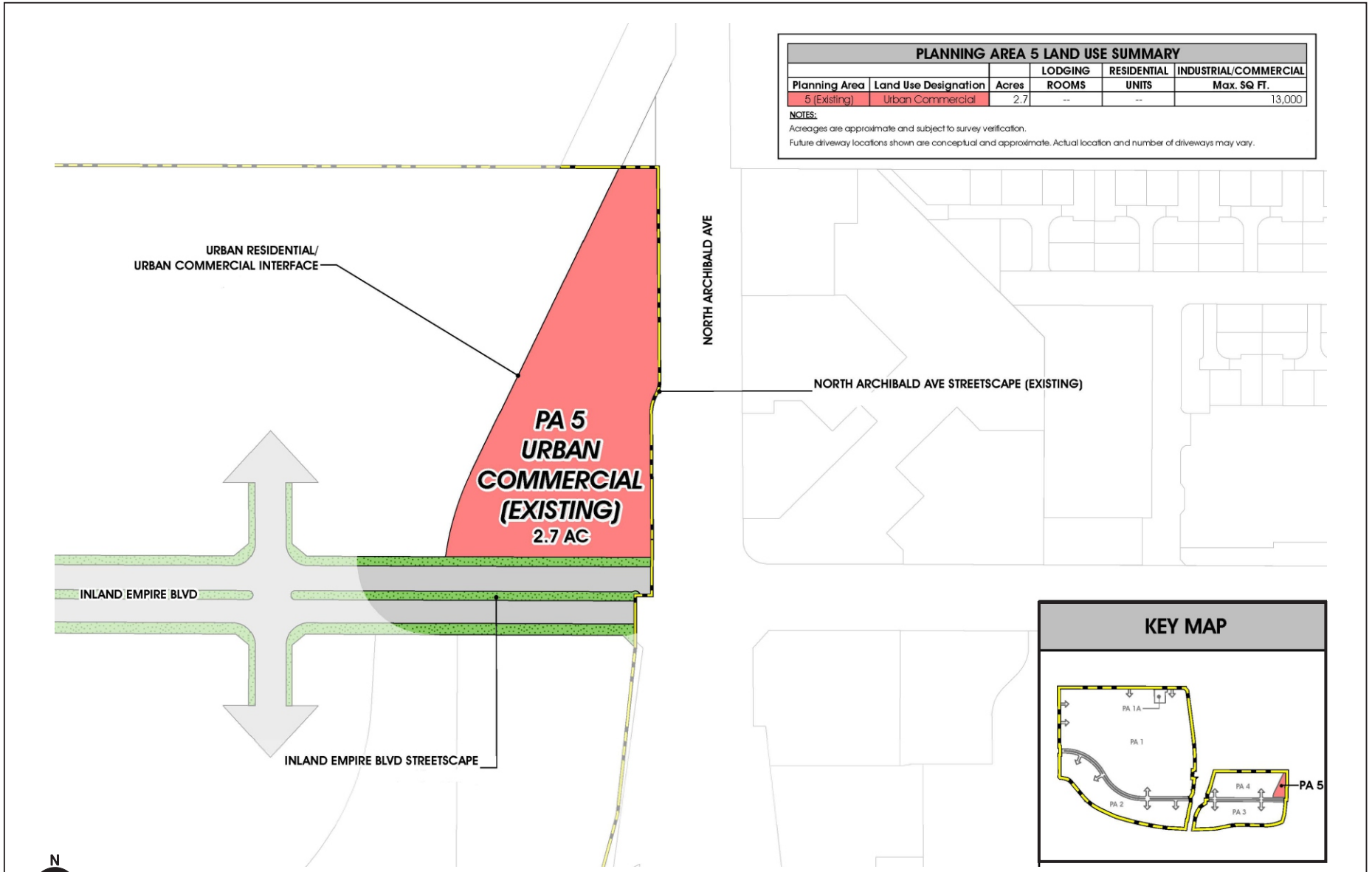
Planning Area 5

As shown in Figure 3.4-7, Planning Area 5 encompasses 2.7 acres and is located at the northwest corner of Archibald Avenue and Inland Empire Boulevard. The site is currently developed with retail and service commercial uses, including fast food restaurants, a convenience store, and a self-serve fueling station. The Meredith SPA assumes continuation of these uses, and does not provide for any additional development within this Planning Area.

Table 3.4-6
Uses Permitted in Planning Area 5

Use	Maximum Size
Urban Commercial	13,000 sq. ft.

Source: T&B Planning



Source: T&B Planning, Inc.

Figure 3.4-7
Planning Area 5 Site Plan

3.4.3 Project Development Scenario

Development of the Meredith SPA is expected to occur incrementally, in response to market demands and with a logical and orderly extension of supporting infrastructure (roadways, public utilities, etc.). Anticipated increments of development are further described below.

Infrastructure Phasing Plan

Project Phase	**Scope required to be complete for Certificate of Occupancy (Temporary certificate of occupancy may be allowed prior to completion.)**
Planning Area 1	
Building 7	Del Rio Place (with closure at future Jay Street) Traffic signal at Inland Empire Boulevard & Del Rio Place Building 7 frontage improvements at Inland Empire Boulevard (north side) All utilities necessary to service Building 7.
Buildings 4, 5, & 6	Jay Street include connection to Del Rio Place Traffic Signal at Jay Street and Vineyard Avenue Reconfigured Inland Empire Boulevard segment Traffic Signal at Inland Empire Boulevard and Vineyard Avenue Vineyard Avenue segment between Inland Empire Boulevard and Jay Street All utilities necessary to service Buildings 4, 5 & 6.
Buildings 1, 2, & 3	North Vineyard Avenue between Jay Street and 4th Street Traffic signal at Vineyard Avenue and 4th Street Frontage imports on 4th Street 4th Street median All utilities necessary to service Buildings 1, 2 & 3.
Planning Areas 2, 3, & 4	
Future Buildings per Specific Plan	Frontage improvements at Inland Empire Boulevard (specific to each development) Eastbound right turn lane at Inland Empire Boulevard/Archibald Avenue Bridge widening on Inland Empire Boulevard All utilities necessary to service each building as developed.

Actual sequencing of development may vary from that described. Notwithstanding, supporting infrastructure would be provided throughout, as determined necessary by the City.

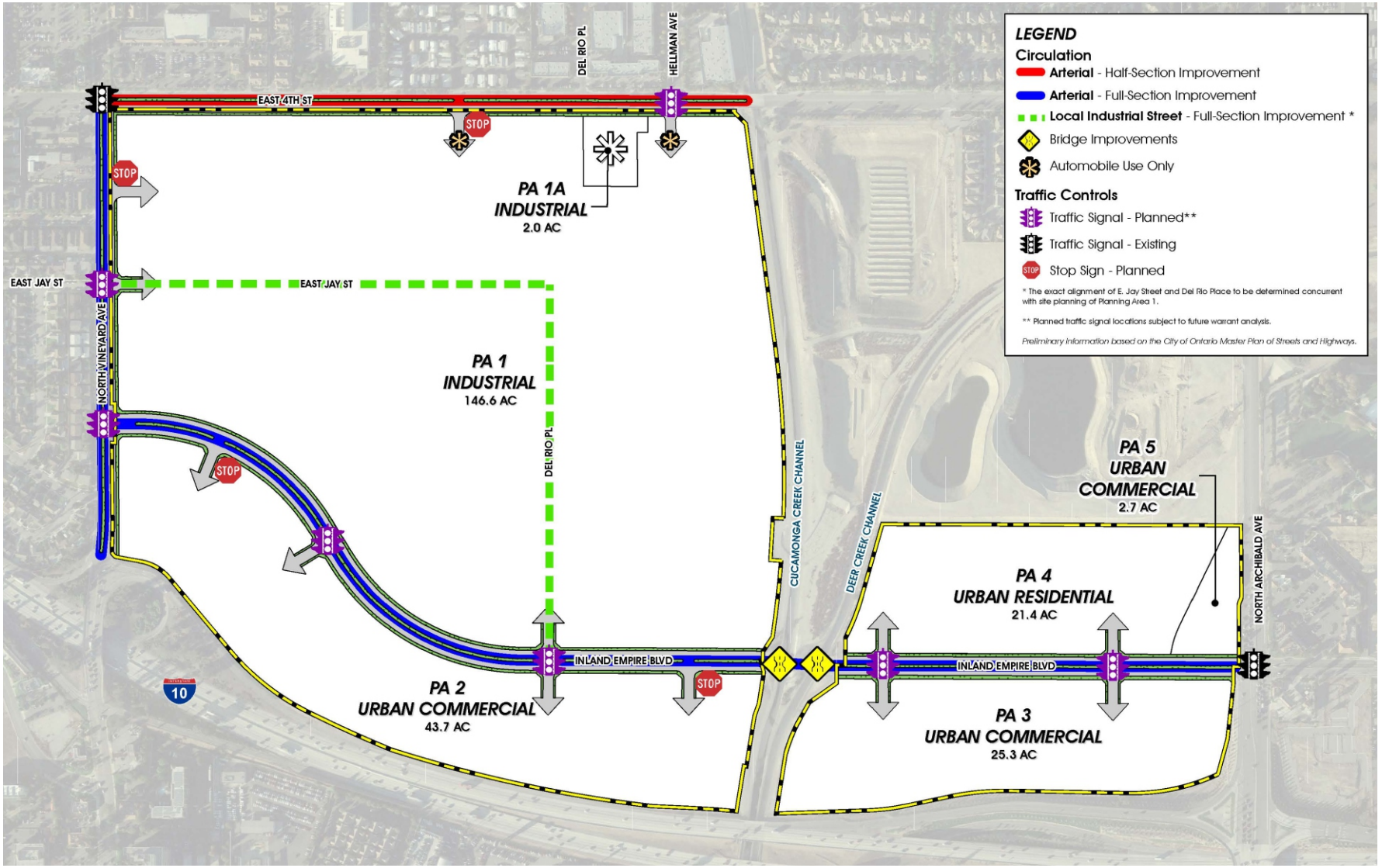
3.4.4 Access and Circulation

3.4.4.1 Vehicular Access and Circulation

Vehicular access and circulation improvements that would be required of, and constructed by, the Project are described below and are schematically presented at Figure 3.4-8. Final design and implementation of all improvements would be subject to review and approval by the City.

- **Vineyard Avenue, adjacent to the Project site to 4th Street:** Construct Vineyard Avenue bordering the Project site in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include three travel lanes in each direction separated by a landscaped median. The implementation of improvements along Vineyard Avenue and 4th Street would require modifications to the existing traffic signal at the intersection of Vineyard Avenue and 4th Street as well as new signals at the realigned Inland Empire Boulevard and Jay Street, which would be interconnected to provide coordinated timing.

- **Inland Empire Boulevard:** Within the Project site, realign Inland Empire Boulevard to the north as required by the City of Ontario to intersect with Vineyard Avenue. Design and construct Inland Empire Boulevard, between Vineyard Avenue and Archibald Avenue in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include two travel lanes in each direction separated by a landscaped median with on-street bike lanes. With the realignment of Inland Empire Boulevard, convert Vineyard Avenue at Plaza Serena from signalized access to an unsignalized right-turn in/out only access and install a new traffic signal at the intersection of Vineyard Avenue and Inland Empire Boulevard. The improvements associated with Inland Empire Boulevard include constructing the project frontage improvements at the intersection of Inland Empire Boulevard and Archibald Avenue.



Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-8
Vehicular Circulation Plan

- **4th Street, adjacent to the Project site to Vineyard Avenue:** Construct 4th Street bordering the Project site in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include two travel lanes in each direction separated by a landscaped median. The improvements associated with 4th Street also include the installation of a traffic signal at the intersection of 4th Street and Hellman Avenue.

- **Jay Street:** Extend Jay Street easterly from Vineyard Avenue to connect with the future alignment of Del Rio Place. Design and construct Jay Street to the City of Ontario "Local Industrial" street standards. The improvements associated with Jay Street also include the installation of a traffic signal at the intersection of Vineyard Avenue and Jay Street with necessary widening at the intersection with Vineyard Avenue based on lane configurations recommended in the Project TIA.

- **Del Rio Place:** Extend Del Rio Place southerly from future Jay Street and intersect with Inland Empire Boulevard. Design and construct Del Rio Place to the City of Ontario "Local Industrial" street standards. The improvements associated with Del Rio Place also include the installation of a traffic signal at the intersection of Inland Empire Boulevard and Del Rio Place with necessary widening at the intersection with Inland Empire Boulevard based on lane configurations recommended in the Project TIA.

- **Other improvements the Lead Agency deems necessary to fulfill Map and/or Specific Plan Conditions of Approval.**

3.4.4.2 Non-Vehicular Access and Circulation

A network of sidewalks, walkways, and bikeways would be provided within the Specific Plan area. The non-vehicular circulation plan promotes pedestrian movement, bicycle use, encourages the use of available mass transit opportunities, and reduces reliance on personal vehicles.

Sidewalks and Pedestrian Paths

Sidewalks would be constructed along all internal roadways consistent with City roadway cross-sections. Additionally, other pedestrian paths would be constructed within the Specific Plan area consistent with concepts articulated at Specific Plan Section 3 B. *Non-Vehicular Circulation Plan*. In areas with anticipated high volumes of vehicular traffic, pedestrian and vehicular traffic would be separated where it is feasible to provide such separation.

Bikeways/Bike Paths

Inland Empire Boulevard is a designated Class II Bikeway Corridor, and the Cucamonga Creek Multipurpose Trail is located between Planning Areas 1 and 4. Linkage to this bikeway corridor and the City's planned Cucamonga Creek Multipurpose Trail would be provided within the Specific Plan area.

Transit Opportunities

As previously mentioned, the Gold Line Foothill Construction Authority is studying the extension of a light rail transit (LRT) line to Ontario International Airport, which is tentatively envisioned to traverse along the Cucamonga Creek Channel immediately west of Planning Areas 3 and 4. Although the LRT line and associated facilities are not part of the Project, the Meredith SPA acknowledges the potential off-site LRT alignment and anticipates its use by employees, visitors, and residents of the Specific Plan.

3.4.5 Utilities Infrastructure

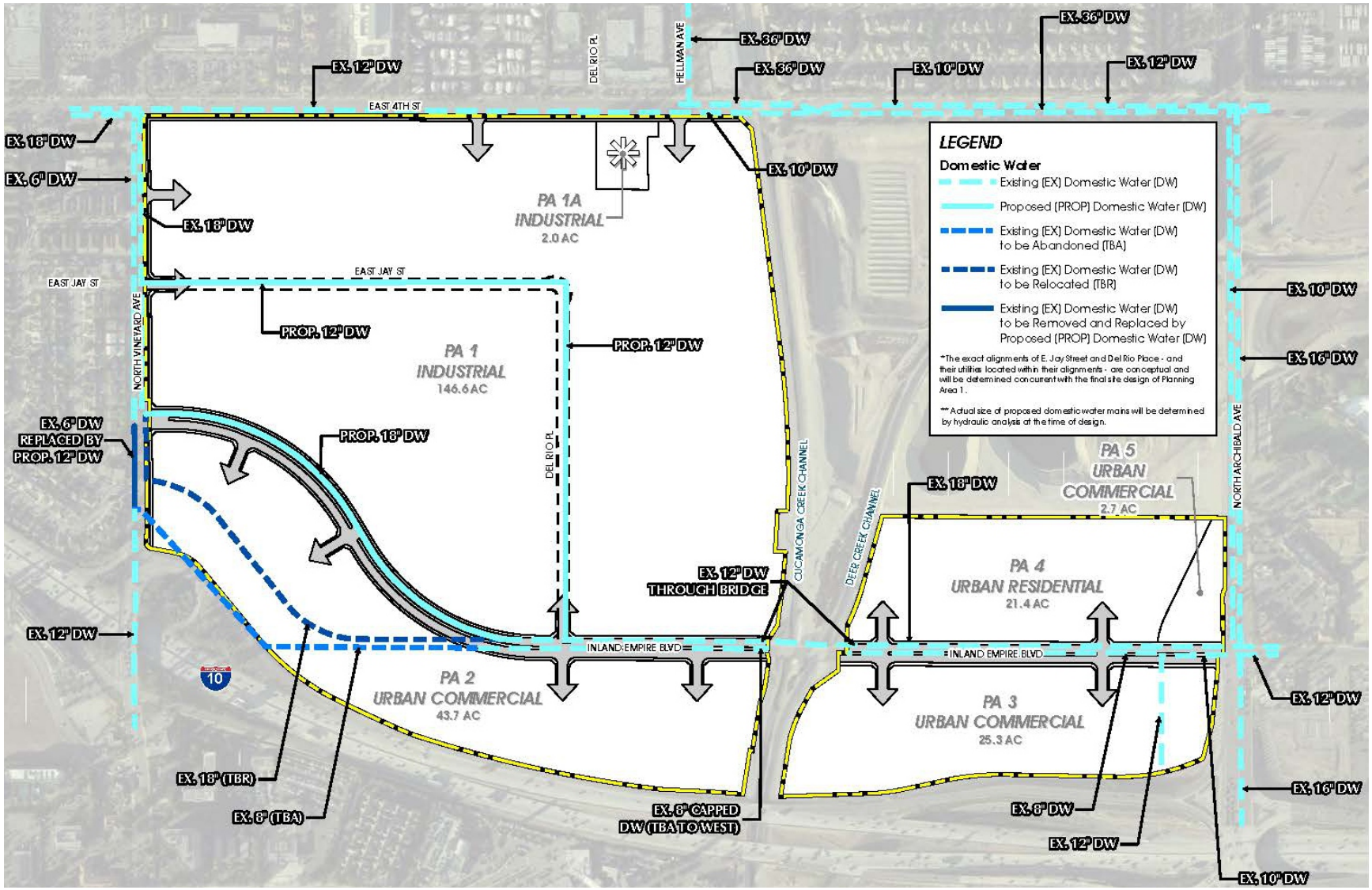
As elements of the Project, public utility systems, including water and sanitary sewer systems would be modified or extended to serve the Project facilities. Such modifications may include, but are not limited to: new service connections, service/distribution line upgrades, and realignment(s) of existing service/distribution lines. Certain aspects and attributes of infrastructure improvements and modifications incorporated in the Project are summarized below.

3.4.5.1 Domestic Water

The Project water demands are estimated at 691,800 gpd (775 acre feet/year) and would be approximately 50 percent of the 1,302,053 gpd (1,459 acre feet/year) water demands for the subject site reflected in the City of Ontario 2010 Urban Water Management Plan (2010 UWMP). The Project would therefore not result in water demands not already considered and evaluated in the 2010 UWMP. The 2010 UWMP concluded that the City would be able to meet 100 percent of its dry year demand under a normal water year, single dry year, and multiple dry years.

Consistent with SB 610 requirements, a Water Supply Assessment (WSA) has been prepared for the Project and is included at EIR Appendix H. The Project WSA substantiates that water demands of the Project are accounted for within the 2010 UWMP, and further that sufficient water supplies are available to meet the Project water demands from existing entitlements and resources. Prior to the issuance of building permits, the Project Applicant would be required to obtain a will-serve letter, indicating purveyor capacity and commitment to provide water to the Project. Please refer also to EIR Section 4.7, Public Services & Utilities, pp. 4.7-16 through 4.7-19, and the Project WSA provided at EIR Appendix H.

Ontario Municipal Utilities Company would provide domestic water service to the Specific Plan area as part of its service to Zone 1212. As shown in Figure 3.4-9, the Specific Plan area would be served by water lines currently installed within Vineyard Avenue, 4th Street, and Inland Empire Boulevard.



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Source: T&B Planning, Inc.

applied planning inc

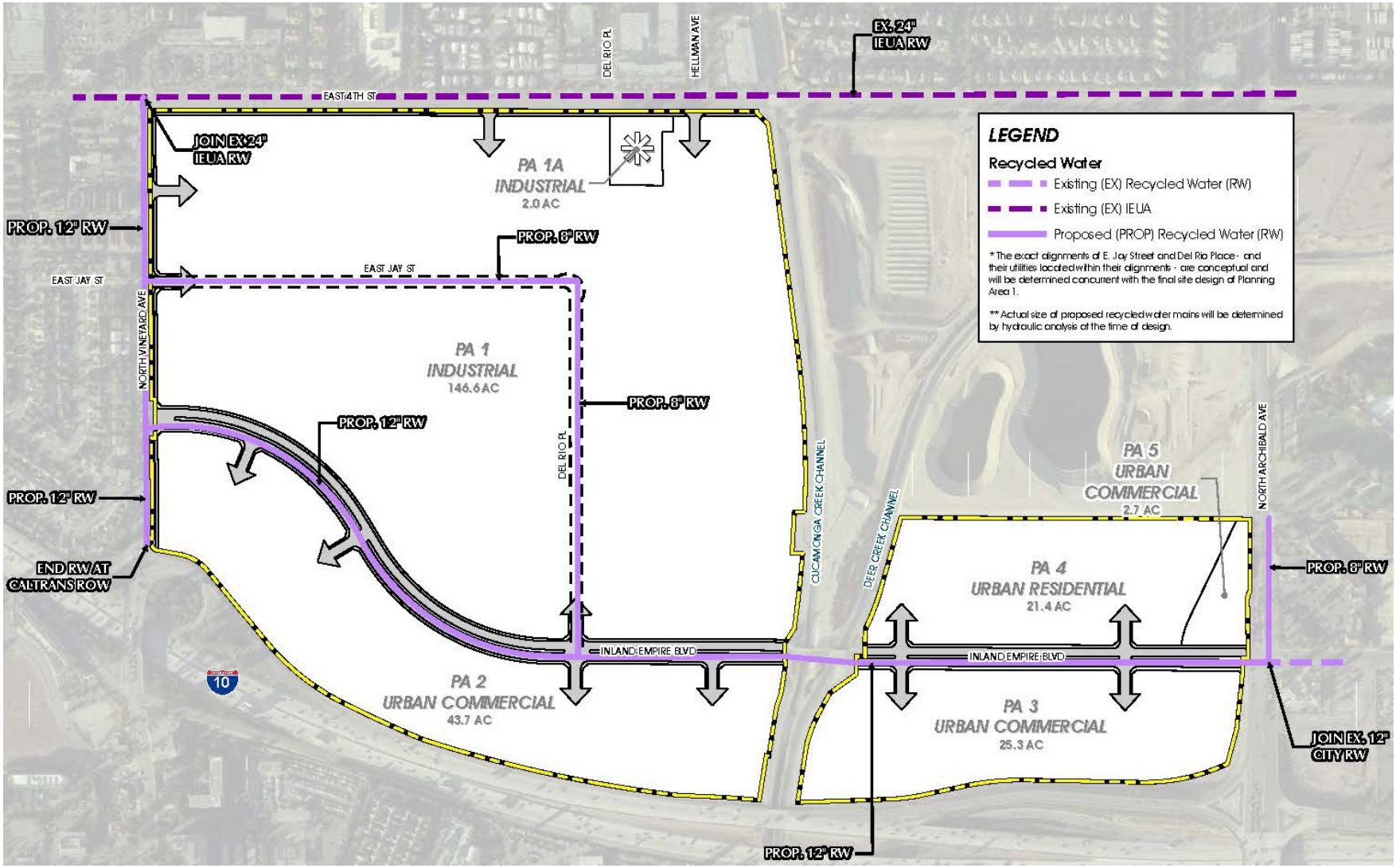
Figure 3.4-9
Domestic Water Plan

Concurrent with the realignment of Inland Empire Boulevard, an 18-inch water line would be installed within the newly aligned segment of the roadway. In addition, approximately 400 feet of 6-inch diameter water line currently installed within Vineyard Avenue would be upsized to a 12-inch diameter line, in conjunction with buildout of the Meredith SPA and relocation of the Inland Empire Boulevard/Vineyard Avenue intersection. New 12-inch diameter water lines are proposed within the alignments of Del Rio Place and East Jay Street, which would provide service to the industrial land uses within Planning Area 1.

3.4.5.2 Recycled Water

Ontario Municipal Utilities would supply recycled water to the Specific Plan area as part of its service to Zone 1270. As shown on Figure 3.4-10, the Project site would be served by a 24-inch diameter recycled water line currently installed within 4th Street, and a 12-inch diameter line installed within Inland Empire Boulevard, east of Archibald Avenue. Expansion of the recycled water system is planned to occur in association with the development of Meredith SPA.

The conceptual recycled water plan provides for the following improvements: a 12-inch diameter line installed within Vineyard Avenue, between 4th Street and the southwest corner of the Specific Plan area (terminating at the Interstate 10 right-of-way); a 12-inch diameter line installed within Inland Empire Boulevard beginning at Vineyard Avenue and extending east to join the existing recycled water line east of Archibald Avenue; and an 8-inch diameter line installed within Archibald Avenue beginning at Inland Empire Boulevard and extending approximately 650 feet north. The Meredith SPA also proposes 8-inch diameter recycled water lines within the alignments of Del Rio Place and East Jay Street to serve industrial land uses within Planning Area 1.



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Source: T&B Planning, Inc.

applied planning inc

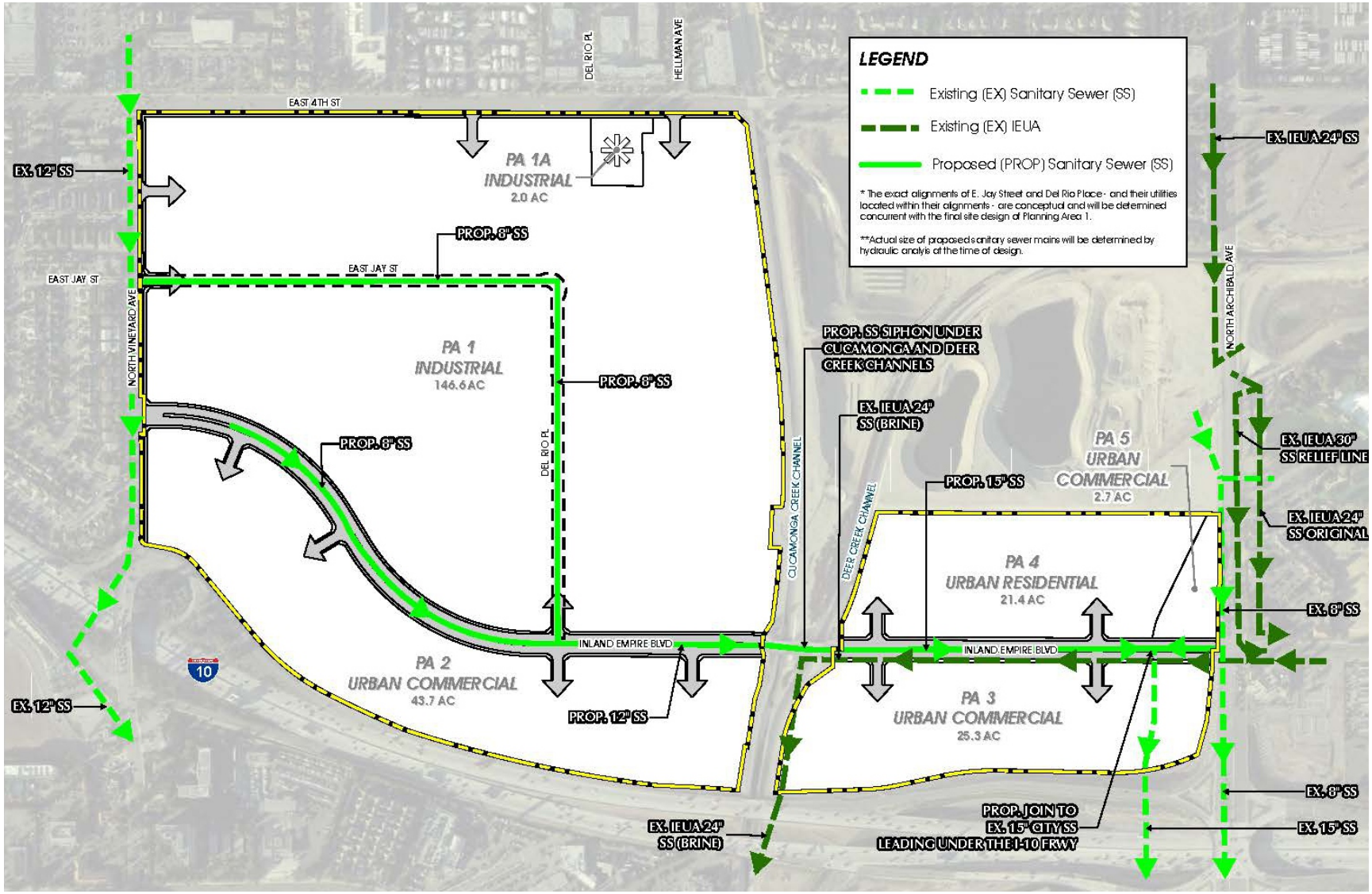
Figure 3.4-10
Recycled Water Plan

3.4.5.3 Sanitary Sewer

The Specific Plan area would be served by Ontario Municipal Utilities Company, which conveys wastewater to the Inland Empire Utility Agency (IEUA) for transmission to treatment facilities. As shown on Figure 3.4-11, there is currently a 12-inch diameter pipe installed within Vineyard Avenue, and an 8-inch diameter pipe installed within Archibald Avenue. In addition, an existing 15-inch diameter pipe traverses Planning Area 3, approximately 300 feet west of Archibald Avenue; this line conveys sewer flows from the 8-inch line beneath Inland Empire Boulevard south, across Interstate 10 to treatment facilities.

IEUA system pipe are installed within Inland Empire Boulevard (24-inch diameter), and Archibald Avenue (24- and 30-inch diameters). The IEUA sewer line within Inland Empire Boulevard is not available for domestic flows and, therefore, not available to service the Project.

The sanitary sewer system for the Specific Plan area is designed to utilize the 15-inch diameter pipe installed within Planning Area 3 as the discharge point for flows produced within the Project site. To make a connection to this line, a pipe that transitions from an 8-inch to 15-inch diameter is proposed within Inland Empire Boulevard from just east of Vineyard Avenue to just west of Archibald Avenue. Proposed 8-inch diameter lines within the alignments of East Jay Street and Del Rio Place would convey flows from Planning Area 1 and connect to the proposed line within Inland Empire Boulevard.



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Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-11
Sewer Plan

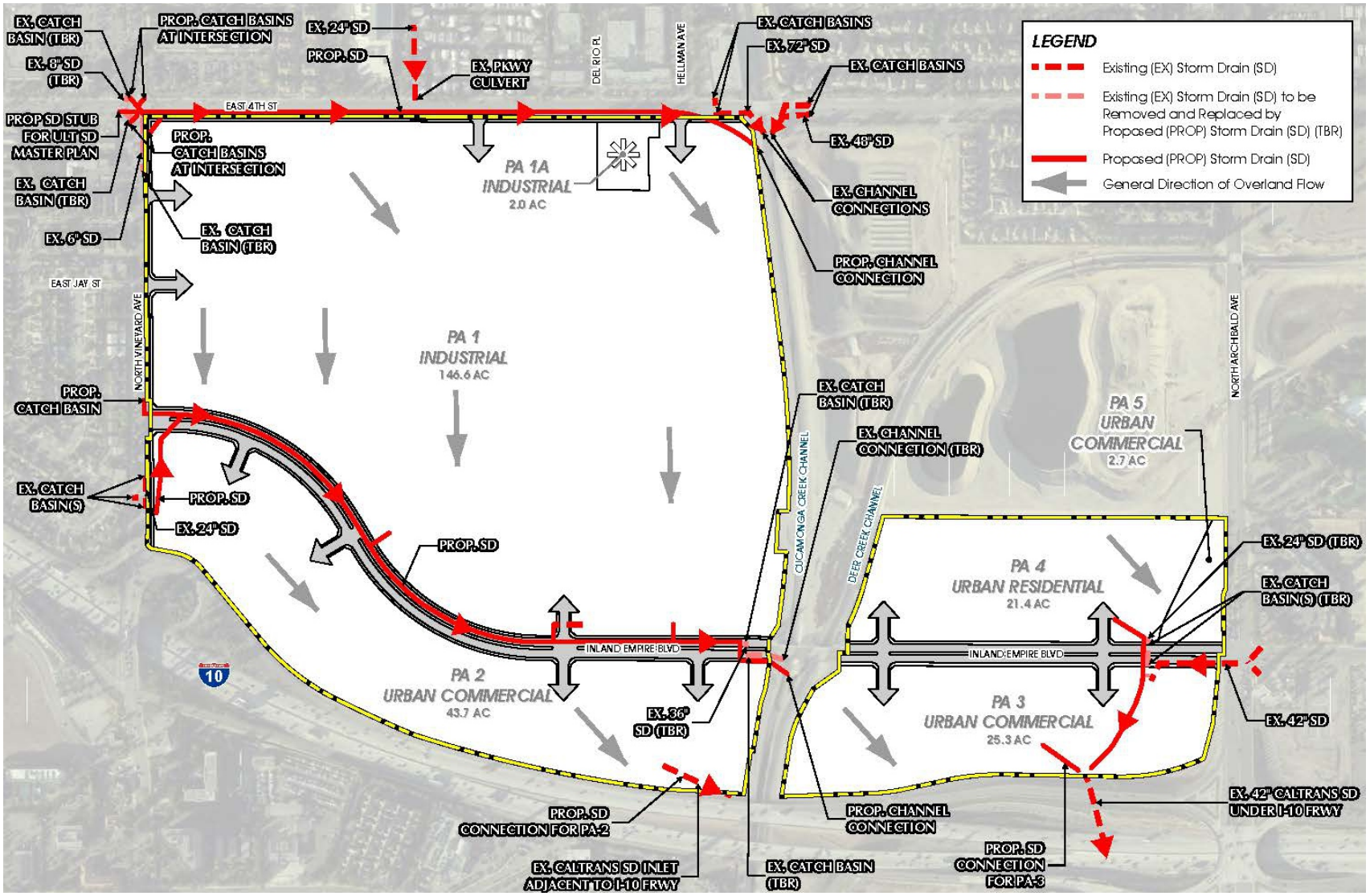
3.4.5.4 Storm Drainage

The master storm drain plan for the Meredith SPA is shown in Figure 3.4-12. As shown, Planning Area 1 drains in a southeasterly direction and ultimately flows into the Cucamonga Creek Channel. Basins for water quality and detention purposes are proposed along Inland Empire Boulevard within Planning Area 1 to comply with the New Development requirements in the San Bernardino County Urban Runoff (NPDES) Permit, serve functional drainage purposes, and to provide green space along the roadway. Flows discharged from Planning Area 1 will be conveyed east via a new storm drain pipe within Inland Empire Boulevard and discharged into the Cucamonga Creek Channel (via a new outlet connection).

Planning Area 2 drains easterly to an existing inlet connection to the Cucamonga Creek Channel adjacent to Interstate 10. No additional storm drain backbone infrastructure would be required to serve Planning Area 2.

Planning Areas 3, 4, and 5 drain southerly toward Interstate 10. A new storm drain pipe would convey storm water flows from these areas to an existing culvert that is located south of Planning Area 3 and travels under Interstate 10. A water quality and detention basin is proposed in Planning Area 3 and/or Planning Area 4 to comply with the New Development requirements in the San Bernardino County Urban Runoff (NPDES) Permit, detain and control onsite stormwater runoff prior to discharge to the culvert under Interstate 10, and to provide green space.

Consistent with City requirements and as stipulated under the San Bernardino County Separate Sewer System Permit (MS4 Permit), development-specific Water Quality Management Plan(s) (WQMPs) would be prepared for all building sites within the Specific Plan Area. Performance standards established under the MS4 Permit require that the Project infiltrate, harvest and use, or bio treat the run-off from a 2-yr, 24-hour storm event (Design Capture Volume). The Project WQMP to include Low Impact Development (LID) design features and operational programs elements would be incorporated in the Project pursuant to the City's final WQMP review and approval processes.



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NOT TO SCALE

Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-12
Storm Drainage Plan

3.4.5.5 Dry Utilities

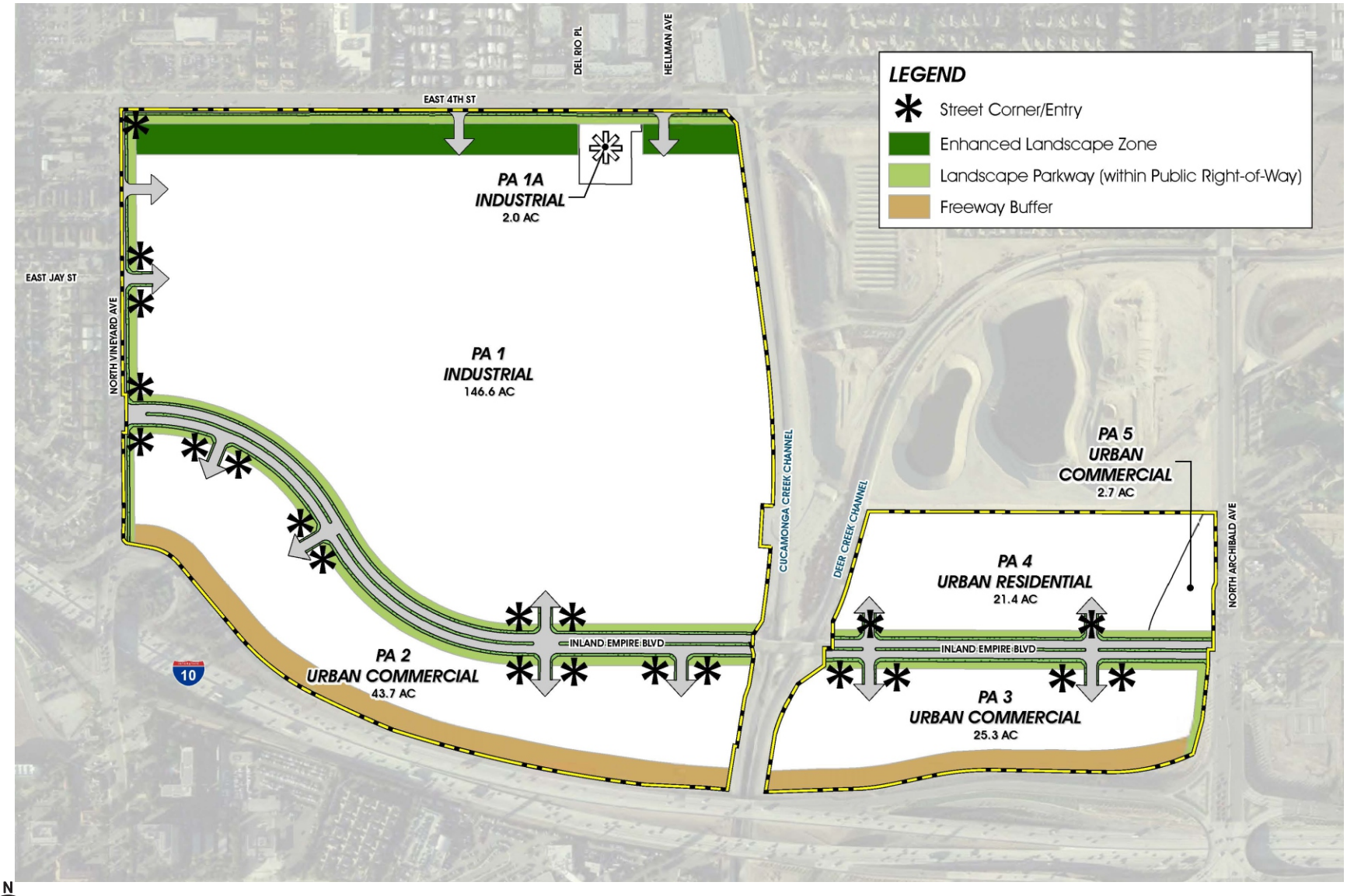
The Specific Plan area receives electrical service from Southern California Edison (SCE), natural gas service from the Southern California Gas Company, and cable service from Time Warner Cable. Electricity, gas, and cable lines are currently installed within Vineyard Avenue, Fourth Street, and Archibald Avenue. As part of the Project, new lines would be installed within Inland Empire Boulevard, Jay Street, and Del Rio Place to fully service the Specific Plan area.

3.4.6 Landscape Concept

The plant palette for Meredith SPA includes shrubs and groundcovers, ornamental grasses and succulents, and evergreen and deciduous trees that are commonly used throughout Southern California. Many of the plant materials are water-efficient species native to Southern California or naturalized to the arid Southern California climate. Please refer to Table 6-1 of the Specific Plan for a complete plant palette.

Landscaping is proposed throughout the Specific Plan area, but would most prominently occur at street corners and along roadways. Street corners would include landscaping and identification monuments. Streetscape landscaping would consist of a combination of evergreen and deciduous trees, low shrubs, and masses of groundcovers. Landscaping will be designed in a manner that will adhere to City engineering sight line standards and not interfere with, or compromise, vehicular and pedestrian visibility.

The location of primary Meredith SPA landscaping is illustrated in Figure 3.4-13. As shown, an enhanced landscape zone occurs along the site's Fourth Street frontage. This area will feature densely planted landscaping and a meandering decomposed granite pathway, serving as an attractive linear parkway. A raised planted median would also be located within Fourth Street.



Source: T&B Planning, Inc.

applied planning inc

Figure 3.4-13
Landscape Plan

An enhanced landscape parkway to accommodate water detention and filtration features is proposed along the north and south sides of Inland Empire Boulevard in Planning Area 1. Inland Empire Boulevard would also feature a raised planted median with evenly spaced trees.

The southern boundary of the Specific Plan area (Planning Areas 2 and 3) abuts Interstate 10. At this interface, layers of large canopied evergreen shade trees and shrub masses provide a green buffer between Urban Commercial development and the freeway.

3.4.7 Design Concepts

The Specific Plan area is envisioned as a contemporary mixed-use center containing Industrial, Urban Commercial, and Urban Residential land uses that take advantage of the property's location near regional transportation corridors.

The Meredith SPA proposes a contemporary design aesthetic, which provides architectural styling with attractive detailing, a light-toned color palette, and timeless features. Signs are modern, lighting is focused and directed, landscaping is colorful and drought-tolerant and design features are applied that lower energy use demands of building operations.

Proposed buildings are characterized by simple and distinct cubic masses with interlocking volumes of wall planes, colors, and materials to create visual appeal. Exterior building colors are light and warm tones with darker or more vibrant accent colors on wall planes at focal points, such as around building entrances and near outdoor gathering spaces. Additionally, architectural designs may mix colors, materials, and textures to articulate façades and create visual appeal.

Design elements throughout the Specific Plan area would be compatible in character, massing, and materials in order to promote a clean and contemporary feel.

Development would not be overly "trendy" or strongly historical; however, subtle references to the history of the region are acceptable.

The design theme of the Meredith SPA is meant to complement the City of Ontario's character and comply with the City's Development Code.

3.4.8 Lighting

Thematic lighting for the entire Project area is established within the Meredith SPA. All lighting within the Meredith SPA area would be designed and implemented in a manner that precludes potential adverse effects of light overspill. All decorative and security lighting plans would be submitted for required City review and approval prior to, or concurrent with, application for building permits. Final design of the Project's lighting is subject to the City's Design Review processes. Lighting within the public street right of way shall conform to city engineering standards.

3.4.9 Signs

All signs within the Meredith SPA area would comply with City of Ontario signage requirements and a Master Sign Program will be prepared and submitted to the City for review and approval. Subsequent development projects within the Project site will be required to adhere to the approved Master Sign Program. All traffic control signs within public and private rights of way shall conform to applicable California Manual on Uniform Traffic Control Devices (CA-MUTCD) standards.

3.4.10 Energy Efficiency/Sustainability

Energy-saving and sustainable design features and operational programs would be incorporated into all facilities developed pursuant to the Meredith SPA. Planning Areas 1 through 4 would provide sustainable design features necessary to achieve a "Certified" rating under the United States Green Building Council's Leadership in Energy & Environmental Design (LEED) programs. The Project also incorporates and expresses the following design features and attributes promoting energy efficiency and sustainability.

- The developer of the industrial phase of the Project (Planning Area 1) will install on the roofs of the warehouse buildings a photo-voltaic electrical generation system (PV system) capable of generating 1,600,000 kilowatt hours per year.[3] The developer may install the required PV system in phases on a pro rata square foot basis as each building is completed; or if the PV system is to be installed on a single building, all of the PV system necessary to supply the PV estimated electrical generation shall be installed within two years (24 months) of the first building that does not include a PV system receives a certificate of occupancy.

- All on-site cargo handling equipment (CHE) would be powered by non-diesel fueled engines (i.e., electric engines).

- Regional vehicle miles traveled (VMT) and associated vehicular-source emissions are reduced by the following Project design features/attributes:

    - Pedestrian connections shall be provided to surrounding areas consistent with the City's General Plan. Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. The Project would provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The Project would minimize barriers to pedestrian access and interconnectivity.

    - The Project's mixed-use configuration and proposed collocation of Industrial, Urban Commercial and Urban Residential land uses together with supporting amenities would tend to decrease the propensity for, and length of commuter vehicle travel.

[3] This electricity generation estimate is based on the amount of electricity to be consumed within Planning Area 1 at buildout and full occupancy.

- To reduce water demands and associated energy use, subsequent development proposals within the Project site would be required to implement a Water Conservation Strategy and demonstrate a minimum 20% reduction in indoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). [4] Development proposals within the Specific Plan Area would also be required to implement the following:

    - Landscaping palette emphasizing drought tolerant plants consistent with provisions of the Meredith SPA and/or City requirements;

    - Use of water-efficient irrigation techniques consistent with provisions of the Meredith SPA and/or City requirements; and

    - U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

Additionally, pursuant to the EIR Mitigation Measures, the Project in total would surpass by a minimum of 5%, incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Title 24 Energy Efficiency Standards).

3.4.11 Land Use Considerations

As currently proposed, the Meredith SPA is inconsistent with the land use distribution and intensities set forth in the Policy Plan component of TOP. The Policy Plan provides

[4] Reduction of 20% indoor water usage is consistent with the current CalGreen Code performance standards for residential and non-residential land uses. Per CalGreen, the reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code.

for an assumed buildout of the site consisting of 2,930 dwelling units and 7.4 million square feet of office/retail uses. This is far more intense than the Project, which proposes 3 million square feet of industrial uses, 1.1 million square feet of commercial uses, and up to 800 residential units. The location and distribution of these uses are inconsistent with those presented within the Policy Plan Land Use Plan (Exhibit LU-01).

In addition to policy considerations, the Project will require an amendment to the Policy Plan definition of "Mixed Use – Meredith." The current definition does not provide for industrial uses. In order to develop the property as proposed, "Mixed Use – Meredith" will need to provide for at least 3,007,000 square feet of industrial uses. Additionally, the existing school designation of "Public School" will need to be amended to accommodate the redefined designation of "Mixed Use – Meredith." A companion land use action will be a zone change for the school site from "Public Facility" to "Specific Plan."

3.5 PROJECT OBJECTIVES

The primary goal of the Project is the development of the subject site with a productive mix of industrial, commercial/retail, and residential uses. Complementary Project Objectives include the following:

- Create an integrated development that provides a full range of employment opportunities near residential uses.
- Create a planned development wherein commercial uses would benefit from the site's freeway visibility.
- Develop industrial uses that would support the Ontario International Airport and that would benefit from the Airport's proximity.
- Construct residential uses proximate to employment opportunities and commercial services.
- Provide an industrial park supporting varied warehouse distribution and industrial tenants.

- Provide safe and convenient access for trucks in a manner that minimizes any potential disruption to residential areas.
- Cluster industrial uses near existing roadway and freeways to reduce traffic congestion and air emissions.
- Facilitate goods movement locally, regionally, nationally, and internationally.
- Provide land uses that are compatible with surrounding land uses and that would not conflict with the policies and environmental constraints identified in the Policy Plan.
- Complete the urbanization of the area north of I-10 and east of Vineyard Avenue with necessary infrastructure while incorporating high quality, consistent design standards.
- Provide infrastructure and public improvements necessary to support each increment of Project development, and the Project in total.
- Establish new development that would further the City's near-term and long-range fiscal goals.

3.6 PROJECT DISCRETIONARY ACTIONS, PERMITS, CONSULTATION

Discretionary actions, permits and related consultation(s) necessary to approve and implement the Project are summarized below.

3.6.1 Discretionary Actions

CEQA Guidelines Section 15124 states in pertinent part that if "a public agency must make more than one decision on a Project, all its decisions subject to CEQA should be listed . . ." Requested decisions, or discretionary actions, necessary to realize the Project include, but may not be limited to, the following:

- Certification of the Meredith International Centre Specific Plan Amendment EIR;

- Adoption of the Meredith International Centre Specific Plan Amendment;

- Approval of Policy Plan (General Plan) Amendments including, but not limited to:
  - Amendment(s) to narrative descriptions for the "Mixed Use – Meredith" land use area to reflect the type and scope of uses proposed by the Project.
  - Amendment of the Land Use Map to incorporate the Italo M. Bernt Elementary School site (approximately 2.0 acres) within the boundaries of the "Meredith Mixed Use Area."
  - TOP Exhibit LU-04 would need to be amended to remove this site from the Ontario Airport Metro Center growth area.

- Approval of Zone Change;

- Approval of Parcel Maps;

- Development Plan Approval for Planning Areas 1 and 1A;

- Approval of Development Plan Entitlements for other Meredith SPA Planning Areas, contingent on their consistency with the adopted SPA;

- Adoption of a Development Agreement; and

- Approval of Conditional Use Permit(s) for certain uses identified by the Meredith SPA. Please refer to the Meredith SPA document (EIR Appendix B) Section 5.D., "Permitted, Conditional and Ancillary Uses."

3.6.2 Consultation and Permits

CEQA Guidelines Section 15124 also states that the EIR should, to the extent known, include a list of all the agencies expected to use the EIR in their decision-making (Responsible Agencies) and a list other permits or approvals required to implement the

Project. Based on the current Project design concept, anticipated permits necessary to realize the proposal would likely include, but are not limited to the following:

- Permitting through the Regional Water Quality Control Board (RWQCB) pursuant to requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit;

- Permitting through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented within the Project area;

- Permitting may be required by/through Caltrans to allow for any necessary modifications to Caltrans facilities, including but not limited to work within or encroachment upon Caltrans rights-of-way; and

- Various construction, grading, and encroachment permits allowing implementation of the Project facilities.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This chapter of the EIR analyzes and describes the potential environmental impacts associated with the adoption and implementation of the Meredith International Centre SPA Project (Project). The environmental impact analysis has been organized into a series of sections, each addressing a separate environmental topic. Environmental topics addressed in this EIR are presented in the following sections:

Section	Topic
4.1	Land Use and Planning
4.2	Traffic and Circulation
4.3	Air Quality
4.4	Global Climate Change and Greenhouse Gas Emissions
4.5	Noise
4.6	Hazards/Hazardous Materials
4.7	Public Services and Utilities
4.8	Hydrology/Water Quality
4.9	Biological Resources
4.10	Geology and Soils
4.11	Cultural Resources
4.12	Aesthetics
4.13	Population and Housing

Within each of the above topical Sections, the discussion is typically divided into subsections which: describe the "setting" or existing environmental conditions; identify regulations and policies, which through their observance typically resolve many potential environmental concerns; identify thresholds of significance applicable to

potential environmental effects of the Project; describe the significance of Project-related environmental effects in the context of applicable significance thresholds; and for impacts which are potentially significant or significant, recommend mitigation measures to eliminate or reduce their effects. In this latter regard, it is recognized that the intent of the California Environmental Quality Act (CEQA) is to focus on significant, or potentially significant adverse effects of the Project, and therefore, mitigation is proposed only for potential impacts of this magnitude.

As noted above, before potential impacts are evaluated, the standards or thresholds which will serve as the basis for judging the relative significance of impacts are presented. Often thresholds serve as a general guide or gauge for determining an impact's potential relative significance, rather than defining its absolute effects. Subsequent to identification of relevant significance thresholds, potential Project-related effects and impacts are identified and explained. If an impact is considered to be potentially significant, mitigation measures are proposed to avoid the impact, or reduce its effects to the extent feasible. In determining the potential significance of impacts, the adequacy of existing policies and regulations in addressing each impact is taken into consideration. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of mitigation measures.

In the environmental analysis, the following terms are used to describe the potential effects of the Project:

- **Less-Than-Significant Impacts**: Minor changes or effects on the environment caused by the Project which do not meet or exceed the criteria, standards, or thresholds established to gauge significance are considered to be less-than-significant impacts. Less-than-significant impacts do not require mitigation. In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation.

- **Potentially Significant Impacts**: Potentially significant impacts are defined as a substantial, or potentially substantial, adverse change in the environment. The CEQA Guidelines and various responsible agencies provide guidance for determining the significance of impacts. However, the determination of impact significance is ultimately based on the judgment of the lead agency. Similarly, the establishment of any criteria to be used in evaluating the significance of impacts is the responsibility of the lead agency. Wherever possible, mitigation is proposed in the EIR to avoid or reduce the magnitude of potentially significant impacts.

- **Significant Impacts**: Impacts identified in the EIR which cannot be mitigated below thresholds of significance through the application of feasible mitigation measures are categorized as "significant."

- **Cumulative Impacts**: A discussion of cumulative impacts is provided in Section 5.0 of this environmental analysis. Cumulative impacts refer to the impacts of the Project as they are combined or interact with anticipated impacts of other vicinity projects and physical effects of projected ambient regional growth.

4.1 LAND USE AND PLANNING

4.1 LAND USE AND PLANNING

Abstract

This Section identifies and addresses potential impacts that may result from land use and planning decisions necessary to implement the proposed development. In addition to land use impacts that could occur due to the proposed type of development, its location or scale. More specifically, the land use and planning analysis presented here examines whether the Project would:

- *Physically divide an established community or result in land use incompatibilities;*

- *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or*

- *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

As supported by the analysis presented in this Section, potential land use and planning impacts of the Project are less-than-significant.

4.1.1 INTRODUCTION

The Land Use and Planning Section of the EIR focuses on the Project's consistency with applicable land use plans, policies and regulations; and also evaluates the Project's compatibility with existing and proposed development in the vicinity. Discussions and analysis within this Section are based on and supported by the following documents and source information:

- The Ontario Plan (TOP), Policy Plan (General Plan), and TOP Final Environmental Impact Report (TOP Final EIR). These documents are available through the City of Ontario, or are accessible at: <http://www.ontarioplan.org/>;

- The 1981 Meredith International Centre Specific Plan, included at EIR Appendix B;

- The proposed Meredith International Centre Specific Plan Amendment (Meredith SPA) included at EIR Appendix B; and

- *Analysis of Market Absorption Potentials and Related Socioeconomic Impacts* (The Natelson Dale Group, Inc.) January 26, 2015 (Project Economic/Fiscal Impact Analysis), included at EIR Appendix K.

4.1.2 SETTING

4.1.2.1 Location

The Project is located in the southeast portion of the City of Ontario, within San Bernardino County. The site is generally located north of Interstate 10 (I-10), between Vineyard Avenue on the west, and Archibald Avenue on the east. The northerly boundary of the site, between Vineyard Avenue and Cucamonga Creek Channel, is formed by Fourth Street. Existing San Bernardino County Flood Control facilities form the northern boundary for the portion of the site located east of Deer Creek Channel. Please refer also to Figure 3.2-1, "Project Location."

4.1.2.2 Existing Land Uses

Project Site and Vicinity Land Uses

Project site and vicinity land uses are denoted in the aerial photograph presented at Figure 4.1-1; and area land uses are described in the following discussions. Please refer also to land use descriptions presented at EIR Section 3.0, "Project Description."

Project Site Land Use

As indicated at Figure 4.1-1, the Project site is predominantly vacant, with the exception of the Italo M. Bernt Elementary School site (Bernt School, approximately 2.0 acres), situated along the Project site's northerly, Fourth Street boundary; and approximately 2.5 acres of commercial uses located at the northwest corner of Inland Empire Boulevard and Archibald Avenue, at the easterly limits of the Project site.

The aforementioned Bernt School site was not part of the original 1981 approved Specific Plan, but is now included within the Project site, and is incorporated in the proposed Meredith International Specific Plan Amendment (Meredith SPA) as "Planning Area 1A." The approximately 2.5 acres of commercial uses located at the northwest corner of Archibald Avenue and Inland Empire Boulevard include an existing gasoline service station/convenience market, and various inline shops/retail/food service uses; and are denoted as Meredith SPA "Planning Area 5."

Cucamonga Creek Channel and Deer Creek Channel, both concrete-lined flood control channels, traverse the central portion of the site in a north/south alignment. Inland Empire Boulevard crosses through the southern portion of the site in an east/west direction. The remainder of the Specific Plan area consists of relatively flat, vacant land.

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NOT TO SCALE

Source: Google Earth, Applied Planning, Inc.

applied planning inc

Figure 4.1-1
Existing Land Uses

Vicinity Land Uses

Land uses bordering the Project site are described below. The Project does not propose or require actions that would affect existing off-site land uses or their current development characteristics.

North

Properties located northerly of the Project site, across Fourth Street, are developed with a variety of commercial, industrial, and residential land uses. Northeasterly of the Project site, across Fourth Street are City of Rancho Cucamonga properties developed with residential uses. Exterior to the Project site, southerly of Fourth Street, and situated between the Cucamonga Creek Channel to the west and Archibald Avenue to the east, are San Bernardino County Flood Control Facilities, and to the northeast of these Facilities, residential land uses.

South

The southerly limits of the Project site are defined by Interstate 10 (I-10). Southerly of the Project site, across I-10, properties are developed with various industrial, office, hotel, and commercial/retail uses.

East

Easterly of the Project site across Archibald Avenue, are various commercial uses and the Cucamonga-Guasti Regional Park.

West

Single-family and multi-family residential uses are located westerly of the Project site, across Vineyard Avenue. Additionally, a commercial/retail center is located at the southwest corner of Vineyard Avenue at Fourth Street.

4.1.2.3 Existing Land Use Designations

Project Site

The Policy Plan Land Use Plan (Exhibit LU-01) designates the majority of the Project site as "Mixed Use – Meredith." The Project's "Planning Area 1A" (the Bernt School site) is designated as "Public School" by the Policy Plan Land Use Plan. Existing Policy Plan Land

Use designations for the Project site are illustrated at Figure 4.1-2, and a summary descriptions of current Project site Land Use designations is presented at Table 4.1-1.

Table 4.1-1
Project Site Land Use Designations - Policy Plan Descriptions

MIXED USE –An intense mixture of uses that, when concentrated, create focal points for community activity and identity and facilitate the use of transit. The Mixed Use land use category accommodates a horizontal and/or vertical mixture of retail, service, office, restaurant, entertainment, cultural, and residential uses.

- Development in the Mixed Use land use designation requires approval of a master plan, such as an area plan, specific plan, or planned unit development, which focuses on the character, relationship of uses, public/private access, parking, pedestrian facilities, building form, integration with the roadways and pedestrian ways, public spaces, landscaping, and public amenities.
- Density, intensity and intended character varies by area, as generally described below.
- The densities and intensities of the mixed use designation represent the intended level of anticipated development; however, individual projects may vary depending upon an approved master plan, such as an area plan, specific plan, or planned unit development.
- The maximum amount of development in each Mixed Use area shall be limited by the Future Buildout Projections. Further direction regarding land use distributions, densities and intensities within each area are provided by Area Plans and/or specific plans as noted below.

Designation	Density/Intensity	Intent
Meredith Mixed Use Area	>14.0 to 125.0 dwelling units per acre 3.0 FAR for office and retail uses Subject to Area Plan for Ontario Airport Metro Center	Meredith is envisioned as one of the most intensive developments in Ontario and is intended to accommodate an intensive, horizontal and vertical mixture of commercial, office, and residential uses based around a transit station. The portion fronting I-10 will be the most intensive mixture of mid-rise buildings, regional-serving retail and office centers, while the northern area is generally a residential village comprised of single and multi-family residential districts surrounding a vertically mixed-use village core. There is an approved Specific Plan on this site that may require amendment to reflect the Ontario Airport Metro Center Area Plan. See Ontario Airport Metro Center Area Plan for more detail.[1]
OTHER		
Designation	**Density/Intensity**	**Intent**
Public School	Not applicable	Public schools (K-12) and universities.

Source: Policy Plan Table LU-02.

[1] As of the date of this EIR, the City has not formally adopted the Ontario Airport Metro Center Area Plan.

LEGEND

Residential

- Rural (0 - 2 du/ac)
- Low Density (2.1 - 5 du / ac)
- Low-Medium Density (5.1 - 11 du / ac)
- Medium Density (11.1 - 25 du / ac)
- High Density (25.1 - 45 du / ac)

Mixed Use

- Mixed Use
  1. Downtown
  2. East Holt
  3. Meredith
  4. Multimodal Mixed Use
  5. Inland Empire Corridor
  6. Guasti
  7. Ontario Center
  8. Ontario Mills
  9. NMC East
  10. NMC West
  11. Euclid/Francis
  12. 60/Hamner

Retail/Service

- Neighborhood Commercial (0.4 FAR)
- General Commercial (0.4 FAR)
- Office Commercial (0.75 FAR)
- Hospitality (1.0 FAR)

Employment

- Business Park (0.6 FAR)
- Industrial (0.55 FAR)

Other

- Open Space - Non Recreation
- Open Space - Parkland
- Open Space - Water
- Public Facility
- Public School

N

NOT TO SCALE

Source: Policy Plan Land Use Plan, Exhibit LU-01

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Figure 4.1-2
Existing Land Use Designations

Within the context of the Meredith Mixed Use Area development intensities noted at Table 4.1-1 (>14.0 to 125.0 dwelling units per acre; 3.0 FAR for office and retail uses), The Ontario Plan EIR reflects development of the Meredith Mixed Use Area with up to 7.5 million square feet of commercial/retail/office uses; and up to 2,958 residential units at an average density of 40 dwelling units per acre. In contrast, the Project proposes approximately 3.0 million square feet of industrial uses; up to 800 residential units, and commercial/retail/office uses totaling approximately 1.1 million square feet.

In order to accommodate land uses and development concepts proposed by the Project, certain of the current Policy Plan Land Use Element descriptions and discussions for the Meredith Mixed Use area would have to be amended. Accordingly, approval of Policy Plan Amendments are requested as components of the Project Discretionary Actions (please refer to EIR Section 3.6.1 "Discretionary Actions"). Policy Plan Amendments would include but would not be limited to:

- Amendment(s) to narrative descriptions for the "Mixed Use – Meredith" land use area to reflect the type and scope of uses proposed by the Project; and

- Amendment of the Policy Plan Land Use Map to incorporate the Italo M. Bernt Elementary School site (approximately 2.0 acres) within the boundaries of the "Meredith Mixed Use Area."

The Policy Plan Land Use Amendments proposed by the Project would substantively affect the scope and type of uses that would otherwise be permitted or conditionally permitted under the site's current Meredith Mixed Use Area designation. Proposed Project site land uses, their potential implications including consistency with the Policy Plan are discussed subsequently at Section 4.1.5, "Potential Impacts and Mitigation Measures."

Vicinity Land Use Designations

Land Use designations and Land Use descriptions for properties in the vicinity of the Project site are presented below. The Project does not propose or require Land Use amendments that would affect existing Policy Plan Land Use designations of off-site

properties. Vicinity Policy Plan Land Use designations are illustrated at previous Figure 4.1-2 and summary descriptions of vicinity Policy Plan Land Use designations are presented at Table 4.1-2.

Table 4.1-2
Vicinity Land Use Designations - Policy Plan Descriptions

RESIDENTIAL–A wide range of housing densities and products to meet the demand of current and future residents with varying lifestyles. In addition to the residential uses described below, other uses such as schools, parks, childcare facilities, utilities, live-work units, and other public/institutional uses that are determined to be compatible with, oriented towards the needs of residential neighborhoods they serve, and those that help enhance community may also be allowed. For developments that encompass multiple properties and contain more than one land use designation, the maximum number of units permitted for the development may be spread over the entire site thereby allowing the blending of the residential densities. When calculating the number of units permitted, the existing parcel size, before required dedication, shall be used.

Designation	Density/Intensity	Intent
Low-Medium Density Residential	>5.0–11.0 du/ac	Single/multi-family attached and detached residences, including small lot subdivisions, townhouses, and courtyard homes.
Medium Density Residential	>11.0–25.0 du/ac	Single/multi-family attached and detached residences including townhouses, stacked flats, courtyard homes, stacked flats, and small lot single-family subdivisions.

RETAIL/SERVICE–A full spectrum of retail, service, professional, office, medical, tourist-related, and entertainment uses at a range of intensities to respond to market demand and the character of the surrounding environment. In addition to the retail/service uses described below, other uses such as parks, childcare facilities, live-work units, utilities, and other public/institutional uses that are determined to be compatible with, oriented towards the needs of the surrounding neighborhood, and those that help enhance community may also be allowed.

Designation	Density/Intensity	Intent
Neighborhood Commercial	0.40 FAR	Local serving retail, personal service, office, and dining uses, typically located within a predominantly residential neighborhood.
General Commercial	0.40 FAR	Local and regional serving retail, personal service, entertainment, dining, office, tourist-serving, and related commercial uses.
Office/Commercial	0.75 FAR	An intense mixture of regional serving retail, service, tourist-serving, professional office, entertainment, dining, and supporting services uses that capitalize on strategic locations in Ontario. Example. This designation also includes professional offices including financial, legal, insurance, medical, and other similar uses in a neighborhood setting and/or as adaptive reuse.
Hospitality	1.00 FAR	Regional serving tourist-serving, retail, entertainment, and service uses such as convention centers, hotels/motels, and restaurants.

Table 4.1-2
Vicinity Land Use Designations - Policy Plan Descriptions

EMPLOYMENT–An array of employment uses, such as manufacturing, distribution, research and development, and office, at a range of intensities to meet the demand of current and future market conditions. In addition to the employment uses described below, other uses such as parks, live-work units, utilities, and other public/institutional uses that are determined to be compatible with and oriented towards the surrounding community uses may also be allowed.

Designation	Density/Intensity	Intent
Business Park	0.60 FAR	Employee-intensive office uses including corporate offices, technology centers, research and development, "clean" industry, light manufacturing, and supporting retail.

OTHER

Designation	Density/Intensity	Intent
Open Space–Non-Recreation	N/A	Open space that includes utility easements, and drainage channels. We desire to realize multiple uses from these open spaces, such as trails, greenways, joint-use recreational amenities, landscaped parkways/medians, parking lots, and nurseries.

MIXED USE (Please refer to the description of the Mixed Use Land Use designation presented at Table 4.1-1).

Designation	Density/Intensity	Intent
Multimodal Mixed Use Area	• >20.0 to 80.0 dwelling units per acre • 1.0 FAR for office and retail uses • Subject to Area Plan for Ontario Airport Metro Center	The Multimodal Mixed Use Area is the ideal location of our future multi-modal transit station that links rail, regional, local, and Airport transit. Intensive office, retail, and residential uses are envisioned to be integrated with the transit station, which should be an iconic structure befitting a key entry into the US and Ontario. See the Ontario Airport Metro Center Area Plan for more detail.[2]
Inland Empire Corridor Mixed Use Area	• >14.0 to 30.0 dwelling units per acre • 2.0 FAR for office uses • 1.0 FAR for retail uses • Subject to Area Plan for Ontario Airport Metro Center	Located along Inland Empire Boulevard, this area is intended to provide a connection between Meredith and the Ontario Center and relate to the park immediately to the north. This area is envisioned as a lower-rise mixture of office, retail, and residential uses. There is an approved Specific Plan on this site that may require amendment to reflect the Ontario Airport Metro Center Area Plan. See the Ontario Airport Metro Center Area Plan for more detail. [3]

Source: Policy Plan Table LU-02.

[2,4] As of the date of this EIR, the Ontario Airport Metro Center Area Plan has not been adopted by the City.

North

The northerly limits of the Project site are defined by Fourth Street. Northerly of the Project site, across Fourth Street, properties are assigned various Policy Plan Land Use designations. More specifically, extending westerly from the Cucamonga Creek Channel to Vineyard Avenue, properties are designated: Business Park (0.6 FAR); Low-Medium Density Residential (5.1-11 du/ac); General Commercial (0.4 FAR); Medium Density Residential (11.1-25 du/ac); and Neighborhood Commercial (0.4 FAR).

In the vicinity of the Project site, the Cucamonga Creek Channel and Fourth Street also define the easterly/northerly boundaries of the City of Ontario. Properties located northerly of Fourth Street, and easterly of the Cucamonga Creek Channel lie within, and are subject to, land uses plans established by the City of Rancho Cucamonga.

South

The southerly boundary of the Project site is formed by the I-10 Freeway. Southerly of the I-10 Freeway, extending westerly from Archibald Avenue to South Vineyard Street properties are designated "Mixed Use" [Multimodal Mixed Use], "Open Space Non Recreation" [Cucamonga Creek Channel], and "Hospitality." The Ontario International Airport (ONT) is located southerly adjacent to these properties, across East Airport Drive.

East/Northeast

The easterly/northeasterly boundary of the Project site is formed by the Cucamonga Creek Channel as it continues southerly from Fourth Street to Inland Empire Drive. The Project boundary then continues easterly, parallel to, and approximately 1/8 mile northerly of Inland Empire Drive, to Archibald Avenue.

Northerly of Inland Empire Drive and easterly of the Cucamonga Creek Channel continuing to Archibald Drive, properties are designated "Open Space Non Recreation" [Cucamonga Creek Channel, and San Bernardino County Flood Control Basins], "Low-Medium Density Residential," and "Medium Density Residential." Easterly of the Project site across Archibald Avenue and extending southerly to the I-10 Freeway, properties are designated "Mixed Use" [Inland Empire Corridor], and Office Commercial (0.75 FAR).

West

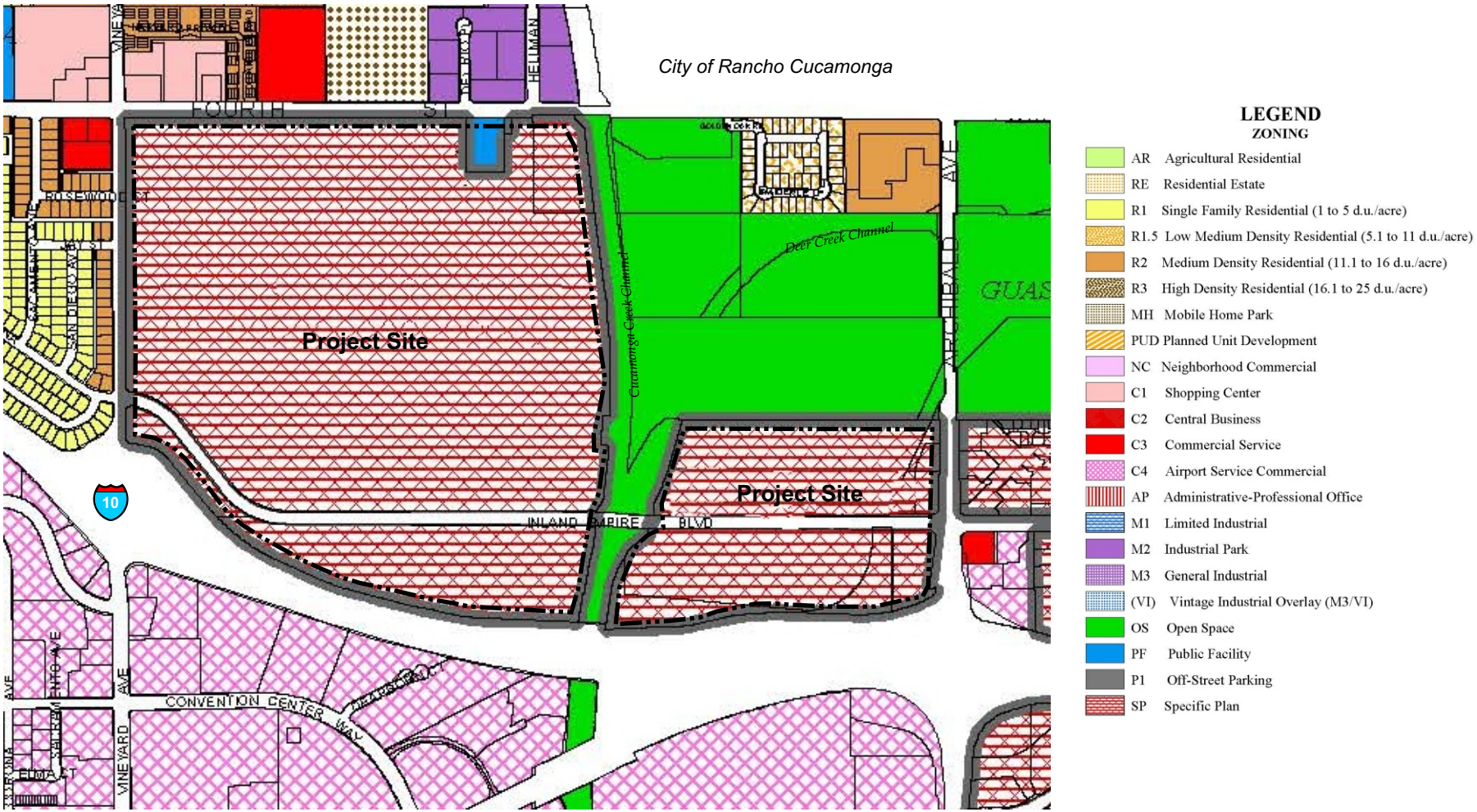
Westerly of the Project site, across Vineyard Avenue and extending northerly from the I-10 Freeway to Fourth Street, properties are designated for Residential uses: Low Density (2.1–5 du/ac), and Medium Density (11.1–25 du/ac). Across the intersection of Vineyard Boulevard and Fourth Street, properties are designated "Neighborhood Commercial" (0.4 FAR). Please refer to Policy Plan descriptions of these land uses presented above.

4.1.2.4 City of Ontario Zoning Designations

Zoning is generally considered the primary tool for implementing a General Plan. In contrast to the long-term, broad-based outlook of the General Plan, zoning is a site-specific device designed to control the locations, densities, and intensities of various land uses. To prevent incompatible land use relationships, zoning ordinance(s) and accompanying map(s) designate different areas or zones for different types of land uses, and establish standards for development. These standards may specify requirements for lot sizes, lot coverages, building heights, setbacks, parking, landscaping, and other development parameters. The California Government Code, Section 65860, requires City zoning designations to be consistent with the City General Plan.

Project Site

Zoning designations of the Project site and vicinity properties are presented at Figure 4.1-3. Current zoning of the predominance of the Project site is "Specific Plan" (Meredith International Centre [2265-SP])"; and development of the site is governed by the Meredith International Centre Specific Plan. The approximately two-acre Italo M. Bernt Elementary School site located along the northerly boundary of the Project site is currently zoned "Public Facility." Current zoning designations for the Project site are further described below.



Source: City of Ontario Zoning Map

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Figure 4.1-3
Existing Zoning Designations

Meredith International Centre Specific Plan-1981 (1981 Specific Plan)

The Meredith International Centre Specific Plan (approved by the City in 1981) establishes land use designations and development standards for all properties within its boundaries, and in this respect is the effective "zoning" for the affected area. In summary, the 1981 Specific Plan development concept would allow for the development of up to 4.15 million square feet of commercial uses (retail, office, and hotel uses) and up to 800 residential units. In order to allow for implementation of the land uses and development concepts proposed by the Project, the proposed Meredith International Centre Specific Plan Amendment would be adopted, and would become the effective zoning for the Project site.

The proposed *Meredith International Centre Specific Plan Amendment* (Meredith SPA) would substantively affect the scope and type of uses that would otherwise be permitted or conditionally permitted under the 1981 Specific Plan. Notably, the proposed Meredith SPA would introduce substantive industrial/warehouse uses not reflected under the 1981 Meredith Specific Plan. Land use implications of the proposed Meredith SPA are discussed in greater detail subsequently within this Section. The *Meredith International Centre Specific Plan Amendment* is presented in its entirety at EIR Appendix B.

Public Facility Zone District

Purposes, permitted uses, development standards, and special requirements of/for the Public Facilities Zone District are presented at City of Ontario Municipal Code Article 18: Public Facilities District (PF). As described at Municipal Code Section 9-1.1800. Purposes:

> The Public Facilities District is established to reserve sites throughout the community consistent with the General Plan for public facilities and public service installations and to provide a procedure for their establishment and for the expansion of their operations.

If approved, the proposed Specific Plan Amendment would extend the current Meredith International Centre Specific Plan boundaries to encompass the two-acre Public Facility Zone District (Bernt School site) located along the Project site's northerly, Fourth Street Boundary; and this property would be rezoned "Specific Plan" (Meredith International Centre Specific Plan Amendment)."

Vicinity Zoning Designations

Zoning of properties adjacent to the Project site are identified below. Development of these properties is regulated under the specific Zone Districts as detailed at City of Ontario Municipal Code Chapter 1: "Zoning and Land Use Requirements." Zoning requirements and standards for these off-site land uses correlate with and act to implement the intent and attributes of the underlying Policy Plan Land Uses described previously in this Section. The Project does not propose or require land use amendments that would affect existing zoning designations of off-site properties.

North

Northerly adjacent to the Project site, across Fourth Street and extending westerly from the Cucamonga Creek Channel to Vineyard Avenue properties are zoned: "Industrial Park" (M2), "Mobile Home Park" (MH), "Commercial Service" (CS), "Medium Density Residential" (R2-11.1 to 16 du/acre), and "Shopping Center" (C1).

South

Southerly of the Project site, across the I-10 Freeway, properties are zoned: "Airport Service Commercial" (C4), roughly bisected by an area zoned "Open Space" (OS) [Cucamonga Creek Channel].

East/Northeast

Off-site properties located northerly of Inland Empire Drive and easterly of the Cucamonga Creek Channel continuing to Archibald Drive, properties are zoned: "Open Space" (OS), "Low Medium Density Residential" (R1.5-5.1 to 11 du/acre), and "Medium Density Residential" (R2-11.1 to 16 du/acre). Easterly of the Project site across Archibald Avenue and extending southerly to the I-10 Freeway, properties are zoned "Specific Plan" (Ontario Festival [PSPA03-004]), "Commercial Service" (C3), "Airport Service Commercial" (C4), and "Specific Plan" (Transpark [2271-SP]).

West

Westerly of the Project site, across Vineyard Avenue and extending northerly from the I-10 Freeway toward Fourth Street, properties are zoned for Residential uses: Low Density (2.1-5 du/ac), and Medium Density (11.1-25 du/ac). At the southwest corner of Vineyard

Avenue and Fourth Street, properties are zoned "Commercial Service" (C3). Northwesterly of the Project site, across the intersection of Vineyard Boulevard and Fourth Street, properties are zoned "Shopping Center" (C1).

4.1.3 LAND USE POLICIES AND REGULATIONS

4.1.3.1 Regional Planning

The proposed Meredith International Centre Specific Plan Amendment Project is considered a project of regional significance pursuant to Section 15206 of the *CEQA Guidelines*. Therefore, the Project's consistency with the applicable Southern California Association of Governments (SCAG) regional planning guidelines and policies is addressed within this Draft EIR Section.

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

In 2012, SCAG adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future*. SCAG emphasizes sustainability and integrated planning as core elements of the 2012–2035 RTP/SCS. The 2012–2035 RTP/SCS vision encompasses three principles intended collectively to shape the region's future: mobility, economy, and sustainability. The 2012–2035 RTP/SCS includes a strong

commitment to reduce air pollutant emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. The Project's consistency with the applicable RTP/SCS goals is summarized subsequently within this Section at Table 4.1-6.

4.1.3.2 Local Planning

The Policy Plan [General Plan] Land Use Goals, Objectives, Policies and Actions act to promote a pattern of orderly and compatible land uses within the City. In support of the Policy Plan, the City Development Code, Chapter 1, "Zoning" regulates site and use-specific development within the City. In the case of the Project, proposed land uses and development actions are also subject to Development Concept(s), Development Plan(s), Design Guidelines, and Administration requirements of the proposed Meredith International Centre Specific Plan Amendment document. In many instances, Project compliance with applicable provisions of the City Policy Plan, Development Code, and proposed Meredith International Centre Specific Plan Amendment would eliminate, or substantively reduce, the Project's potential land use and planning impacts.

4.1.3.3 Policy Plan Component of The Ontario Plan

The Policy Plan–Land Use Element establishes a plan for land uses within the City. The Policy Plan land use designations direct the general character and intensities of land uses within the City boundaries. All proposed development projects are evaluated for consistency with the intent and purpose of the applicable Policy Plan land use designation(s) and related Policy Plan Goals and Policies.

The Policy Plan Land Use Plan (Exhibit LU-01) designates the majority of the Project site as "Mixed Use – Meredith." The Project's "Planning Area 1A" (the Bernt School site) is designated as "Public School" in the Policy Plan Land Use Plan. In order to accommodate land uses and development concepts proposed by the Project, the current Policy Plan Land Use designations for the Project would have to be amended.

To these ends, approval of Policy Plan (General Plan) Amendments are requested as components of the Project Discretionary Actions (please refer to EIR Section 3.6.1

"Discretionary Actions"). Policy Plan Land Use Amendments necessary to allow for implementation of the Project would include but would not be limited to:

- Amendment(s) to narrative descriptions for the "Mixed Use – Meredith" land use area to reflect the type and scope of uses proposed by the Project;

- Amendment of the Land Use Map to incorporate the Italo M. Bernt Elementary School site (approximately 2.0 acres) within the boundaries of the "Meredith Mixed Use Area"; and

- Amendments to certain Policy Plan Goals and Policies Statements.

An assessment of Project support of, or consistency with, applicable Policy Plan Goals and Policies; and evaluation of the potential land use and planning impacts of Policy Plan Amendments necessary to implement the Project are presented subsequently at Section 4.1.5, "Potential Impacts and Mitigation Measures."

4.1.3.4 1981 Meredith International Centre Specific Plan (1981 Specific Plan), City of Ontario Development Code

The Project site boundaries are largely coterminous with the boundaries of the 1981 Meredith International Centre Specific Plan, with the exception of newly included Bernt School site (excluded from the 1981 Specific Plan). Excluding the Bernt School site, the 1981 Specific Plan currently establishes the effective zoning and development regulations for the Project site. The City Development Code currently regulates development of the subject site not otherwise addressed under the 1981 Specific Plan.

The 1981 Specific Plan includes the following land use designations/descriptions: Urban Commercial Core, Urban Commercial, Garden Commercial, and Urban Residential. Intended development characteristics of these land uses are summarized below. Development that would be realized under the 1981 Specific Plan is summarized at Table 4.1-3. The 1981 Specific Plan Land Use Concept is presented at Figure 4.1-4. Please refer also to the 1981 Specific Plan included at EIR Appendix B.

Table 4.1-3
1981 Meredith International Centre Specific Plan Land Use Concept

Land Use	Size
Retail	400,000 sq. ft.
Office	2,850,000 sq. ft.
Hotel	900,000 sq. ft. (1,200 rooms)
Residential	800 units
Total	*4,150,000 sq. ft./800 units*

Source: Meredith International Centre Specific Plan, 1981

Urban Commercial Core

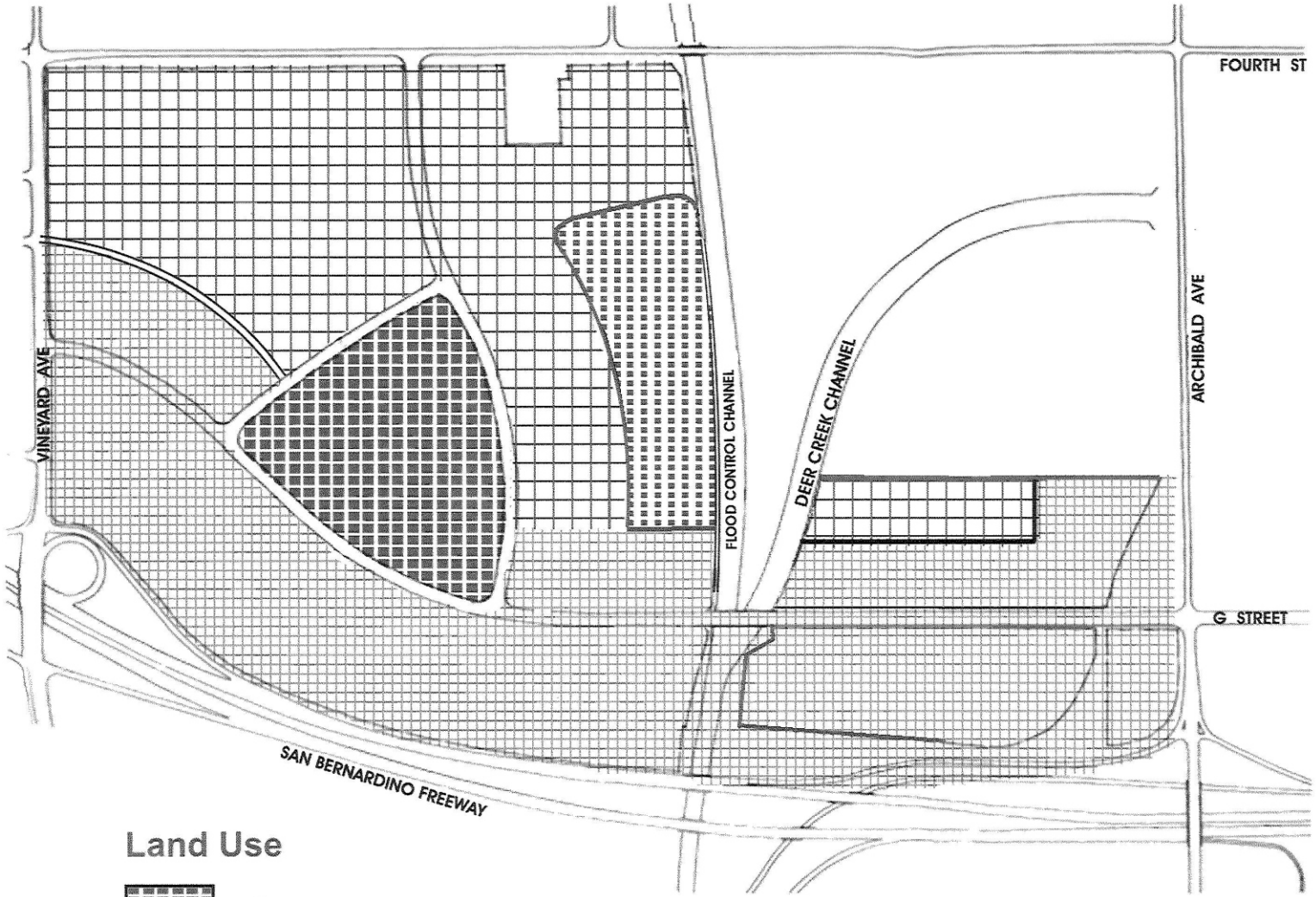
The Meredith International Centre Urban Commercial Core land use would establish a centrally located high-density core area. Development within the Core area would emphasize clustered high-rise structures connected at the ground plane by low-rise buildings and urban pedestrian zones. A range of uses would be encouraged, with upper stories of buildings providing office space, with ground floor retail uses. Hotel(s) and limited residential uses would also be accommodated within the Core area. The Urban Commercial Core would provide the greatest development intensity within the 1981 Specific Plan area.

Urban Commercial

The Urban Commercial land use would establish high and mid-rise structures along the 1981 Specific Plan's I-10 Freeway frontage. A mix of uses would be allowed in the Urban commercial zone including offices, hotels, retail, entertainment, recreation. Residential uses would be allowed on upper stories. Intervening viewsheds would be provided to allow views from the Freeway of the interior Specific Plan areas, and to the San Gabriel Mountains beyond.

Garden Commercial

A less intense Garden Commercial land use would be established northerly and easterly of the Urban Commercial Core area. The Garden Commercial land use would act as a linking/buffering area between the Urban Core and less intense surrounding land uses. Buildings within the Garden Commercial land use would be primarily low-rise; limited development of medium-rise office buildings would also be allowed. Permitted uses would include administrative and professional offices and supporting service retail.



Source: 1981 Meredith International Centre Specific Plan

applied planning inc

Figure 4.1-4
1981 Specific Plan Land Use Concept

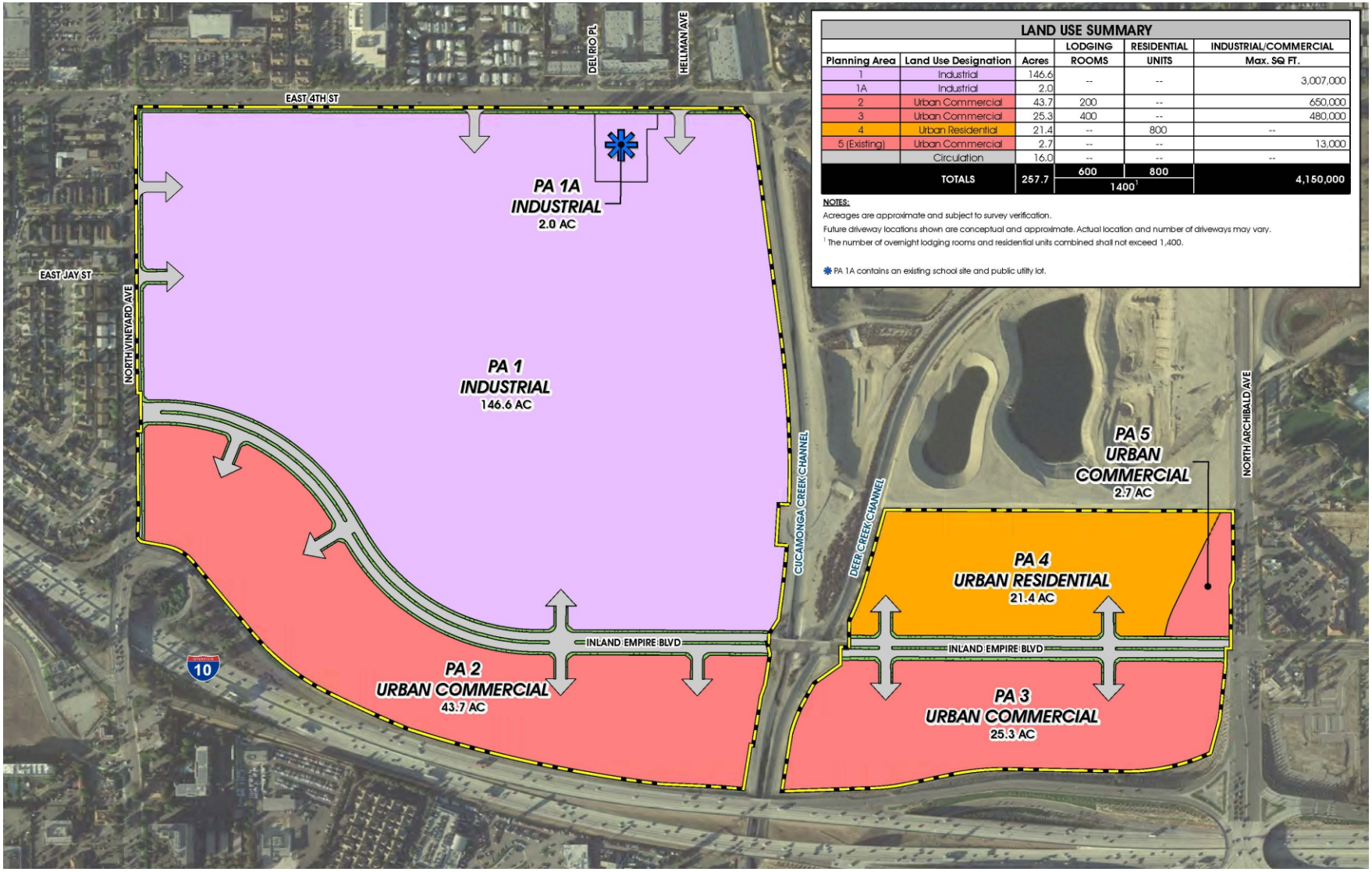
Urban Residential

An area of Urban Residential land uses would be established easterly adjacent to the Garden Commercial area, continuing to the Cucamonga Creek Channel. The Urban Residential land use would accommodate with high-density residential development, providing housing proximate to on-site and off-site employment centers, with ready access to urban activity and recreational areas. Low-rise buildings would predominate, with limited mid-rise and/or high-rise housing towers.

4.1.3.5 Proposed 2015 Meredith International Centre Specific Plan Amendment (Meredith SPA)

Development proposed by the Project differs substantively from that currently approved under the 1981 Specific Plan. In order to accommodate land uses and development concepts proposed by the Project, the current 1981 Specific Plan would have to be amended pursuant to the proposed 2015 Meredith International Centre Specific Plan Amendment (Meredith SPA), EIR Appendix B. If adopted by the City, the proposed Meredith SPA would become the effective zoning for the subject site, and would supersede any pre-existing requirements or provisions of the 1981 Specific Plan. In instances or circumstances where the Meredith SPA is silent, requirements of the City Development Code would prevail.

The proposed Meredith SPA includes the following land use designations/descriptions: "Industrial," "Urban Commercial," and "Urban Residential." The Meredith SPA Land Use Concept is presented at Figure 4.1-5. Development of the subject that would be realized under the Meredith SPA is summarized at Table 4.1-4. Intended development characteristics of these land uses are summarized below. Detailed information regarding land uses and development proposed under the Project is presented within the *Meredith International Centre Specific Plan Amendment* document included at EIR Appendix B, and the Specific Plan document is incorporated in the EIR Project Description by reference. Analyses within this EIR reflect the range and types of uses permitted or conditionally permitted under the Specific Plan and as currently envisioned under the Project Development Concept. Should future development proposal differ substantively from the development concepts analyzed herein, the Lead Agency may require additional environmental analyses.



LAND USE SUMMARY

Planning Area	Land Use Designation	Acres	LODGING ROOMS	RESIDENTIAL UNITS	INDUSTRIAL/COMMERCIAL Max. SQ FT.
1	Industrial	146.6	--	--	3,007,000
1A	Industrial	2.0			
2	Urban Commercial	43.7	200	--	650,000
3	Urban Commercial	25.3	400	--	480,000
4	Urban Residential	21.4	--	800	--
5 (Existing)	Urban Commercial	2.7	--	--	13,000
	Circulation	16.0	--	--	--
	TOTALS	257.7	600	800	4,150,000
			1400[1]		

NOTES:

Acreages are approximate and subject to survey verification.

Future driveway locations shown are conceptual and approximate. Actual location and number of driveways may vary.

[1] The number of overnight lodging rooms and residential units combined shall not exceed 1,400.

* PA 1A contains an existing school site and public utility lot.

N

NOT TO SCALE

Source: T&B Planning, Inc.

applied planning inc

Figure 4.1-5
Land Use Plan

Industrial

The Meredith SPA Industrial land use would accommodate a variety of general light industrial, manufacturing, and warehouse/distribution operations. Industrial buildings would provide attractive building façades facing East Fourth Street, with no visible loading bays. Industrial uses visible from North Vineyard Avenue would also present attractive architectural features with no visible loading bays. Industrial buildings in the westerly portions of the Specific Plan Area would be smaller in scale and would provide a visual transition in scale to larger industrial uses envisioned for interior parcels (Meredith SPA, Section 2, *Development Plan*). Please refer to Meredith SPA Section 5, *Development Standards*, for a list of permitted uses and additional information. Meredith SPA Section 6, *Design Guidelines* establishes Industrial Land Use Design Guidelines.

Urban Commercial

The Urban Commercial Land Use allows for a range of commercial uses that benefit from adjacency of local roads and the regional highway system; and proximity of the Ontario International Airport. The Urban Commercial Land Use provides for a variety of market-driven commercial uses to service nearby residents, visitors to the area, and travelers on Interstate 10. Up to 200 overnight lodging rooms also are permitted in Urban Commercial Land Use (Planning Area 2). The range of permitted land uses achieves this Specific Plan's vision and intention to provide a mix of uses that take advantage of proximity to transportation corridors and serve the surrounding community and region. The Urban Commercial Land Use Designation (Planning Area 5) also recognizes and accommodates existing commercial uses located within the Specific Plan Area. Please refer to Meredith SPA Section 5, *Development Standards*, for a list of permitted uses and additional information. Meredith SPA Section 6, *Design Guidelines* establishes Urban Commercial Land Use Design Guidelines.

Urban Residential

The Urban Residential Land Use designation allows for high-density and medium-high density residential land uses (for-sale or for-rent multi-family residential units) within walking distance to a variety of shopping and employment opportunities, as well as Cucamonga-Guasti Regional Park, and the planned Gold Line light rail corridor. The

proposed Urban Residential Land Use in combination with Urban Commercial and Industrial Land Uses described previously would foster a mixed-use development acting to define and revitalize the area and promote economic development.

The Meredith SPA Urban Residential Land Use as envisioned would include on-site private recreation facilities, pedestrian connections, and amenities such as carports, garages, and leasing offices serving the residential development. Perimeter landscaped areas would provide transitional elements between the Urban Residential land Use and the adjacent Urban Commercial Land Use. Please refer to Meredith SPA Section 5, *Development Standards*, for a list of permitted uses and additional information. Meredith SPA Section 6, *Design Guidelines* establishes Urban Residential Land Use Design Guidelines.

Table 4.1-4
Meredith International Centre Specific Plan Amendment Proposed Land Uses

Planning Area	Land Use[1]	Acreage	Square Footage	Residential Units	Overnight Lodging Units
1	Industrial	146.6	Option A: 3,007,000 Option B: 2,927,000	-	-
1A	Industrial	2.0	Option A: n/a Option B: 6,767		-
2	Urban Commercial	43.7	650,000	-	200
3	Urban Commercial	25.3	480,000	-	400
4	Urban Residential	21.4	-	800	-
5	Urban Commercial	2.7	13,000[1]	-	-
Roadway Modifications		16.0	-	-	-
Total		*257.7*	*4,150,000 (Maximum)*	*800*[2]	*600*[2]

Source: Conceptual Land Use Plan for the Meredith International Centre (T&B Planning) January 2015.
[1] Please refer to Table 5-1 of the Meredith SPA for uses permitted within these land use categories.
[2] Approximate square footage of existing uses.
[3] The maximum number of overnight lodging units and residential units combined shall not exceed 1,400.

As indicated at Table 4.1-4, the proposed Meredith SPA accommodates two development Options ("A" and "B") for the Specific Plan Area. Option "A" reflects integration and development of the current two-acre Bernt School site as an industrial land use within the Meredith SPA Planning Area 1. Under Option "A" up to 3,007,000 square feet of industrial uses (initial and total development) would be implemented under the Meredith SPA. Development of the Specific Plan Area pursuant to the Meredith SPA would not be otherwise affected under Option "A."

Option "B" assumes that the Bernt School site (Planning Area 1A) would be maintained in its current state in the near term, while the remainder of the Specific Plan Area would be developed as proposed under the Meredith SPA. Pending its eventual redevelopment with industrial uses, the Bernt School site would be buffered from effects of land uses proposed under the Meredith SPA. To this end, the Meredith SPA development concept provides substantive perimeter landscaping/screening to be implemented in bordering areas of the Meredith SPA. The School site would also be provided independent access by a private driveway connecting to northerly to adjacent Fourth Street. Under Option "B" up to 2,927,000 square feet of industrial uses would be developed within Planning Area 1. The Bernt School site (Planning Area 1A), when eventually redeveloped under the Meredith SPA, would accommodate up to 6,767 square feet of additional Industrial land uses[4], yielding a total of 2,933,767 square feet of Industrial land uses within the Specific Plan area. Development of the Specific Plan Area pursuant to the Meredith SPA would not be otherwise affected under Option "B."

[4] Development of Planning Area 1A under Option "B" reflects the existing development intensity (6,767 square feet) within the Bernt School site.

4.1.4 STANDARDS OF SIGNIFICANCE

Appendix G of the California Environmental Quality Act (*CEQA*) Guidelines, as utilized by the City of Rancho Cucamonga, indicates a Project will normally have a significant effect related to land use if it would:

- Physically divide an established community;

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Any of the above would be considered a potentially significant land use impact.

4.1.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.1.5.1 Introduction

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant land use and planning impacts, based on the previous discussions included within this Section and analysis presented within the EIR Initial Study (EIR Appendix A). As discussed within the Initial Study, the Project would not conflict with any applicable habitat conservation plan or natural community conservation plan. The Project would have no impact in these regards. This potential impact is therefore not substantively discussed further within this Section. Please refer also to Initial Study Checklist Item X., "Land Use and Planning."

4.1.5.2 Impact Statements

Potential Impact: *Physically divide an established community or result in land use incompatibilities.*

Impact Analysis:

Land Use Compatibility Considerations

The Project proposes development of the site with land uses, and at development intensities differing from those currently approved for the subject site under the 1981 Meredith International Centre Specific Plan (1981 Specific Plan), and anticipated under the Policy Plan. Reflecting the intended development of the site with the mix of Industrial, Urban Commercial and Urban Residential proposed by the Project, the Applicant is requesting that the 1981 Specific Plan be amended as detailed in the proposed 2015 Meredith International Centre Specific Plan Amendment (Meredith SPA). In order to allow for implementation of the Project, Policy Plan Amendments (Land Use Element) reflecting provisions of the proposed Meredith SPA would also be required.

The proposed Meredith SPA Land Use Concept is presented at Figure 4.1-5. No established communities exist within the Project site. Moreover, the Project does not propose elements or aspects that would otherwise physically divide an established community.

Pending its development as part of the Project, the Bernt School site (Figure 4.1-5, Planning Area 1A) would be buffered from adjacent industrial development by an approximately 60-foot wide landscape buffer. Ultimately this site would be developed with industrial uses permitted within the Meredith SPA area.

Existing commercial uses located in the southeasterly portion of the Project site, at the northwest corner of Inland Empire Boulevard and Archibald Avenue (Figure 4.1-5, Planning Area 5), have been developed consistent with the 1981 Meredith Specific Plan and would be incorporated as compatible elements of the proposed Meredith SPA. Any future development of these properties would be subject to development standards established

under the Meredith SPA. The Project site is otherwise currently vacant and undeveloped. Internal to the Project site, land uses would be developed consistent with land uses, development standards, and design guidelines established under the Meredith SPA as approved by the City. In this manner, potential land use incompatibilities internal to the Project would be precluded.

As discussed below, development pursuant to the Meredith SPA would also orient land uses and implement perimeter landscaping and buffering elements so as to minimize potential conflicts with adjacent off-site land uses.

More specifically, land uses located to the north of the Project site and west of the Cucamonga Creek Channel are physically separated from the Project site by Fourth Street. Additionally, an expanded landscaped parkway would be provided along the entirety of the Project's Fourth Street frontage. Further, the Meredith SPA Industrial Development Standards for Planning Areas 1 and 1A would establish a minimum building setback of 75 feet from the Fourth Street right-of-way, with a minimum of 70 feet of landscaping to be provided within the setback area (*Meredith International Centre Specific Plan Amendment*, Section 5 E., Industrial Development Standards). In combination, landscape elements and building setbacks proposed by the Project would act to screen and enhance views of the Project's Industrial land uses as seen from Fourth Street, and would buffer potential Industrial land use impacts of the Project received at northerly adjacent land uses. The easterly boundary of Planning Area 1 is defined by the Cucamonga Creek Channel. The Meredith SPA Industrial Development Standards would require that buildings within Planning Area 1 provide a minimum 25-foot setback from the Channel, a minimum of 5 feet of which would be landscaped. This landscaped setback would act to preclude encroachment of the Project Industrial uses within the Channel area and would minimize potential Project impacts to Channel stormwater conveyance efficiencies. Related, potential impacts to Army Corps of Engineers (ACOE) and California Department of Fish and Wildlife (CDFW) jurisdictional areas would also be minimized or avoided. The required landscape setback would reciprocally act to ensure that stormflows conveyed by the Channel would not adversely affect the Project Industrial land uses.

To the west of the Project site, properties are provided physical separation from the Project land uses by Vineyard Avenue. A landscaped parkway would be implemented along the entirety of the Project's Vineyard Avenue frontage. The Meredith SPA Industrial development standards would require all buildings within Planning Area 1 to be setback a minimum of 75 feet from the Vineyard Avenue right-of-way, with a minimum of 20 feet of landscaping to be provided within the setback area (*Meredith International Centre Specific Plan Amendment*, Section 5 E., Industrial Development Standards). In combination, landscape elements and building setbacks proposed by the Project would act to screen and enhance views of the Project's Industrial land uses as seen from Vineyard Avenue, and would buffer potential industrial land use impacts of the Project received at westerly adjacent land uses. Within Planning Area 2, the Meredith SPA Urban Commercial Development Standards would require all buildings to be setback a minimum of 20 feet from Vineyard Avenue. This setback area in total is to be landscaped (*Meredith International Centre Specific Plan Amendment*, Section 5 F., Urban Commercial Development Standards). In combination, landscape elements and building setbacks proposed by the Project would act to screen and enhance views of the Project's Urban Commercial land uses as seen from Vineyard Avenue, and would buffer potential Urban Commercial land use impacts of the Project received at westerly adjacent land uses.

The Interstate 10 Freeway (I-10 Freeway), the Project's southerly boundary, effectively precludes perception of any off-site effects of the Project at land uses located southerly of the Freeway. The Meredith SPA Urban Commercial Development Standards for Planning Areas 2 and 3 would require a minimum 100 foot setback from the I-10 Freeway right-of-way. Landscaping would be provided throughout this setback area (*Meredith International Centre Specific Plan Amendment*, Section 5 F., Urban Commercial Development Standards). Building setbacks and landscaping along the I-10 Freeway would act to screen views into the Project site as seen from the Freeway, and would also act to buffer effects of Freeway traffic as received at the Project's Urban Commercial land uses.

The easterly boundary of Planning Area 2 and the westerly boundary of Planning Area 3 are defined by the Cucamonga Creek Channel. The Meredith SPA Urban Commercial Development Standards would require that buildings within Planning Areas 2 and 3

provide a minimum 20 foot wide fully landscaped setback from the Channel (*Meredith International Centre Specific Plan Amendment*, Section 5 F., Urban Commercial Development Standards). This landscaped setback would act to preclude encroachment of the Project Urban Commercial uses within the Channel area and would minimize potential Project impacts to Channel stormwater conveyance efficiencies. Related, potential impacts Army Corps of Engineers (ACOE) and California Department of Fish and Wildlife (CDFW) jurisdictional areas would also be minimized or avoided. The required landscape setback would reciprocally act to ensure that stormflows conveyed by the Channel would not adversely affect the Project Urban Commercial land uses.

The easterly limits of the Project site are defined by Archibald Avenue. At this location, Archibald Avenue acts to physically separate the Project land uses from properties located to the east. Along Archibald Avenue, south of Inland Empire Boulevard, the Meredith SPA Urban Commercial Development Standards for Planning Area 3 would require that buildings be setback a minimum of 20 feet from the Archibald Avenue right-of-way, and that landscaping be provided throughout this setback area. In combination, landscape elements and building setbacks proposed by the Project would act to screen and enhance views of the Project's Urban Commercial land uses as seen from Archibald Avenue, and would buffer potential Urban Commercial land use impacts of the Project received at easterly adjacent land uses. Along Archibald Avenue, north of Inland Empire Boulevard, the Meredith SPA recognizes and accommodates the existing commercial uses within this Area. Any future development or redevelopment of these properties would be required to conform with the Meredith SPA Urban Commercial Development Standards.

In summary, configuration and orientation of land uses under the Project combined with integral development standards and design guidelines, act to preclude division or disruption of land uses, whether those land uses be internal or external to the Project. Physical arrangement of surrounding areas would not be modified or otherwise substantively affected by the Project.

Based on the preceding discussion, the Project's potential to disrupt or divide the physical arrangement of an established community is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: C*onflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.*

Impact Analysis: The Project is subject to Land Use Designations, and Land Use Goals and Policies established by the Policy Plan component of The Ontario Plan. As noted previously in this Section, in order to accommodate land uses and development concepts proposed by the Project, approval of certain Policy Plan (Land Use Element) Amendments would be required, and are requested as components of the Project Discretionary Actions (please refer to EIR Section 3.6.1 "Discretionary Actions"). Policy Plan Land Use Amendments would include but would not be limited to:

- Amendment(s) to narrative descriptions for the "Mixed Use – Meredith" land use area to reflect the type and scope of uses proposed by the Project; and

- Amendment of the Land Use Map to incorporate the Italo M. Bernt Elementary School site (approximately 2.0 acres) within the boundaries of the "Meredith Mixed Use Area."

- TOP Exhibit LU-04 would need to be amended to remove this site from the Ontario Airport Metro Center growth area.

The larger amounts of commercial development consistent with the TOP land use vision would theoretically generate substantial fiscal and employment benefits; however, as described in greater detail within this DEIR, the projected timing of market demand for an intensive mixed use development on-site would result in a very prolonged buildout timeframe. In contrast, the proposed Project land uses would result in lower employment

generation but could be built out much sooner based on projected demand. Thus, the basic "trade-off" under consideration is that TOP scenario offers the theoretical, longer-term opportunity of creating substantial employment opportunities and fiscal benefits, whereas the proposed Project offers benefits that would be lower but would occur much sooner and last for a longer duration.

This trade-off presents a unique policy question that needs to be considered as part of the public deliberations process. The TOP presents a long term vision for the site resulting in "the creation of the most intensive mixed use development area west of downtown Los Angeles." This vision is further embellished by the long-term possibility of the Gold Line extension providing mass transit to the area. Also the larger amounts of commercial development under TOP scenario would theoretically generate substantial fiscal and employment benefits; however, as described in greater detail within the Project Economic Study, the projected timing of market demand for intensive mixed use development on-site would result in a very prolonged development timeframe. Further analysis of this dilemma is presented within the Economic Study/Market Absorption Study that can be reviewed in detail at Appendix K of this EIR (*Analysis of Market Absorption Potentials and Related Socioeconomic Impacts* [The Natelson Dale Group, Inc.] January 26, 2015.)

Consistency of the Project with applicable Policy Plan Land Use Element Goals and Policies is presented at Table 4.1-5. Please refer also to other EIR Sections for discussions of Goals/Policies consistency issues concerning topics other than Land Use. Related supporting discussions are also presented at Meredith SPA (EIR Appendix B), Section 8: *Policy Plan Consistency.*

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
LU1 Balance		
Goal LU1 A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.		
LU1-1	*Strategic Growth*. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, and foster the development of transit.	***Consistent:*** The proposed Meredith International Centre SPA includes a horizontal mixture of Industrial, Urban Commercial, and Urban Residential uses on an under-utilized property surrounded by developed, urban land uses. Development intensities and land use configurations proposed under the Project promote the highest and best use of the subject site. The Project is provided proximate access to regional transportation corridors (Interstate 10 and Interstate 15). In addition, the Project is located approximately ½-mile north of Ontario International Airport and adjacent to the planned Gold Line light rail corridor. Industrial, Urban Commercial, and Residential land uses established under the Project would establish destinations and a ridership base promoting implementation, extension and enhancement of transit facilities in the area. Further, the Project would utilize and upgrade, as needed, existing public roadway and utility infrastructure systems. Development plans, development standards and design guidelines implemented pursuant to the proposed Meredith SPA would establish a Project identity differentiated from, but compatible with, adjacent land use. On this basis, the Project is considered consistent with Policy LU1-1.
LU1-2	*Sustainable Community Strategy*. We integrate state, regional and local Sustainable Community/Smart Growth principles into the development and entitlement process.	***Consistent:*** Sustainability/conservation attributes of the Project are discussed in detail in the *Meredith International Centre Specific Plan Amendment* (EIR Appendix B) and are summarized below. The Project's mixed-use land use concept collocates residential and business/commercial–retail uses, thereby acting to reduce vehicle miles traveled (VMT) locally and within the region, with corollary reductions in vehicle energy consumption and vehicular-source air pollutant emissions. The Project also accommodates a Class II Bikeway Corridor along Inland Empire Boulevard in accordance with the Policy Plan Mobility Element, and provides sidewalks and pathways adjacent to roadways to promote pedestrian activity. Alignment of the planned Gold Line transit corridor as indicated in the Policy Plan (Policy Plan Mobility Element Figure M-4, *Transit Plan*) would parallel the Cucamonga Creek Channel, roughly bisecting the Specific Plan area. Gold Line transit corridor opportunities made available to the Project site would provide alternatives to use of personal vehicles for residents, employees, and patrons traveling to and from the Specific Plan area.

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
		Industrial land uses proposed by the Project would incorporate solar panels providing electricity to industrial building office areas. Additionally, all primary structures within the Specific Plan area would be designed to achieve or surpass Leadership in Energy and Environmental Design (LEED) Certification Minimum Program Requirements (MPRs). The plant palette for the Project incorporates water-efficient/drought tolerant species native to Southern California or naturalized to the arid Southern California climate; and use of turf will be minimized throughout the Specific Plan area. In this manner, landscaping implemented by the Project would provide for efficient use of water resources. Further, "purple pipe" landscape irrigation systems would be implemented throughout the Specific Plan area, and only recycled/reclaimed water would be used for landscape irrigation or other non-potable purposes, thereby reducing demands on potable water resources. The Project Economic/Fiscal Impact Analysis (EIR Appendix K) substantiates economic sustainability of the Project, and demonstrates that the Project would provide a net economic benefit to the City. Based on the preceding, the Project is considered consistent with Policy LU1-2.
LU1-3	*Adequate Capacity*. We require adequate infrastructure and services for all development.	***Consistent:*** The Project Applicant would construct, or would otherwise ensure to the satisfaction of the Lead Agency, those infrastructure improvements and service enhancements necessary to meet the demands of the Project. As substantiated in this EIR, infrastructure and service demands of the Project can be satisfied without adverse impacts to existing or anticipated customers within affected service areas. Please refer also to EIR Section 4.7, Public Services and Utilities. On this basis, the Project is considered consistent with Policy LU1-3.
LU1-4	*Mobility*. We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on multi-modal transportation opportunities.	***Consistent:*** The Project offers employees, patrons and residents opportunities for use of public transit and other alternatives to personal vehicles. In this regard, the Policy Plan Mobility Element Figure M-4, *Transit Plan*, indicates a planned Gold Line transit corridor alignment paralleling the Cucamonga Creek Channel, roughly bisecting the Specific Plan area. Also, Archibald Avenue, the easterly Project boundary, is designated as a Bus Rapid Transit (BRT) corridor by the Policy Plan (Policy Plan Mobility Element Figure M-4, *Transit Plan*). Additionally, the Project provides a Class II Bikeway along Inland Empire Boulevard, as well as sidewalks and pathways to promote non-vehicular transportation. Based on the preceding, the Project is considered consistent with Policy LU1-4.
LU1-5	*Jobs-Housing Balance*. We coordinate land use, infrastructure, and transportation planning and analysis with regional, county and other local agencies to further regional and subregional goals for jobs-housing balance.	***Consistent:*** The Project Economic/Fiscal Impact Analysis (EIR Appendix K) substantiates employment opportunities created by the Project would improve the City's current average jobs/housing ratio within the Project's estimated 20-year buildout time frame (Economic/Fiscal Impact Analysis, p. ES-4). The Project would therefore support local, county, sub-regional and regional goals furthering job-housing balance. Land uses, infrastructure, and transportation improvements implemented in support of the Project would not interfere with

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
		or otherwise obstruct regional and/or subregional goals addressing jobs-housing balance. On this basis, the Project is considered consistent with Policy LU1-5.
LU1-6	*Complete Community.* We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	The Project proposes an integrated mixed-use development concept evidencing Industrial, Urban Commercial, and Urban Residential land uses. The implemented Meredith International Centre SPA development concept would provide varied employment opportunities, retail/commercial venues responding to area market demands, and a range of housing types. Amenities provided within the Specific Plan area would include commercial recreation and entertainment facilities, improved parks, open space, and pedestrian trails. Please refer also to the *Meredith International Centre Specific Plan Amendment* at EIR Appendix B. On this basis, the Project is considered consistent with Policy LU1-6.
LU1-7	*Revenues and Costs.* We require future amendments to our Land Use Plan to be accompanied by analyses of fiscal impacts.	***Consistent:*** An Economic/Fiscal Impact Analysis has been prepared for the Project, and is provided at EIR Appendix K. On this basis, the Project is considered consistent with Policy LU1-7.
LU2 Compatibility		
Goal LU2 Compatibility between a wide range of uses.		
Policies		**Remarks**
LU2-1	*Land Use Decisions.* We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	***Consistent:*** As discussed within this Section 4.1, development pursuant to the proposed Meredith International Centre Specific Plan Amendment would orient land uses, and would implement perimeter landscaping and buffering elements so as to minimize potential conflicts with adjacent off-site land uses. That is, configuration and orientation of land uses under the Project combined with integral development standards and design guidelines established under the *Meredith International Centre Specific Plan Amendment* would act to preclude division or disruption of land uses, whether those land uses be internal or external to the Project. Physical arrangement of surrounding areas would not be modified or otherwise substantively affected by the Project. On this basis, the Project is considered consistent with Policy LU2-1.
LU2-2	*Buffers.* We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur.	Please refer to Remarks at Policy LU2-1.
LU2-3	*Hazardous Uses.* We regulate the development of industrial and similar uses that use, store, produce or transport toxic substances, air emissions, other pollutants or hazardous materials.	***Consistent:*** The Project does not propose or require uses whose primary function is to store, produce, or transport toxic substances or other hazardous materials. Routine use of hazardous or potentially hazardous materials within the Specific Plan area would be subject to extensive local, regional, and federal regulatory requirements, and would not result in or cause potentially significant environmental impacts (please refer to EIR Section 4.6, Hazards/Hazardous Materials). Moreover, the Phase I Environmental Site Assessment (Phase I ESA) prepared for the Project (EIR Appendix G) substantiates that the Specific Plan area is not subject to known or suspected hazards or hazardous conditions. Based on the preceding, the Project is considered consistent with Policy LU2-3.

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
LU2-4	*Regulation of Nuisances.* We regulate the location, concentration and operations of potential nuisances.	***Consistent:*** The Project does not propose or require uses or development that would be characterized as "nuisances." Rather, the implemented Project would establish a compatible and beneficial mixed-use development within a currently underutilized property. On this basis, the Project is considered consistent with Policy LU2-4.
LU2-5	*Regulation of Uses.* We regulate the location, concentration and operations of uses that have impacts on surrounding land uses.	As substantiated in this EIR, the Project would not adversely affect surrounding land uses. To this end, all development and operations within the Project site would be required to conform to development standards and design guidelines established under the *Meredith International Centre Specific Plan Amendment* and would further be required to conform to all City Municipal Code requirements. In combination, provisions of the *Meredith International Centre Specific Plan Amendment* and City Municipal Code act to ensure that Project land uses and operations would not adversely impact surrounding land uses. On this basis, the Project is considered consistent with Policy LU2-5.
LU2-6	*Infrastructure Compatibility.* We require infrastructure to be aesthetically pleasing and in context with the community character.	***Consistent:*** Perimeter and interior streets will be landscaped with a combination of evergreen and deciduous trees (including flowering varieties), shrubs, and groundcovers in an aesthetically pleasing manner to establish the Project design theme and to complement existing surrounding development. The Specific Plan would locate utility connections, utility cabinets, etc. in areas not visible from publically-accessible areas, where feasible. In instances where utility connections or utility cabinets must be placed in areas visible to the public, the Specific Plan Amendment Design Guidelines provide for screening and/or landscaping to minimize views of utility equipment. On this basis, the Project is considered consistent with Policy LU2-6.
LU2-7	*Inter-jurisdictional Coordination.* We maintain an ongoing liaison with IEUA, LAWA, Caltrans, Public Utilities Commission, the railroads and other agencies to help minimize impacts and improve the operations and aesthetics of their facilities.	***Consistent:*** The Project does not propose or require elements or actions that would obstruct or otherwise interfere with the City's Inter-jurisdictional Coordination efforts. On this basis, the Project is considered consistent with Policy LU2-7.
LU2-8	*Transitional Areas.* We require development in transitional areas to protect the quality of life of current residents.	***Consistent:*** The Project site does not lie within a Policy Plan Transitional Area. Notwithstanding, as substantiated in this EIR, the Project incorporates elements and operational programs that would act to minimize or avoid the Project's potentially significant environmental impacts and thereby protect the quality of life or current residents. On this basis, the Project is considered consistent with Policy LU2-8.
LU2-9	*Methane Gas Sites.* We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	***Consistent:*** The Project Phase I ESA does not identify methane gas as a potential hazard affecting the Specific Plan area. Moreover, the Project site has not been formerly used for dairy farming or other purposes that would indicate that methane gas would be a potentially significant environmental hazard. Moreover, as discussed in this EIR, the Project would not result in or cause other potentially significant health risks. On this basis, the Project is considered consistent with Policy LU2-9.

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
LU3 Flexibility		
Goal LU3 Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.		
Policies		**Remarks**
LU3-1	*Development Standards.* We maintain clear development standards which allow flexibility to achieve our Vision.	***Consistent:*** The proposed Meredith International Centre SPA incorporates development standards and design guidelines allowing for flexible development of the Project site supporting the Policy Plan Vision of "sustained, community-wide prosperity which continuously adds value and yields benefits." To these ends, the Project would establish a mixed-use development on a currently underutilized site. Benefits of the Project including, but not limited to, jobs creation, increased property tax and sales tax revenues, would promote community-wide prosperity and add value. More specifically, development of the site pursuant to the proposed Meredith SPA, would generate an estimated 5,011 jobs (Economic/Fiscal Impact Analysis, Table ES-1); and would yield a net total of approximately $84.6 million available to the City General Fund over the course of the Project's estimated 20-year buildout time frame. Thereafter, the Project would generate a net General Fund impact of approximately $4.9 million annually (Economic/Fiscal Impact Analysis, Table ES-2C).
LU3-2	*Design Incentives.* We offer design incentives to help projects achieve the Vision.	***Consistent:*** The Project does not propose elements or aspects that would obstruct or interfere with Design Incentives programs established by the City. The Meredith SPA would establish land uses, design guidelines and development standards that would support the Policy Plan Vision. Please refer also to Remarks at Policy LU3-1.
LU3-3	*Land Use Flexibility.* We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.	***Consistent:*** Land uses and development concepts proposed by the Project are not currently reflected in the Policy Plan. Accordingly, the Project proposes to amend the Policy Plan to allow for implementation of the Project. Notwithstanding, the proposed Meredith International Centre SPA provides for flexible and compatible development of the subject site. More specifically, the Meredith International Centre SPA would implement a compatible mix of Industrial, Urban Commercial, and Urban Residential uses on a currently under-utilized property. Development intensities and land use configurations proposed under the Meredith International Centre SPA promote the highest and best use of the subject site. The Project's mixed-use land use concept collocates residential and business/commercial–retail uses, thereby acting to reduce vehicle miles traveled (VMT) locally and within the region, with corollary reductions in vehicle energy consumption and vehicular-source air pollutant emissions. The Project also accommodates a Class II Bikeway Corridor along Inland Empire Boulevard in accordance with the Policy Plan Mobility Element, and provides sidewalks and pathways adjacent to roadways to promote pedestrian activity. Development plans, development standards and design guidelines implemented pursuant to the proposed Meredith International Centre SPA would establish a Project identity differentiated from, but compatible with, adjacent land uses. Development concepts and associated amenities implemented pursuant to the SPA would promote livability, create community

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
		gathering places and establish activity nodes (please refer to the *Meredith International Centre Specific Plan Amendment*, EIR Appendix B). Please refer also to Remarks at Policies LU1-1 and LU1-2. Based on the preceding, the Project is considered consistent with Policy LU3-3.
LU4 Phased Growth		
Goal LU4 Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.		
Policies		**Remarks**
LU4-1	*Commitment to Vision.* We are committed to achieving our Vision but realize that it may take time and several interim steps to get there.	Uses and development concepts that would be implemented under the Project differ from development envisioned under the 1981 Meredith Specific Plan, and different than that reflected in The Ontario Plan EIR. Nonetheless, the Project is considered to support The Ontario Plan Vision of "sustained, community-wide prosperity which continuously adds value and yields benefits." Please refer also to Remarks at Policies LU3-1, LU3-2. Based on the preceding, the Project is considered consistent with Policy LU4-1.
LU4-2	*Interim Development.* We allow development in growth areas that is not immediately reflective of our ultimate Vision provided it can be modified or replaced when circumstances are right. We will not allow development that impedes, precludes or compromises our ability to achieve our Vision.	***Consistent:*** The Project does not propose interim development. Please refer also to Remarks at Policies LU3-1, LU3-2, LU4-1.
LU4-3	*Infrastructure Timing.* We require that the necessary infrastructure and services be in place prior to or concurrently with development.	***Consistent:*** Pursuant to provisions of the proposed Meredith SPA, Section 4, *Utility Infrastructure Plan*; mitigation measures identified in this EIR, and City Conditions of Approval, the Project would provide and/or otherwise ensure to the satisfaction of the City, that infrastructure and services are timely available to meet Project demands. On this basis, the Project is considered consistent with Policy LU4-3.
LU5 Airport Planning		
Goal LU5 Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.		
Policies		**Remarks**
LU5-1	*Coordination with Airport Authorities.* We collaborate with FAA, Caltrans Division of Aeronautics, airport owners, neighboring jurisdictions, and other shareholders in the preparation, update and maintenance of airport-related plans.	***Consistent:*** The Project does not propose elements or aspects that would interfere with or obstruct City collaboration or coordination with agencies or shareholders participating in or responsible for the preparation, update and maintenance of airport-related plans. On this basis, the Project is considered consistent with Policy LU5-1.
LU5-2	*Airport Planning Consistency.* We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations and/or adopted master plans and land use compatibility plans for the ONT and Chino Airport.	***Consistent:*** The Project does not propose or require development or operations that would conflict with state law, federal regulations and/or adopted master plans and land use compatibility plans for the ONT and/or Chino Airport. Nor does the Project propose elements or aspects that would interfere with or obstruct City coordination with laws, regulations or plans for the ONT and/or Chino Airport. On this basis, the Project is considered consistent with Policy LU5-2.

Table 4.1-5
Policy Plan-Land Use Element Goals and Policies Consistency Analysis

Goals/Policies		Remarks
LU5-3	*Airport Impacts.* We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations.	***Consistent:*** The Project does not propose or require development or uses that would be adversely affected by airport operations. On this basis, the Project is considered consistent with Policy LU5-3.
LU5-4	*ONT Growth Forecast.* We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	***Consistent:*** Development of the currently underutilized Project site would act to promote City and regional economic growth, and in this manner would generally act to support growth of ONT. Further, the Project does not propose or require development or uses that would be interfere with or obstruct ONT Growth Forecasts. On this basis, the Project is considered consistent with Policy LU5-4.
LU5-5	*Airport Compatibility Planning for ONT.* We create and maintain the Airport Land Use Compatibility Plan for ONT.	***Consistent:*** The Project does not propose or require amendment to the Ontario International Airport Land Use Compatibility Plan (ONT ALUCP). Nor would the Project otherwise interfere or obstruct the City's administration and maintenance of the ONT ALUCP. The City fulfills its state Airport Land Compatibility requirements pursuant to the "Alternative Process." Under the Alternative Process, affected agencies are responsible for conducting their own consistency evaluations for new development and/or major land use actions within their portions of the ONT AIA. In this regard, the City of Ontario is responsible for ALUCP consistency evaluations/determinations for the Project. Land uses and development that would be realized pursuant to the Project would conform to all applicable provisions and restrictions of the ONT ALUCP as determined by the City. In this latter regard, all future development on the Specific Plan area would be required to comply with development standards and design guidelines established in the Meredith SPA, as well as the applicable requirements of the City of Ontario Development Code (please refer to City of Ontario Municipal Code Title 9, Development Code, Chapter 1 Zoning and Land Use Requirements, Sec. 9-1.2980. Airport safety zones.). In combination, compliance with provisions of the Meredith SPA and the City Development Code would preclude any potential inconsistencies with the ONT ALUCP. On this basis, the Project is considered consistent with Policy LU5-5.
LU5-6	*Alternative Process.* We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.	***Consistent:*** The Project does not propose or require development or uses that would interfere with or obstruct City responsibilities with regard to the Alternative Process for proper airport land use compatibility planning. On this basis, the Project is considered consistent with Policy LU5-6.
LU5-7	*ALUCP Consistency with Land Use Regulations.* We comply with state law that requires general plans, specific plans and all new development be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public use airport.	***Consistent:*** Please refer to Remarks at Policy LU5-5.
LU5-8	*Chino Airport.* We will support the creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport.	***Consistent:*** The Project does not propose or require development or uses that would interfere with or obstruct City efforts and actions supporting creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport. On this basis, the Project is considered consistent with Policy LU5-8.

Sources: Goal/Policy statements from: Policy Plan, Land Use Element; Remarks-Applied Planning, Inc.

In order to allow implementation of the Project, Zoning for the subject site would be established by the proposed *Meredith International Centre Specific Plan Amendment*, which would supersede any concepts, requirements, or guidelines established under the 1981 Meredith International Centre Specific Plan. The proposed *Meredith International Centre Specific Plan Amendment* would be consistent with the Policy Plan Land Use Element as amended.

All development within the Project site would be subject to plans, requirements, standards, and guidelines established under the proposed Meredith International Centre Specific Plan Amendment. In instances where the Meredith International Centre Specific Plan Amendment is silent, development within the Project site would be subject to requirements of the City Development Code. The Project does not propose or require amendment(s) to the City Development Code.

The Project is also evaluated in the context of the SCAG *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012-2035 RTP/SCS): Towards a Sustainable Future*. As noted previously, sustainability and integrated planning are core elements of the 2012–2035 RTP/SCS. The 2012–2035 RTP/SCS vision encompasses three principles intended collectively to shape the region's future: mobility, economy, and sustainability. The Project's consistency with the applicable RTP/SCS goals is presented at Table 4.1-6.

Table 4.1-6
Meredith International Centre Specific Plan Amendment Project
Consistency with SCAG RTP/SCS Regional Goals

RTP/SCS Goals	Remarks
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	***Consistent:*** The proposed Meredith SPA includes a horizontal mixture of Industrial, Urban Commercial, and Urban Residential uses on an under-utilized property surrounded by developed, urban land uses. Development intensities and land use configurations proposed under the Meredith SPA promote the highest and best use of the subject site. The Project is provided proximate access to regional transportation corridors (Interstate 10 and Interstate 15). In addition, the Project is located approximately ½-mile north of Ontario International Airport and adjacent to the planned Gold Line light rail corridor. Industrial, Urban Commercial, and Residential land uses established under

Table 4.1-6
Meredith International Centre Specific Plan Amendment Project
Consistency with SCAG RTP/SCS Regional Goals

RTP/SCS Goals	Remarks
	the Project would establish destinations and a ridership base promoting implementation, extension and enhancement of transit facilities in the area. The Project Economic/Fiscal Impact Analysis (EIR Appendix K) substantiates economic sustainability of the Project, and demonstrates that the Project would provide a net economic benefit to the City. Based on the preceding, the Project is considered consistent with and would support Goal 1.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	***Consistent:*** The Project's mixed-use land use concept collocates residential and business/commercial–retail uses, thereby acting to reduce vehicle miles traveled (VMT) locally and within the region, with corollary reductions in vehicle energy consumption and vehicular-source air pollutant emissions. The Project also accommodates a Class II Bikeway Corridor along Inland Empire Boulevard in accordance with the Policy Plan Mobility Element, and provides sidewalks and pathways adjacent to roadways to promote pedestrian activity. Alignment of the planned Gold Line transit corridor as indicated in the Policy Plan (Policy Plan Mobility Element, Figure M-4, Transit Plan) would parallel the Cucamonga Creek Channel, roughly bisecting the Specific Plan area. Gold Line transit corridor opportunities made available to the Project site would provide alternatives to use of personal vehicles for residents, employees, and patrons traveling to and from the Specific Plan area. Based on the preceding, the Project is considered consistent with and would support Goal 2.
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	***Consistent:*** The Project TIA identifies improvements that will promote the safe movement of people and goods, with importance placed on pedestrian safety as well as vehicular safety. All transportation modes within the Project area would be required to follow safety standards set by corresponding regulatory documents. Roadways for motorists, as well as pedestrian walkways and bicycle routes, must follow safety precautions and standards established by local (e.g., City of Ontario) and regional (e.g., SCAG, Caltrans) agencies. Based on the preceding, the Project is considered consistent with and would support Goal 3.

Table 4.1-6
Meredith International Centre Specific Plan Amendment Project
Consistency with SCAG RTP/SCS Regional Goals

RTP/SCS Goals	Remarks
Goal 4: Preserve and ensure a sustainable regional transportation system.	***Consistent:*** The Project TIA assesses all new and existing roadways and identifies required improvements to the existing transportation network. Through participation in the City's Development Impact Fee system, fees paid by the Project and other regional development would be used to ensure that existing and future traffic capacities are provided for. Mitigation included in The Meredith International Centre Specific Plan Amendment and this Draft EIR (Section 4.2, "Traffic and Circulation") encourages regional coordination of transportation issues in order to preserve and ensure a sustainable regional transportation system. Based on the preceding, the Project is considered consistent with, and would support Goal 4.
Goal 5: Maximize the productivity of our transportation system.	***Consistent:*** The local and regional transportation system would be improved and maintained to encourage efficiency and productivity. The City's Engineering Department oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis. The Meredith International Centre Specific Plan Amendment also strives to maximize productivity of the region's public transportation system (i.e., Gold Line light rail, bus, bicycle) for residents, visitors, and workers coming into and out of the Specific Plan area. Multi-modal transportation opportunities established under the Project would be consistent with and would support Policy Plan Mobility Element. Based on the preceding, the Project is considered consistent with Goal 5.
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	***Consistent:*** The Project's mixed-use land use concept collocates residential and business/commercial–retail uses, thereby acting to reduce vehicle miles traveled (VMT) locally and within the region; with corollary reductions in vehicle energy consumption and vehicular-source air pollutant emissions, including Greenhouse Gas (GHG) emissions. The Project also accommodates a Class II Bikeway Corridor along Inland Empire Boulevard in accordance with the Policy Plan Mobility Element, and provides sidewalks and pathways adjacent to roadways to promote pedestrian activity. Alternative transportation modes provided by and facilitated through the Project also act to reduce VMT and vehicular-source emissions. Alignment of the planned Gold Line transit corridor as indicated in the Policy Plan (Policy Plan Mobility Element, Figure M-4, Transit Plan) would parallel the Cucamonga Creek Channel, roughly bisecting the Specific Plan area. Gold Line transit corridor opportunities made available to the Project site would provide alternatives to use of personal vehicles for residents, employees, and patrons

Table 4.1-6
Meredith International Centre Specific Plan Amendment Project
Consistency with SCAG RTP/SCS Regional Goals

RTP/SCS Goals	Remarks
	traveling to and from the Specific Plan area, thereby reducing VMT and vehicular-source emissions. Industrial land uses proposed by the Project would incorporate solar panels providing electricity to industrial building office areas acting to reduce consumption of fossil fuels and related generation of air pollutants. Additionally, all primary structures within the Specific Plan area would be designed to achieve or surpass Leadership in Energy and Environmental Design (LEED) Certification Minimum Program Requirements (MPRs). The plant palette for the Project incorporates water-efficient/drought tolerant species native to Southern California or naturalized to the arid Southern California climate; and use of turf will be minimized throughout the Specific Plan area. In this manner, landscaping implemented by the Project would provide for efficient use of water resources. Reduced water consumption translates to reduced energy consumption with related reductions in GHG emissions. Further, "purple pipe" landscape irrigation systems would be implemented throughout the Specific Plan area, and only recycled/reclaimed water would be used for landscape irrigation or other non-potable purposes, thereby reducing demands on potable water resources. Based on the preceding, the Project is considered consistent with Goal 6.
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	***Consistent:*** Please refer to Remarks at Goal 6.
Goal 8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	***Consistent:*** Please refer to Remarks at Goals 1, 2, 5, and 6.
Goal 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	***Consistent:*** The City of Ontario is responsible for monitoring of existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. Other local and regional agencies and organizations (e.g., Omnitrans, RTA, Caltrans, and SCAG) work with the City to manage these systems. Security situations involving roadways and evacuations would be addressed in the City's Emergency Operations Plan (EOP) and Hazard Mitigation Plan (HMP). The Ontario General Plan identifies potential evacuation routes in and around Ontario. Major evacuation routes include I-10, I-15, SR-60, and numerous major and secondary highways. Since earthquakes, floods, fires, or other disasters may render some or portions of these routes

Table 4.1-6
Meredith International Centre Specific Plan Amendment Project
Consistency with SCAG RTP/SCS Regional Goals

RTP/SCS Goals	Remarks
	impassible, specific evacuation routes would need to be designated during an emergency depending on the nature and location of the particular disaster.

Sources: Goal statements from: *SCAG Regional Transportation Plan and Sustainable Communities Strategy for 2012-2035*, Table 1.1 RTP/SCS Goals (Southern California Association of Government) Adopted April 2012; Remarks-Applied Planning Inc.

Summary

As outlined above, the proposed Meredith International Centre Specific Plan Amendment would establish land use plans, development standards, and design guidelines directing the ultimate buildout of the Project site. Land uses and development reflected within the proposed Meredith SPA can be feasibly implemented consistent with applicable provisions of the City General Plan (as amended) and City Development Code. Prior to issuance of building permits, the City would review the final development plans for individual projects within the Specific Plan Area to ensure consistency with the Meredith SPA land use plans, development standards, design guidelines; and where applicable, City Development Code requirements.

The Project is also considered to be consistent with, and would support mobility, economy, and sustainability goals and policies articulated in the *2012-2035 RTP/SCS.*

On the basis of the preceding analysis, the potential for the Project to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.2 TRAFFIC AND CIRCULATION

4.2 TRAFFIC AND CIRCULATION

Abstract

This Section addresses the Project's potential to increase traffic and congestion within the Traffic Impact Analysis Study Area (Study Area). Potential impacts are addressed for Existing (2014) Conditions; Year 2017 Conditions reflecting completion and occupancy of the Project's Planning Area 1 industrial land uses, together with development of 86,000 square feet of commercial/retail uses in Planning Area 2; Year 2020 Conditions reflecting buildout of the Project site in total; and Year 2035 Conditions reflecting completion and occupancy of the Project in the context of City Buildout Conditions envisioned under The Ontario Plan (TOP). More specifically, this Section of the EIR examines whether the Project could:

- *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;*

- *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;*

- *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*

- *Result in inadequate emergency access; or*

- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.*

Project compliance with the City of Ontario DIF Program and payment of Fair Share Fees would fulfill mitigation requirements for Project contributions to potentially significant traffic/transportation impacts at facilities under the sole jurisdiction of the City of Ontario. However, at extra-jurisdictional or shared jurisdictional locations determined to be subject to potentially significant Project-related traffic/transportation impacts, Project compliance with the City DIF Program and payment of Fair Share Fees would not ensure timely completion of required improvements. Further, at certain Study Area locations, implementation of required improvements would require additional right-of-way, acquisition of which may not feasible. Within these discussions, potentially significant Project-related traffic/transportation impacts at extra-jurisdictional or shared jurisdictional locations; or at locations where additional right-of-way be required, are considered to remain significant and unavoidable pending completion of the required improvements.

On this basis, pending the completion of required improvements, Project traffic impacts at the following Study Area intersections are considered cumulatively significant and unavoidable under at least one of the analysis scenarios noted above (Existing Conditions, Year 2017 Conditions, Year 2020 Conditions, and/or Year 2035 Conditions).

- *Archibald Avenue at Arrow Route (Study Area Intersection 2);*
- *Baker Avenue at 8th Street (Study Area Intersection 3);*
- *Hellman Avenue at 6th Street (Study Area Intersection 9);*
- *Haven Avenue at 6th Street (Study Area Intersection 12);*
- *I-10 EB Ramp at 4th Street (Study Area Intersection 14);*[1]
- *Vineyard Avenue at 4th Street (Study Area Intersection 20);*
- *Archibald Avenue at 4th Street (Study Area Intersection 23);*
- *Haven Avenue at 4th Street (Study Area Intersection 25);*
- *Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and*
- *Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32).*

Project traffic would also contribute to cumulatively significant impacts affecting analyzed freeway facilities within the Study Area.[2] *As discussed within this Section, there are no feasible*

[1] Significant impacts under the "Existing Plus Project" analytic scenario are considered Project-specific.

means for the Project Applicant or the City of Ontario to mitigate cumulatively significant freeway facilities impacts, and these impacts are accordingly recognized as cumulatively significant and unavoidable.

All other Project-related traffic and circulation impacts would be less-than-significant, or would be reduced to levels that are less-than-significant with implementation of the mitigation measures identified herein.

4.2.1 INTRODUCTION

The detailed evaluation of potential Project-related traffic and circulation impacts is documented in: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015 (Project TIA). The Project TIA and supporting data are presented at Draft EIR Appendix C.

4.2.2 STUDY AREA ANALYSIS LOCATIONS AND METHODOLOGIES

4.2.2.1 Overview

Discussions were held with the City of Ontario and the Project Applicant to establish a comprehensive understanding of the Project, determine the Scope of work and Methodology for the TIA, and define the TIA Study Area. The Scope of Work and Methodology for the Project TIA is also consistent with applicable City of Rancho Cucamonga, San Bernardino County, and California Department of Transportation (Caltrans) TIA guidelines.

Discussions with the City defined the level-of-service (LOS) analysis methodology, and the determination of traffic impact significance. Past, present and reasonably foreseeable probable future projects ("related" projects) which would be considered as part of the cumulative development setting were also identified. The Project is anticipated to be completed in two increments of development. "Planning Area 1" land uses together with approximately 86,000 square feet of commercial/retail space in

[2] Under Existing Plus Project Conditions (Project Buildout) Project-specific traffic contributions to eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21) would be considered significant.

"Planning Area 2" would be completed in the initial increment of development, with an anticipated Year 2017 opening year. Buildout and occupation of the remaining Project land uses is expected by the Year 2020.

Pursuant to the TIA Scope of Work and City requirements, analyses of traffic conditions are presented for Existing Conditions (2014), Year 2017 Conditions, Year 2020 Conditions, and Year 2035 Conditions.

4.2.2.2 Study Area Intersections

The Project TIA evaluated a total of 36 existing and 8 future intersections. Table 4.2-1 lists these intersections, and indicates jurisdictional control for each. The TIA Study Area intersections are mapped at Figure 4.2-1.

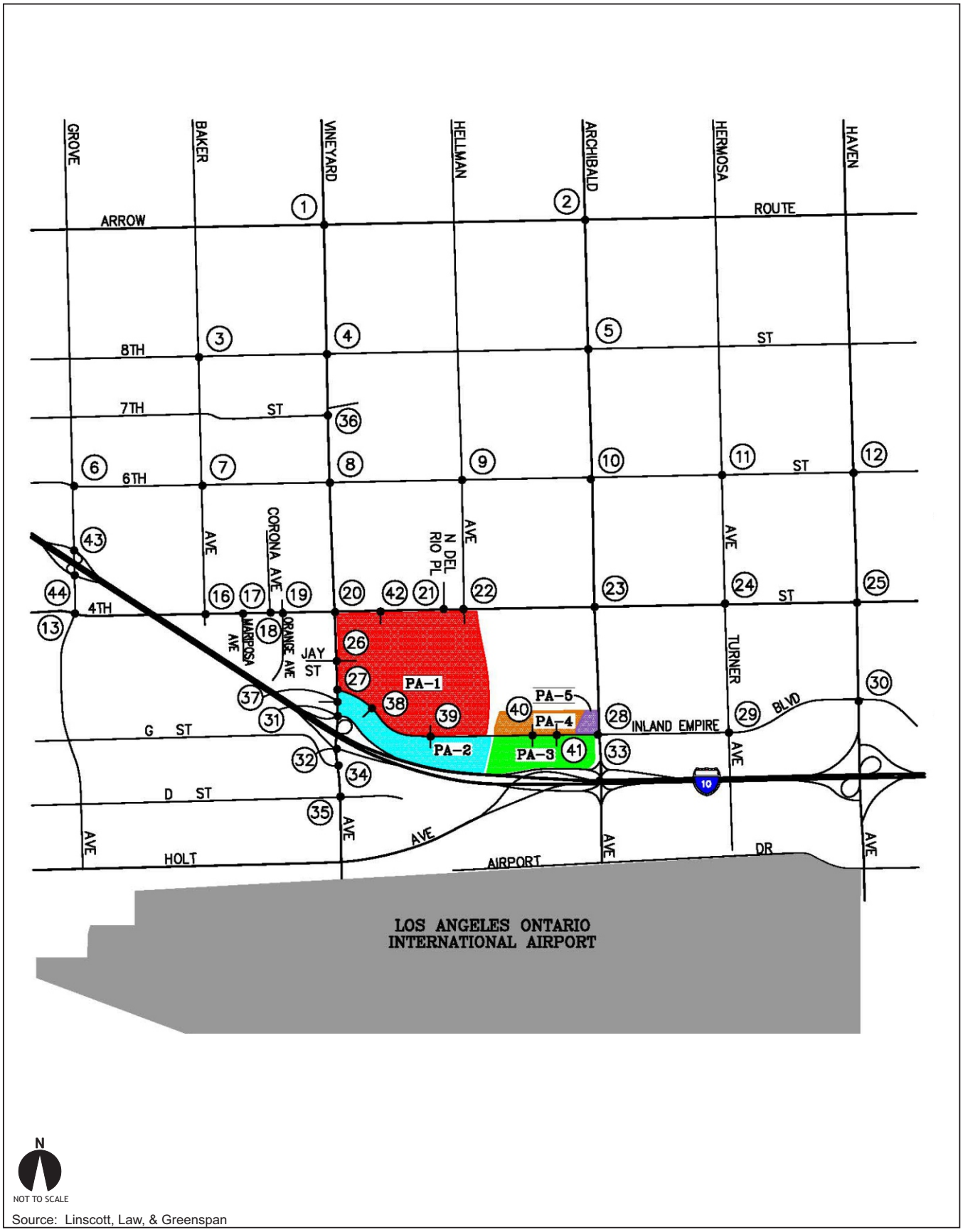
Table 4.2-1
Study Area Intersections

Map No.	Intersection	Jurisdiction
1	Vineyard Avenue at Arrow Route	City of Rancho Cucamonga
2	Archibald Avenue at Arrow Route *	City of Rancho Cucamonga
3	Baker Avenue at 8th Street	City of Rancho Cucamonga/City of Ontario
4	Vineyard Avenue at 8th Street	City of Rancho Cucamonga/City of Ontario
5	Archibald Avenue at 8th Street	City of Rancho Cucamonga
6	Grove Avenue at 6th Street	City of Ontario
7	Baker Avenue at 6th Street	City of Ontario
8	Vineyard Avenue at 6th Street	City of Ontario
9	Hellman Avenue at 6th Street	City of Rancho Cucamonga
10	Archibald Avenue at 6th Street	City of Rancho Cucamonga
11	Hermosa Avenue at 6th Street	City of Rancho Cucamonga
12	Haven Avenue at 6th Street	City of Rancho Cucamonga
13	Grove Avenue at 4th Street *	City of Ontario
14	I-10 EB Ramps at 4th Street *	City of Ontario/Caltrans
15	I-10 WB Ramps at 4th Street *	City of Ontario/Caltrans
16	Baker Avenue at 4th Street	City of Ontario
17	Mariposa Avenue at 4th Street	City of Ontario

Table 4.2-1
Study Area Intersections

Map No.	Intersection	Jurisdiction
18	Corona Avenue at 4th Street	City of Ontario
19	Orange Avenue at 4th Street	City of Ontario
20	Vineyard Avenue at 4th Street	City of Ontario
21	Del Rio Place at 4th Street	City of Ontario
22	Hellman Avenue at 4th Street	City of Ontario
23	Archibald Avenue at 4th Street *	City of Rancho Cucamonga/City of Ontario
24	Turner Avenue at 4th Street	City of Rancho Cucamonga/City of Ontario
25	Haven Avenue at 4th Street *	City of Rancho Cucamonga/City of Ontario
26	Vineyard Avenue at Jay Street	City of Ontario
27	Vineyard Avenue at Inland Empire Boulevard	City of Ontario
28	Archibald Avenue at Inland Empire Boulevard	City of Ontario
29	Turner Avenue at Inland Empire Boulevard	City of Ontario
30	Haven Avenue at Inland Empire Boulevard	City of Ontario
31	Vineyard Avenue at I-10 WB Ramps	City of Ontario/Caltrans
32	Vineyard Avenue at I-10 EB Ramps	City of Ontario/Caltrans
33	Archibald Avenue at I-10 Freeway *	City of Ontario/Caltrans
34	Vineyard Avenue at G Street	City of Ontario/Caltrans
35	Vineyard Avenue at D Street	City of Ontario
36	Vineyard Avenue at 7th Street	City of Ontario
37	Vineyard Avenue at Plaza Serena **	City of Ontario
38	Project Driveway "A" at Inland Empire Boulevard **	City of Ontario
39	Project Driveway "B" at Inland Empire Boulevard **	City of Ontario
40	Project Driveway "C" at Inland Empire Boulevard **	City of Ontario
41	Project Driveway "D" at Inland Empire Boulevard **	City of Ontario
42	Project Driveway "E" at 4th Street **	City of Ontario
43	Grove Avenue at I-10 WB Ramps **	City of Ontario/Caltrans
44	Grove Avenue at I-10 EB Ramps **	City of Ontario/Caltrans

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: * denotes San Bernardino County CMP intersection; ** denotes future intersection



Source: Linscott, Law, & Greenspan

Figure 4.2-1
Study Area Intersections

4.2.2.3 Level of Service Descriptors

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS "A," representing completely free-flow conditions, to LOS "F," representing breakdown in flow resulting in stop-and-go conditions. LOS "E" represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

4.2.2.4 Intersection Capacity Analysis Methodology

LOS descriptions for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The *Highway Capacity Manual* (HCM), published by the Transportation Research Board (2000), methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

Tables 4.2-2 and 4.2-3 present LOS descriptors for signalized and unsignalized intersections within the Study Area. Additional detail regarding the Project TIA's assessment of intersection levels of service, including the specifics of modeling performed for intersections under Caltrans jurisdiction is included in the Project TIA (Draft EIR Appendix C, Section 2, "Methodologies").

Table 4.2-2
Signalized Intersection LOS Descriptors

Level of Service	Description	Average Control Delay (seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up

Source: *Highway Capacity Manual* (Chapter 16).

Table 4.2-3
Unsignalized Intersection LOS Descriptors

Level of Service	Description	Average Control Per Vehicle (seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Severe congestion.	50.01 and up

Source: *Highway Capacity Manual* (Chapter 17).

4.2.2.5 Acceptable Circulation System Operational Conditions/Circulation System Deficiencies Defined

Acceptable or target system operational conditions and system deficiency criteria established by governing jurisdictional agencies are summarized below.

City of Ontario

The Ontario Policy Plan, Mobility Element, indicates that LOS E should be maintained at City of Ontario intersections.[2] Intersections operating at LOS F would be considered deficient.

City of Rancho Cucamonga

The City of Rancho Cucamonga 2010 General Plan, Community Mobility Element, indicates that LOS D should be maintained at City of Rancho Cucamonga intersections.[3] Intersections operating at LOS E would be considered deficient.

County of San Bernardino

The Congestion Management Program (CMP) definition of deficiency is based on maintaining a Level of Service standard of Level of Service E or better, except where an existing Level of Service F condition is identified in the *Congestion Management Program for San Bernardino County* (San Bernardino Associated Governments, SANBAG). A Congestion Management Program deficiency is, therefore, defined as any CMP facility operating or projected to operate at Level of Service F, unless the CMP facility in question is identified in the CMP document.

[2] City of Ontario. The Ontario Plan. Policy Plan. Mobility Element, Policy M1-1.Web. December 11, 2014. < http://www.ontarioplan.org/index.cfm/29232>.

[3] City of Rancho Cucamonga. Rancho Cucamonga General Plan. Community Mobility Element. P CM-17. http://www.cityofrc.us/cityhall/planning/genplan.asp

Caltrans

Caltrans District 8 Guidelines were employed in the analysis of Caltrans facilities in the Study Area. In this regard, the LOS for operating State highway facilities is based upon Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is "D."

Within these analyses, LOS "D" is also considered to be the limit of acceptable traffic operations for Caltrans-maintained facilities. LOS E and LOS F conditions affecting Caltrans facilities are therefore considered deficient. Construction of improvements that may be necessary to maintain or achieve acceptable LOS D conditions for Caltrans facilities are beyond the control or purview of the Project Applicant or the Lead Agency.

Shared Jurisdictional Facilities

In instances where facilities are under shared jurisdiction the most restrictive LOS standards would apply. For example: intersections along the shared City Ontario/City of Rancho Cucamonga corporate boundary(ies) would be subject to City of Rancho Cucamonga minimum LOS D operating standard rather than the City of Ontario LOS E standard. A summary of the minimum acceptable LOS standards, based on jurisdiction, for each Study Area intersection is provided at Table 4.2-4.

Table 4.2-4
Study Area Intersections Acceptable LOS Standards

Map No.	Intersection	Jurisdiction	Minimum Acceptable LOS
1	Vineyard Avenue at Arrow Route	City of Rancho Cucamonga	D
2	Archibald Avenue at Arrow Route *	City of Rancho Cucamonga	D
3	Baker Avenue at 8th Street	City of Rancho Cucamonga/ City of Ontario	D
4	Vineyard Avenue at 8th Street	City of Rancho Cucamonga/ City of Ontario	D
5	Archibald Avenue at 8th Street	City of Rancho Cucamonga	D
6	Grove Avenue at 6th Street	City of Ontario	E
7	Baker Avenue at 6th Street	City of Ontario	E
8	Vineyard Avenue at 6th Street	City of Ontario	E
9	Hellman Avenue at 6th Street	City of Rancho Cucamonga	D
10	Archibald Avenue at 6th Street	City of Rancho Cucamonga	D
11	Hermosa Avenue at 6th Street	City of Rancho Cucamonga	D
12	Haven Avenue at 6th Street	City of Rancho Cucamonga	D
13	Grove Avenue at 4th Street *	City of Ontario	E
14	I-10 EB Ramps at 4th Street *	City of Ontario/Caltrans	D
15	I-10 WB Ramps at 4th Street *	City of Ontario/Caltrans	D
16	Baker Avenue at 4th Street	City of Ontario	E
17	Mariposa Avenue at 4th Street	City of Ontario	E
18	Corona Avenue at 4th Street	City of Ontario	E
19	Orange Avenue at 4th Street	City of Ontario	E
20	Vineyard Avenue at 4th Street	City of Ontario	E
21	Del Rio Place at 4th Street	City of Ontario	E
22	Hellman Avenue at 4th Street	City of Ontario	E
23	Archibald Avenue at 4th Street *	City of Rancho Cucamonga/ City of Ontario	D
24	Turner Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D
25	Haven Avenue at 4th Street *	City of Rancho Cucamonga/ City of Ontario	D
26	Vineyard Avenue at Jay Street	City of Ontario	E
27	Vineyard Avenue at Inland Empire Boulevard	City of Ontario	E
28	Archibald Avenue at Inland Empire Boulevard	City of Ontario	E

Table 4.2-4
Study Area Intersections Acceptable LOS Standards

Map No.	Intersection	Jurisdiction	Minimum Acceptable LOS
29	Turner Avenue at Inland Empire Boulevard	City of Ontario	E
30	Haven Avenue at Inland Empire Boulevard	City of Ontario	E
31	Vineyard Avenue at I-10 WB Ramps	City of Ontario/Caltrans	D
32	Vineyard Avenue at I-10 EB Ramps	City of Ontario/Caltrans	D
33	Archibald Avenue at I-10 Freeway *	City of Ontario/Caltrans	D
34	Vineyard Avenue at G Street	City of Ontario/Caltrans	D
35	Vineyard Avenue at D Street	City of Ontario	E
36	Vineyard Avenue at 7th Street	City of Ontario	E
37	Vineyard Avenue at Plaza Serena **	City of Ontario	E
38	Project Driveway "A" at Inland Empire Boulevard **	City of Ontario	E
39	Project Driveway "B" at Inland Empire Boulevard **	City of Ontario	E
40	Project Driveway "C" at Inland Empire Boulevard **	City of Ontario	E
41	Project Driveway "D" at Inland Empire Boulevard **	City of Ontario	E
42	Project Driveway "E" at 4th Street **	City of Ontario	E
43	Grove Avenue at I-10 WB Ramps **	City of Ontario/Caltrans	D
44	Grove Avenue at I-10 EB Ramps **	City of Ontario/Caltrans	D

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: * denotes San Bernardino County CMP intersection; ** denotes future intersection

4.2.2.6 Freeway Facilities Analysis Methodologies (excerpted from Project TIA)

Freeway Mainline Segment Analysis

Consistent with the Caltrans *Guide for the Preparation of Traffic Impact Studies dated December 2002,* an analysis of the freeway mainline segments located on either side of the I-10 Freeway/Vineyard Avenue Interchange and I-10 Freeway/Archibald Avenue Interchange has been prepared. The freeway segments evaluated include mainline segments where the proposed Project is anticipated to contribute 100 or more two-way peak hour trips to existing and/or future conditions.

[TIA] Table 12-1 presents a summary of the Project traffic volumes on key freeway segments on the San Bernardino (I-10) Freeway (Segments 1 through 25), the Orange Freeway (SR-57) Freeway (Segments 26 through 27) and Interstate 15 (I-15) Freeway (Segments 28 through 35). A review of *Table 12-1* indicates that the proposed Project is forecast to contribute 100 two-way peak hour trips on all key freeway mainline study segments, except four locations, Segments 1, 25, 28 and 35. Project added freeway volumes on these four segments total at 50 trips or less. Nevertheless, a freeway mainline segment analysis has also been conducted at these four freeway mainline segments on the I-10 Freeway, I-15 Freeway and/or SR-57 Freeway to provide a conservative assessment of the proposed Projects' potential traffic impacts. [TIA] *Figure 12-1* presents the scope of the freeway analysis. The expansive scope of this freeway analysis is very conservative and goes beyond the analysis that exists or is included in most traffic impact analyses and likely overstates the potential traffic impacts from the proposed Project.

The freeway peak hour traffic forecasts were developed based on the peak period model data for autos and trucks. This incremental growth was added to existing freeway volumes obtained from Caltrans to develop Year 2035 Cumulative traffic volumes. The Project traffic volumes, as assigned, were added to Year 2035 Cumulative traffic volumes to develop Year 2035 Cumulative-plus-Project PA-1, PA-2, PA-3 and PA-4 traffic conditions.

The CMP definition of deficiency is based on maintaining a level of service standard of LOS "E" or better, except where an existing LOS "F" condition is identified in the CMP document.

Caltrans District 8 has established that LOS D is the operating standard for all Caltrans facilities. Caltrans has determined that all state owned facilities that operate below LOS D should be identified and improved (to

the extent feasible) to an acceptable LOS. However, the *Caltrans Traffic Impact Study Guidelines dated December 2002* does state that if an existing state owned facility operates at less than LOS D, the existing service level should be maintained.

The most current San Bernardino County CMP states "*Only project opening day and future scenarios with project require that traffic operational problems be mitigated to provide LOS E or better operation. If the lead agency or an affected adjacent jurisdiction requires mitigation to a higher LOS, this takes precedence over the CMP requirements*." Based on this, LOS D is the minimum required LOS to be maintained on the freeway segments since the I-10, SR-57 and I-15 are under Caltrans' jurisdiction (Project TIA, pp. 121-122).

Please refer also to Appendix M of the Project TIA.

Freeway Ramp (Merge/Diverge) Junction Analysis

The Project TIA Freeway Ramp (Merge/Diverge) Junction Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to Appendix N of the Project TIA.

Freeway Weaving Analysis

The Project TIA Freeway Weaving Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to Appendix O of the Project TIA.

4.2.3 EXISTING CONDITIONS

4.2.3.1 Overview

The following discussions describe the existing Study Area circulation network, and describe other transportation modes that exist or anticipated within, or would be available to, the Study Area.

4.2.3.2 Existing Roadway System

The major factors affecting access to the Project site are the location of the site and the efficiency of the roadway system serving the site. Efficiency of access is a function of travel time, convenience, directness, and available capacity of the routes utilized in accessing the development. Key regional and local roadways within the Study Area are summarized below.

Regional Access

Regional access to the Project site is provided by the San Bernardino (I-10) Freeway. This 8-lane freeway facility extends through Los Angeles County and San Bernardino County, and links the City of Ontario with adjacent jurisdictions. High Occupancy Vehicle (HOV) lanes are provided for each direction of travel on the I-10 Freeway. Proximate to the Project site, access to the freeway is provided via the Vineyard Avenue/I-10 Freeway Interchange, with additional freeway access provided at the 4th Street/I-10 Freeway Interchange, and the Archibald Avenue/I-10 Freeway Interchange.

Local Access

The local network of streets serving the Project site consists of Baker Avenue, Vineyard Avenue, Archibald Avenue, Haven Avenue, Arrow Route, 8th Street, 6th Street, 4th Street, and Inland Empire Boulevard. Orientations, lane configurations, parking provisions/restrictions, posted speed limits, and roadway classifications for the local street network are summarized below.

Baker Avenue is a two-lane, undivided roadway oriented generally north-south. On-street parking is not permitted along this roadway in the vicinity of the Project. The posted speed limit on Baker Avenue is 35 miles per hour (mph). Baker Avenue is classified as a Collector Street in the City of Ontario Master Plan of Streets.

Vineyard Avenue is a four-lane, divided roadway oriented generally north-south, along the westerly Project boundary. On-street parking is generally permitted on the west side of Vineyard Avenue, between 4th Street and Inland Empire Boulevard, but is restricted along the east side along Project frontage. The posted speed limit on Vineyard Avenue is 45 mph. Vineyard Avenue along the Project frontage is classified as a Principal Arterial in the City of Ontario Master Plan of Streets.

Archibald Avenue is a four- to six-lane, divided roadway oriented generally north-south along the easterly Project boundary. On-street parking is not permitted along this roadway in the vicinity of the Project. The posted speed limit on Archibald Avenue is 45 mph. Archibald Avenue is classified as a six-lane divided Principal Arterial in the City of Ontario Master Plan of Streets.

Haven Avenue is a six-lane, divided roadway oriented generally north-south. In the vicinity of the Project, on-street parking is prohibited along this roadway. The posted speed limit on Haven Avenue is 50 mph. Haven Avenue is classified as a Principal Arterial (ranging from four to eight lanes) in the City of Ontario Master Plan of Streets.

Arrow Route is oriented generally east-west. Arrow Route is a two-lane undivided roadway west of Vineyard Avenue; and is a four-lane divided roadway east of Vineyard Avenue. On-street parking is not permitted along this roadway in the vicinity of the Project. The posted speed limit on Arrow Route is 45 mph. Arrow Route is classified as a Major Arterial by the City of Rancho Cucamonga General Plan Mobility Element.

8th Street is a two-lane undivided roadway oriented generally east-west. On-street parking is not permitted along this roadway within the vicinity of the Project. The posted speed limit on 8th Street is 45 mph. 8th Street is classified as a Minor Arterial in the City of Ontario Master Plan of Streets.

6th Street is a two to four-lane divided roadway oriented generally east-west. On-street parking is not permitted along this roadway within the vicinity of the Project. The posted speed limit on 6th Street is 45 mph. 6th Street is classified as a Collector Street in the City of Ontario Master Plan of Streets.

4th Street is a four-lane, divided roadway oriented generally east-west, along the northerly Project boundary. On-street parking is not permitted along this roadway in the vicinity of the Project. The posted speed limit on 4th Street is 55 mph within the vicinity of the Project. 4th Street along Project frontage is classified as a six-lane divided Arterial in the City of Ontario Master Plan of Streets.

Inland Empire Boulevard is a four-lane, undivided roadway oriented generally east-west. This roadway traverses the southerly portion of the Project site; connecting to Vineyard Avenue to the west, and Archibald Avenue to the east. The posted speed limit on Inland Empire Boulevard is 50 mph. Inland Empire Boulevard, between Vineyard Avenue and Archibald Avenue, is classified as a six-lane divided Minor Arterial in the City of Ontario Master Plan of Streets.

4.2.3.3 Alternative Transportation Modes

Bus Service

Bus service is provided in the Project area by OmniTrans. OmniTrans bus routes are provided along Vineyard Avenue, Arrow Highway, Inland Empire Boulevard, Milliken Avenue, and Haven Avenue. OmniTrans Route 61 operates east-west along Inland Empire Boulevard between the cities of Fontana and Pomona. Route 68 operates east-west along Arrow Highway, north of the Project site, between the City of Chino, Montclair and Chaffey College. Route 80 operates north-south along Vineyard Avenue, west of the Project site, between the City of Montclair and Chaffey College. Route 81 operates north-south along Inland Empire Boulevard and Milliken Avenue, east of the Project site, between the City of Ontario and Chaffey College. Route 82 operates north-south along Haven Avenue, east of the Project site, between the City of Rancho

Cucamonga and Sierra Lakes. Figure 4.2-2 presents the OmniTrans Transit Bus Systems Map.

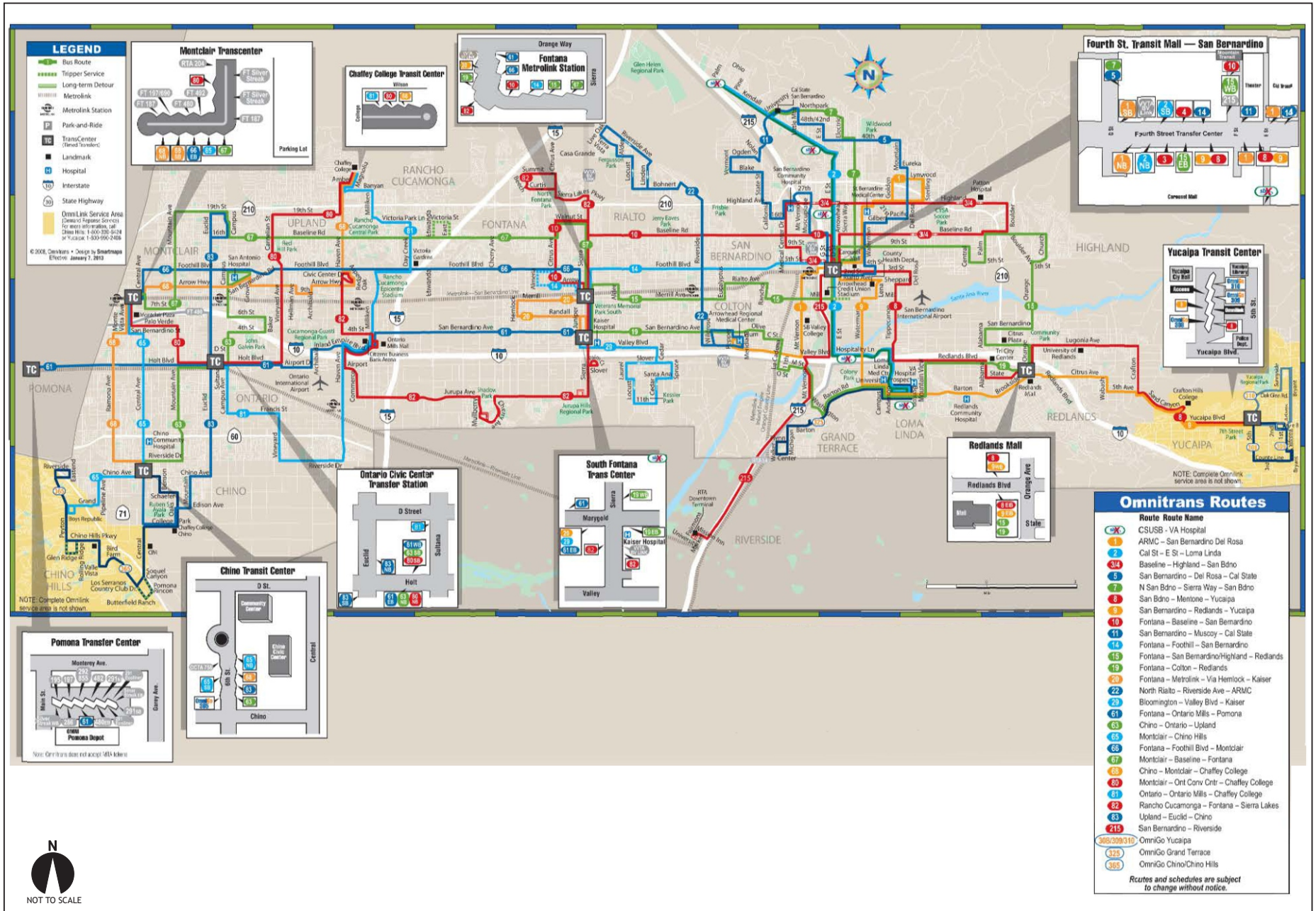
Additionally, the Metrolink Riverside Line provides connecting transit service to Riverside County and Los Angeles County. The Upland and Rancho Cucamonga San Bernardino Line Metrolink stations are located within three miles of the Project site.

Pedestrian and Bicycle Facilities

Figure 4.2-3 presents the City's Multipurpose Trails and Bikeway Corridor Plan. In the vicinity of the Project site, Vineyard Avenue has been designated as a Class III bikeway (signed/shared bike route) between Inland Empire Boulevard and G Street. As part of the planned Vineyard Avenue/I-10 Freeway Interchange improvement, Class II bikeway improvements (striped separate bike lanes) are expected to be completed along Vineyard Avenue. Inland Empire Boulevard is designated as a Class II bikeway in the vicinity of the Project site.

4.2.3.4 Existing Traffic Volumes

Existing peak hour traffic volumes within the Study Area were determined by field traffic counts conducted during May 2014. Weekday morning (AM) peak traffic conditions are represented by traffic counts conducted for the two-hour period between 7:00 and 9:00 a.m. Similarly, weekday evening (PM) peak hour traffic conditions are represented by traffic counts conducted for the two-hour period from 4:00 to 6:00 p.m. The TIA traffic count data is considered representative of typical peak hour traffic conditions in the Study Area. Please refer to the Project TIA (EIR Appendix C) for detailed traffic count information.

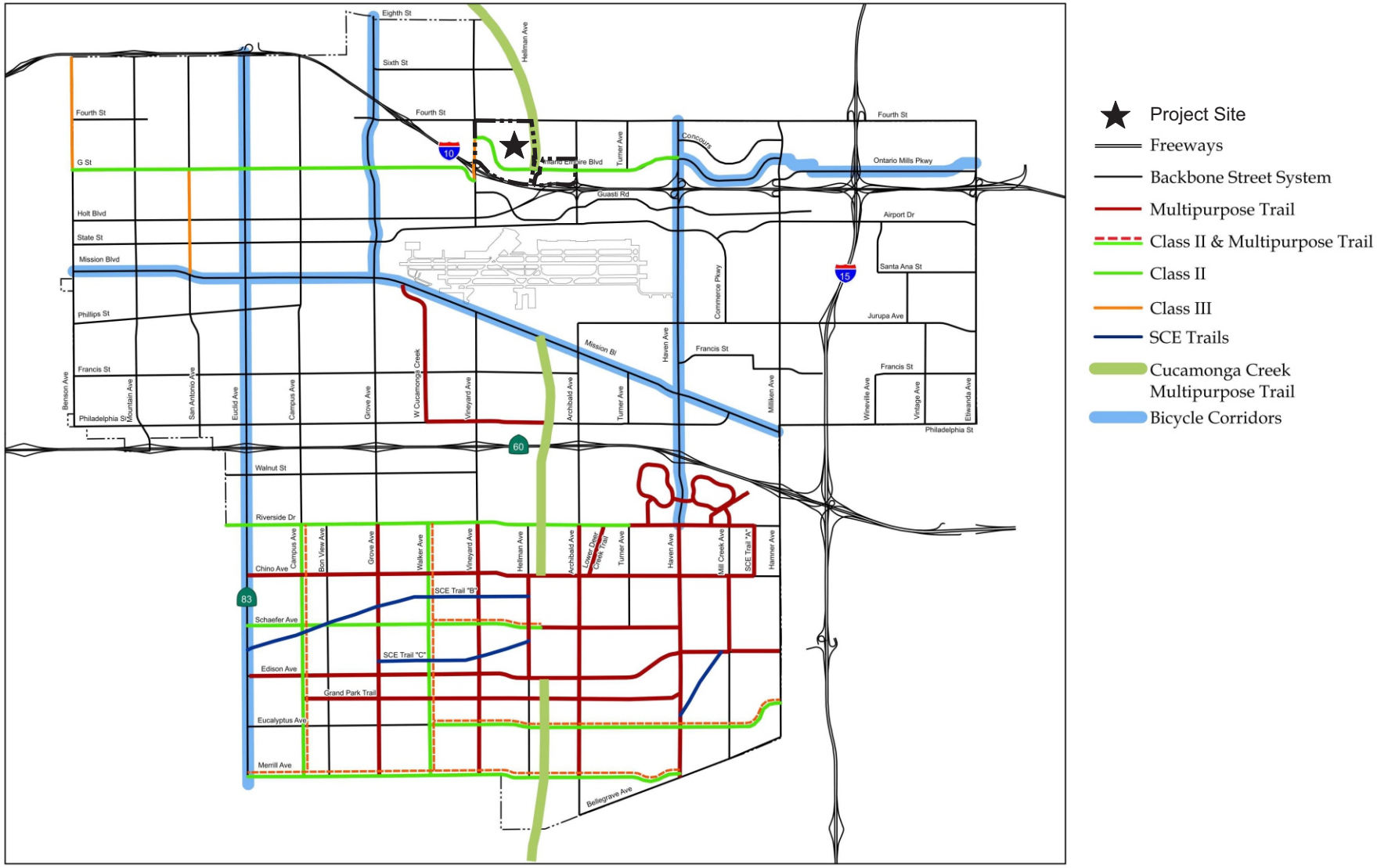


NOT TO SCALE

Source: OmniTrans, City of Ontario

applied planning inc

Figure 4.2-2
OmniTrans Location Map



N

NOT TO SCALE

Source: City of Ontario

Figure 4.2-3
Ontario Trails and Bikeway Plan

4.2.3.5 Existing Conditions Intersection Operations Analysis

Within the Study Area, 32 of the 36 existing intersections analyzed currently operate at acceptable LOS. The four Study Area intersections that currently operate at unacceptable LOS are identified at Table 4.2-5.

Table 4.2-5
Existing Study Area Intersection LOS Deficiencies

ID	Intersection Location	Jurisdiction	Minimum Acceptable LOS	Traffic Control	Peak Hour	Delay	V/C	LOS
14	I-10 EB Ramps at 4th Street	City of Ontario/ Caltrans	D	3-Phase Traffic Signal	AM	19.6	0.652	B
					PM	**78.1**	**0.808**	**E**
22	Hellman Avenue at 4th Street	City of Ontario	E	One-Way Stop	AM	42.8	---	E
					PM	**75.4**	**---**	F
26	Vineyard Avenue at Jay Street	City of Ontario	E	One-Way Stop	AM	28.6	---	D
					PM	**50.7**	**---**	**F**
30	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	8-Phase Traffic Signal	AM	52.1	0.537	D
					PM	**102.8**	**0.742**	**F**

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Bold, shaded text indicates unacceptable levels of service.

4.2.3.6 Existing Conditions–Freeway Segment Analysis

Consistent with Caltrans guidelines and requirements, a Freeway Mainline Segment Analysis was conducted for Study Area freeway segments located on either side of the I-10 Freeway/Vineyard Avenue Interchange, and the I-10 Freeway/Archibald Avenue Interchange. All freeway segments are under Caltrans Jurisdiction. Within the Study Area, 51 of the 68 freeway segments analyzed were found to operate unacceptably during peak hour periods under Existing Conditions. Table 4.2-6 summarizes the 51 freeway segment deficiencies within the Study Area.

Table 4.2-6
Existing Study Area Freeway Segment Deficiencies

	Freeway Segment	Peak Hour	Fwy Segment Lanes	Existing Traffic Conditions		
				Peak Hour Volume (pc/h/ln)	Density (pc/mi/ln)	LOS
1.	I-10 Eastbound *from*	AM	4	1,838	27.3	D
	Citrus Street *to* Grand Avenue	PM		**2,220**	**37.3**	**E**
5.	I-10 Eastbound *from*	AM	4	2,065	32.5	D
	SR-57 *to* Fairplex Drive	PM		**2,493**	**--**	**F**
6.	I-10 Eastbound *from*	AM	4	2,065	32.5	D
	Fairplex Drive *to* Dudley Street	PM		**2,493**	**--**	**F**
7.	I-10 Eastbound *from*	AM	4	2,056	32.3	D
	Dudley Street *to* White Avenue	PM		**2,482**	**--**	**F**
8.	I-10 Eastbound *from*	AM	4	1,969	30.1	D
	White Avenue *to* Garey Avenue	PM		**2,377**	**43.8**	**E**
9.	I-10 Eastbound *from*	AM	4	2,047	32.0	D
	Garey Avenue *to* Towne Avenue	PM		**2,472**	**--**	**F**
10.	I-10 Eastbound *from*	AM	4	2,030	31.6	D
	Towne Avenue *to* Indian Hill Boulevard	PM		**2,451**	**--**	**F**
11.	I-10 Eastbound *from*	AM	4	1,509	21.6	C
	Indian Hill Boulevard *to* Monte Vista Avenue	PM		**3,161**	**--**	**F**
12.	I-10 Eastbound *from*	AM	4	1,496	21.4	C
	Monte Vista Avenue *to* Central Avenue	PM		**3,136**	**--**	**F**
13.	I-10 Eastbound *from*	AM	4	1,503	21.5	C
	Central Avenue *to* Mountain Avenue	PM		**3,148**	**--**	**F**
14.	I-10 Eastbound *from*	AM	4	1,509	21.6	C
	Mountain Avenue *to* Euclid Avenue	PM		**3,161**	**--**	**F**
15.	I-10 Eastbound *from*	AM	4	1,485	21.3	C
	Euclid Avenue *to* 4th Street	PM		**3,133**	**--**	**F**
16.	I-10 Eastbound *from*	AM	4	1,442	20.6	C
	4th Street *to* Vineyard Avenue	PM		**3,021**	**--**	**F**

Table 4.2-6
Existing Study Area Freeway Segment Deficiencies

	Freeway Segment	Peak Hour	Fwy Segment Lanes	Existing Traffic Conditions		
				Peak Hour Volume (pc/h/ln)	Density (pc/mi/ln)	LOS
17.	I-10 Eastbound *from*	AM	4	1,503	21.5	C
	Vineyard Avenue *to* Holt Boulevard	PM		**2,999**	**--**	**F**
18.	I-10 Eastbound *from*	AM	4	1,370	19.6	C
	Holt Boulevard *to* Archibald Avenue	PM		**2,976**	**--**	**F**
19.	I-10 Eastbound *from*	AM	4	1,515	21.7	C
	Archibald Avenue *to* Haven Avenue	PM		**3,174**	--	**F**
20.	I-10 Eastbound *from*	AM	4	1,509	21.6	C
	Haven Avenue *to* Milliken Avenue	PM		**3,161**	--	**F**
22.	I-10 Eastbound *from*	AM	4	1,492	21.4	C
	I-15 *to* Etiwanda Avenue	PM		**3,127**	--	**F**
23.	I-10 Eastbound *from*	AM	4	1,277	18.2	C
	Etiwanda Avenue *to* Cherry Avenue	PM		**2,677**	--	**F**
24.	I-10 Eastbound *from*	AM	4	1,247	17.8	B
	Cherry Avenue *to* Citrus Avenue	PM		**2,613**	--	**F**
25.	I-10 Eastbound *from*	AM	4	1,241	17.7	B
	Citrus Avenue *to* Sierra Avenue	PM		**2,600**	--	**F**
30.	I-15 Northbound *from*	AM	4	**2,958**	--	**F**
	Jurupa Street *to* I-10	PM		1,714	25.0	C
31.	I-15 Northbound *from*	AM	4	**2,725**	--	**F**
	I-10 *to* 4th Street	PM		1,579	22.7	C
32.	I-15 Northbound *from*	AM	4	**2,573**	**--**	**F**
	4th Street *to* Foothill Boulevard	PM		1,491	21.4	C
33.	I-15 Northbound *from*	AM	4	**2,257**	**38.6**	**E**
	Foothill Boulevard *to* Baseline Road	PM		1,307	18.7	C
36.	I-15 Southbound *from*	AM	4	1,598	23.0	C
	Baseline Road *to* Foothill Boulevard	PM		**2,387**	**44.3**	**E**

Table 4.2-6
Existing Study Area Freeway Segment Deficiencies

	Freeway Segment	Peak Hour	Fwy Segment Lanes	Existing Traffic Conditions		
				Peak Hour Volume (pc/h/ln)	Density (pc/mi/ln)	LOS
37.	I-15 Southbound *from*	AM	4	1,822	27.0	D
	Foothill Boulevard *to* 4th Street	PM		**2,722**	**--**	**F**
38.	I-15 Southbound *from*	AM	4	1,929	29.2	D
	4th Street *to* I-10	PM		**2,882**	**--**	**F**
39.	I-15 Southbound *from*	AM	4	2,095	33.3	D
	I-10 *to* Jurupa Street	PM		**3,130**	**--**	**F**
43.	SR-57 Southbound *from*	AM	3	2,076	34.6	D
	I-10 *to* Temple Avenue	PM		**2,243**	**40.2**	**E**
44.	I-10 Westbound *from*	AM	4	**2,791**	**--**	**F**
	Sierra Avenue *to* Citrus Avenue	PM		1,642	23.7	C
45.	I-10 Westbound *from*	AM	4	**2,805**	**--**	**F**
	Citrus Avenue *to* Cherry Avenue	PM		1,650	23.9	C
46.	I-10 Westbound *from*	AM	4	**2,873**	**--**	**F**
	Cherry Avenue *to* Etiwanda Avenue	PM		1,690	24.5	C
47.	I-10 Westbound *from*	AM	4	**3,356**	**--**	**F**
	Etiwanda Avenue *to* I-15	PM		1,974	30.2	D
48.	I-10 Westbound *from*	AM	6	**2,237**	**37.9**	**E**
	I-15 *to* Milliken Avenue	PM		1,316	18.8	C
49.	I-10 Westbound *from*	AM	4	**3,393**	**--**	**F**
	Milliken Avenue *to* Haven Avenue	PM		1,996	30.7	D
50.	I-10 Westbound *from*	AM	4	**3,406**	**--**	**F**
	Haven Avenue *to* Archibald Avenue	PM		2,004	30.9	D
51.	I-10 Westbound *from*	AM	4	**3,239**	**--**	**F**
	Archibald Avenue *to* Holt Boulevard	PM		1,866	27.8	D
52.	I-10 Westbound *from*	AM	4	**3,232**	**--**	**F**
	Holt Boulevard *to* Vineyard Avenue	PM		1,933	29.3	D

Table 4.2-6
Existing Study Area Freeway Segment Deficiencies

	Freeway Segment	Peak Hour	Fwy Segment Lanes	Existing Traffic Conditions		
				Peak Hour Volume (pc/h/ln)	Density (pc/mi/ln)	LOS
53.	I-10 Westbound *from*	AM	4	**3,242**	**--**	**F**
	Vineyard Avenue *to* 4th Street	PM		1,907	28.7	D
54.	I-10 Westbound *from*	AM	4	**3,379**	**--**	**F**
	4th Street *to* Euclid Avenue	PM		1,953	29.7	D
55.	I-10 Westbound *from*	AM	4	**3,393**	**--**	**F**
	Euclid Avenue *to* Mountain Avenue	PM		1,996	30.7	D
56.	I-10 Westbound *from*	AM	4	**3,379**	**--**	**F**
	Mountain Avenue *to* Central Avenue	PM		1,988	30.5	D
57.	I-10 Westbound *from*	AM	4	**3,365**	**--**	**F**
	Central Avenue *to* Monte Vista Avenue	PM		1,980	30.4	D
58.	I-10 Westbound *from*	AM	4	**3,393**	**--**	**F**
	Monte Vista Avenue *to* Indian Hill Boulevard	PM		1,996	30.7	D
59.	I-10 Westbound *from*	AM	4	**2,246**	**38.2**	**E**
	Indian Hill Boulevard *to* Towne Avenue	PM		2,141	34.7	D
60.	I-10 Westbound *from*	AM	4	**2,266**	**39.0**	**E**
	Towne Avenue *to* Garey Avenue	PM		**2,160**	**35.3**	**E**
61.	I-10 Westbound *from*	AM	4	**2,179**	**35.9**	**E**
	Garey Avenue *to* White Avenue	PM		2,077	32.8	D
62.	I-10 Westbound *from*	AM	4	**2,275**	**39.3**	**E**
	White Avenue *to* Dudley Street	PM		**2,169**	**35.6**	**E**
63.	I-10 Westbound *from*	AM	4	**2,285**	**39.7**	**E**
	Dudley Street *to* Fairplex Drive	PM		**2,178**	**35.9**	**E**
64.	I-10 Westbound *from*	AM	4	**2,285**	**39.7**	**E**
	Fairplex Drive *to* SR-57	PM		**2,178**	**35.9**	**E**

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: pc/mi/ln = Passenger cars per mile per lane (density); **Bold, shaded text** indicates unacceptable levels of service.

4.2.3.7 Existing Conditions–Freeway Merge/Diverge Ramp Junction Analysis

Consistent with Caltrans guidelines and requirements, a Freeway Ramp Junction (Merge/Diverge) analysis was conducted for potentially affected freeway ramps within the Study Area. These included on/off ramps at the I-10 interchanges at 4th Street, Archibald Avenue, and Vineyard Avenue. All of the evaluated Study Area freeway on/off ramp junctions currently operate at unacceptable levels of service under either AM peak hour conditions or PM peak hour conditions. All freeway ramp junctions within the Study Area are under Caltrans jurisdiction. Table 4.2-7 summarizes the freeway ramp junction merge/diverge deficiencies within the Study Area.

Table 4.2-7
Existing Study Area Freeway Ramp Junction Merge/Diverge Deficiencies

Freeway Ramp Junction Location		Analysis Type	Peak Hour	Existing Traffic Conditions			
				Freeway Peak Hr Volume	Ramp Peak Hr Volume	Density (pc/mi/ln)	LOS
1.	I-10 Eastbound Off-Ramp *to* 4th Street	Diverge	AM	5,024	563	25.0	C
			PM	**11,044**	**743**	**56.6**	**F**
2.	I-10 Eastbound On-Ramp *from* 4th Street	Merge	AM	5,024	400	23.4	C
			PM	**11,044**	**322**	**42.7**	**F**
3.	I-10 Eastbound On-Ramp *from* Holt Boulevard	Merge	AM	4,562	592	20.7	C
			PM	**10,189**	**1,006**	**38.2**	**E**
4.	I-10 Eastbound On-Ramp *from* Archibald Avenue	Merge	AM	5,154	545	21.2	C
			PM	**11,195**	**746**	**38.8**	**F**
5.	I-10 Eastbound Off-Ramp *to* Vineyard Avenue	Diverge	AM	4,930	494	24.7	C
			PM	**10,753**	**613**	**54.4**	**F**
6.	I-10 Westbound Off-Ramp *to* 4th Street	Diverge	AM	**11,916**	**282**	**41.6**	**F**
			PM	6,726	450	24.6	C
7.	I-10 Westbound On-Ramp *to* 4th Street	Merge	AM	**11,916**	**796**	**49.2**	**F**
			PM	6,726	623	30.6	D
8.	I-10 Westbound On-Ramp *from* Northbound on Vineyard Avenue	Merge	AM	**11,620**	**195**	**36.7**	**F**
			PM	6,606	210	22.1	C

Table 4.2-7
Existing Study Area Freeway Ramp Junction Merge/Diverge Deficiencies

Freeway Ramp Junction Location		Analysis Type	Peak Hour	Existing Traffic Conditions			
				Freeway Peak Hr Volume	Ramp Peak Hr Volume	Density (pc/mi/ln)	LOS
9.	I-10 Westbound On-Ramp *from* Southbound on Vineyard Avenue	Merge	AM	**11,815**	**383**	**36.3**	**F**
			PM	6,816	360	21.2	C
10.	I-10 Westbound Off-Ramp *to* Holt Boulevard	Diverge	AM	**11,589**	**598**	**42.2**	**F**
			PM	6,296	726	27.3	C

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: pc/mi/ln = Passenger cars per mile per lane (density); **Bold, shaded text** indicates locations with unacceptable levels of service.

4.2.3.8 Existing Conditions–Freeway Weaving Analysis

Consistent with Caltrans guidelines and requirements, a Freeway Weaving Analysis was conducted for the I-10 Freeway segments between Vineyard Avenue and 4th Street; and for the I-10 Freeway segments between Archibald Avenue and Haven Avenue. All freeway segments within the Study Area are under Caltrans jurisdiction. All of the freeway segments evaluated under the weaving analysis currently operate at unacceptable levels of service.

4.2.4 FUTURE TRAFFIC VOLUMES

The following discussions address traffic volumes anticipated to be generated by the Project, and traffic attributable to other growth and development within the Study Area.

4.2.4.1 Project Trip Generation

Trip generation represents the amount of traffic that is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used in this analysis establish likely maximum traffic impacts that would be generated by the Project. Trip generation rates were obtained from Institute of Transportation Engineers (ITE) *Trip Generation Manual*; 9th Edition, 2012 (ITE Trip Generation Manual). Consistent with the land uses proposed by the Project, ITE land use categories and average daily trip generation rates employed are:

- ITE Land Use 110: General Light Industrial–6.97 Trip Ends (TE)/Thousand Square Feet (TSF);
- ITE Land Use 152: High-Cube Warehouse–1.68 TE/TSF;
- ITE Land Use 310: Hotel–8.17 TE/Room;
- ITE Land Use 710: General Office–11.03 TE/TSF;
- ITE Land Use 820: Shopping Center–42.70TE/TSF; and
- ITE Land Use 220: Apartments–6.65 TE/Dwelling Unit (DU).

To equitably account for the varying sizes and operational characteristics of the range of cars and trucks accessing the Project site, trip generation rates for General Light Industrial and High Cube Warehouse uses reflect conversion of passenger car and truck trips to Passenger Car Equivalents (PCEs) as follows: Passenger Car (baseline unit) = 1 PCE; 2-axle truck = 1.5 PCE; 3-axle truck = 2.0 PCE; 4-axle truck = 3.0 PCE. Proportional daily trip generation by vehicle type for General Light Industrial, and High Cube Warehouse land uses reflect the recommended mix of traffic, including mix of 2-axle, 3-axle and 4+axle trucks, based on *Truck Trip Generation Study – City of Fontana, August 2003,* as follows:

- General Light Industrial: passenger cars-78.60%; 2-axle trucks-8.00%; 3-axle trucks-3.9%; 4-axle trucks-9.50%.

- High Cube Warehouse: passenger cars-79.57%; 2-axle trucks-3.46%; 3-axle trucks-4.64%; 4-axle trucks-12.33%.

For land use categories other than General Light Industrial and High Cube Warehouse, trips generated are predominantly passenger cars, and are therefore already expressed in PCEs. Gross Project trip generation (PCE) was then adjusted to account for pass-by trips and internal trip capture. Please refer also to the Project TIA (EIR Appendix C) for further details regarding Project trip generation characteristics.

Pass-By Trips

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These types of trips are often associated with retail uses such as gas stations, convenience stores, and drive-through restaurants.

Pass-by trip percentages employed in this analysis were obtained from the ITE Trip Generation Manual and were reviewed and approved by the Lead Agency. For the Project's Planning Area 2/Planning Area 3 commercial/retail, office, and hotel land uses the following pass-by rates were applied: 10 percent daily, 10 percent AM peak hour, and 34 percent PM peak hour.

Internal Trip Capture

Internal trip capture account for trips made between on-site uses and can be made either by walking or using internal roadways without using external streets. As reviewed and approved by the Lead Agency, an internal capture reduction of 5 percent was applied to recognize the interactions that would likely occur between the Project Planning Area 2/Planning Area 3 commercial/retail, office, and hotel land uses. For example, customers of the Project commercial/retail uses may patronize multiple shops or services without leaving the site; or hotel customers may also be patrons of the Project's commercial/retail venues. Vehicle trips that would be internal to the site are reflected in the 5 percent internal trip capture rate noted above.

Net Project-Related Trips

Based on the Project's ITE trip generation rates, and adjustments for pass-by-trips and internal trip capture, net Project trips added to the Study Area roadway system under Year 2017 Conditions (Interim Project Development), and Year 2020 Conditions (Project Buildout) are summarized below.

- Under Year 2017 Conditions (Interim Project Development), the Project would generate the following estimated traffic volumes (PCEs):
  - 14,015 average daily trips;
  - 1,337 AM peak hour trips (1,088 inbound and 249 outbound); and
  - 1,462 PM peak hour trips (305 inbound and 1,157 outbound).

- Under Year 2020 Conditions (Project Buildout), the Project would generate the following estimated traffic volumes (PCEs):
  - 42,057 average daily trips;
  - 2,802 AM peak hour trips (1,922 inbound and 880 outbound); and
  - 3,660 PM peak hour trips (305 inbound and 2,329 outbound).

It is noted that while available or planned alternative travel modes (e.g., public transit, walking, or bicycling) may diminish the Project's forecasted traffic volumes, the traffic-reducing potentials of alternative travel modes were not considered in the Project trip generation estimates. Project traffic volumes considered in this analysis therefore represent the likely maximum Project traffic generation and traffic impact condition.

4.2.4.2 Project Trip Distribution and Assignment

The trip distribution process establishes the directional orientation of traffic approaching and departing the site. Trip distribution is influenced by the location of the site in relation to nearby residential, employment and recreational opportunities, and proximity to the regional freeway system. Based on the trip distribution patterns, peak hour trips were assigned at Study Area intersections. Please refer to the Project TIA (Draft EIR Appendix C, Section 5.2) for additional details regarding the trip distribution and trip assignment processes.

4.2.4.3 Traffic Growth

Near-Term (2014–2020) Traffic Growth

Ambient Traffic Growth

In consultation with the Lead Agency, a two percent annual increase in traffic has been assumed to reflect traffic generated by generalized ambient growth within the region. For the period 2014–2017 (2017 representing the opening year for the initial increment of Project development), total ambient traffic growth is approximated at six percent; for the period 2014–2020, (2020 representing the Project buildout year), total ambient traffic growth is approximated at 12 percent.

Traffic Contributions from Related Projects

Near-term (2014–2020) ambient background traffic growth summarized above was then added to daily and peak hour traffic volumes that would be generated by development of cumulative or "related" projects that have been approved but not yet constructed, and/or for which development applications have been filed and are under consideration by governing agencies. A total of 68 related projects have been identified and are listed at Table 4.2-8. Although 68 related projects have been identified, only 11 of these (bold/shaded text at Table 4.2-8) would have explicit assignments to the TIA Study Area intersections, and traffic generated by these related projects has, as conservative measure, been added to the assumed two percent near-term ambient traffic growth rate noted above. In this respect, the TIA potentially double-counts traffic contributions from these 11 related projects as they may be already reflected in near-term ambient traffic growth estimates. The TIA further assumes that the two percent annual traffic growth rate would encompass any potential additional traffic generated by the remaining 57 related projects.

Based on the preceding, the growth in traffic and total traffic volumes reflected in the Year 2017 and Year 2020 analyses presented herein would tend to overstate, as opposed to understate, the significance of potential cumulative traffic impacts affecting the Study Area circulation system.

Table 4.2-8
Related Projects

Project Name	Location/Address	Description
The Picerne Group	**Haven Avenue at 4th Street**	**298 DU Apartments**
Warmington Residential	**2041 E. 4th Street**	**57 DU Single-Family Residential**
Parkside	**Inland Empire Boulevard at Archibald Avenue**	**152 DU Condominiums** **100 DU Single-Family Residential**
Guasti	**Guasti Road at Archibald Avenue**	**197.820 TSF Shopping Center** **114.654 TSF Office Building**
Family Practice Medical Office	1435 South Grove Avenue, Unit 8	1.19 Acres Medical Office Building
Ambulance Service	2324 South Vineyard Avenue	Suite within building on 4.69 Acres
Industrial	NE Corner of Philadelphia Street and Wineville Avenue	910.119 TSF Industrial Building
Biane Business Park	**8th Street at Hermosa Avenue**	**122.304 TSF Industrial Warehouse**
Consolidated Consulting	**6th Street at Haven Avenue**	**126 Room Hotel** **3.0 TSF Office**
DDCT 8th & Vineyard LLC	**Hellman Avenue at 8th Street**	**904 TSF Industrial**
Rancho Tech	**9th Street at Archibald Avenue**	**16.616 TSF addition to Industrial**
Phelan Dev. Company	**9212 Hermosa Avenue**	**100 TSF Industrial**
Scheu Management Corp.	**Archibald Avenue at 7th Street**	**173.340 TSF Industrial**
Goodman Rancho SPE, LLC	SW Corner of Arrow Route and Etiwanda Avenue	555.664 TSF Industrial Warehouse 1,033.565 TSF Industrial Warehouse
Walmart Stores, Inc.	NE Corner of Foothill Boulevard and Mayten Avenue	189.411 TSF Retail Building 62.120 TSF Commercial/Office
Eastvale Commerce Center	NW Corner of Bellegrave Avenue and the I-15 Freeway	249.0 TSF Shopping Center, 130 Room Hotel, 3,100.0 TSF High Cube Warehouse, and 610.0 TSF Business Park
Arco Gas Station	SE Corner of Milliken Avenue and Riverside Drive	18 VFP Gas Station with Store and Car Wash, 2.8 TSF Fast-Food without Drive-Thru, 2.1 TSF Fast-Food with Drive-Thru
The Marketplace at Enclave	SW Corner of Archibald Avenue and Schleisman Road	1.6 TSF Coffee/Donut Shop 82.671 TSF Shopping Center

Table 4.2-8
Related Projects

Project Name	Location/Address	Description
The Ranch at Eastvale	SE Corner of Hellman Avenue and Bellegrave Avenue	267.2 TSF Shopping Center, 801.5 TSF General Light Industrial, 1,121 TSF Business Park
The Commons	NE Corner of El Prado Road and Kimball Avenue	Shopping Center
Industrial Building	SW Corner of Archibald Avenue and Bellegrave Avenue	738.43 TSF General Light Industrial
The Golden Triangle	SW Corner of Magnolia Avenue and Kimball Avenue	106.7 TSF Shopping Center
Heritage Professional Center	SW Corner of Magnolia Avenue and Kimball Avenue	55 TSF Hospital, 86.952 TSF Medical Office Building, 120 Room Hotel, 38.848 TSF Shopping Center, and 7.2 TSF Restaurant
Higgins Business Park	SW Corner of Magnolia Avenue and Kimball Avenue	338.682 TSF Business Park, 40 TSF Business Park, 10 TSF Specialty Retail, 2 TSF Bank, 3 TSF Fast-Food with Drive-Thru, and 10 VHP Gas Station with Store and Car Wash
Retail/Residential	SE Corner of Hellman Avenue and Chandler Street	122 DU Single-Family Residential 124.36 TSF Shopping Center
Countryside	SW Corner of Archibald Avenue and Riverside Drive	819 DU Single-Family Residential
Edenglen	SW Corner of Hamner Avenue and Riverside Drive	310 DU Single-Family Residential, 274 DU Multi-Family Attached, 217.52 TSF Shopping Center, 550 TSF Business Park
Esperanza	NW Corner of Hamner Avenue and Bellegrave Avenue	914 DU Single-Family Residential 496 DU Single-Family Residential
Grand Park	SE Corner of Archibald Avenue and Edison Avenue	484 DU Single-Family Residential 843 DU Multi-Family Attached
Parkside	SW Corner of Archibald Avenue and Edison Avenue	437 DU Single-Family Residential, 1,510 DU Multi-Family Attached, and 115 TSF Shopping Center
Rich Haven	NE Corner of Haven Avenue and Edison Avenue	2,372 DU Single-Family Residential, 1,524 DU Multi-Family Attached, 115 TSF Shopping Center

Table 4.2-8
Related Projects

Project Name	Location/Address	Description
Retail/Residential	NE Corner of Archibald Avenue and Bellegrave Avenue	2,865 DU Single-Family Residential, 87 TSF Shopping Center
The Avenue	NE Corner of Archibald Avenue and Edison Avenue	2,020 DU Single-Family Residential, 586 DU Multi-Family Attached, 250 TSF Shopping Center
West Haven	SW Corner of Haven Avenue and Riverside Drive	753 DU Single-Family Residential, 87 TSF Shopping Center
Tuscana Village	NW Corner of Hamner Avenue and Riverside Drive	176 DU Single-Family Residential, and 26 TSF Shopping Center
Majestic Airport Center	NW Corner of Kimball Avenue and Euclid Avenue	2,890.4 TSF High-Cube Warehouse, 180 TSF Warehousing, 25 TSF Specialty retail, 13 TSF Pharmacy/Drugstore, 8.6 TSF Fast-Food with Drive-Thru
Falloncrest at the Preserve	NW Corner of W Preserve Loop and Pine Avenue	204 DU Single-Family Residential, 786 DU Condo/Townhome, 412 DU Apartments, 77.597 TSF Shopping Center, 77.597 General Office
Mill Creek	SW Corner of Hellman Avenue and Chandler Street	1,074 DU Single-Family Residential
Chino East Industrial	SE Corner of Grove Avenue and Merrill Avenue	1,593.5 TSF General Light Industrial
Eastvale Shopping Center	SE Corner of Archibald Avenue and Limonite Avenue	192 TSF Free-Standing Discount Superstore, 9.2 TSF Specialty Retail, 7.2 TSF Fast-Food without Drive-Thru, 2 TSF Coffee/Donut Shop, 3.5 TSF Fast-Food with Drive-Thru, and 16 VFP Gas Station with Store and Car Wash
Grainger Site	NE Corner of Hamner Avenue and Cantu-Galleano Ranch Road	546 TSF Industrial
Commercial Retail Center	16697 Arrow Boulevard	1.8 Acres Commercial Retail Buildings
Truck Repair Shop	11123 Banana Avenue	4 Acres Truck Repair Shop
Fontana Sports Park	S/S Sierra Lakes, E/O Knox	27 Acre Sports Park

Table 4.2-8
Related Projects

Project Name	Location/Address	Description
Department of Motor Vehicles	8026 Hemlock Avenue	24.689 TSF DMV Buildings
Farmer Boys	14505 Foothill Boulevard	21.8 TSF Farmer Boys Restaurant
Industrial	NEC Summit/Sierra	741.325 TSF Industrial Building
Hemlock Business Park	10990 Hemlock Avenue	344.891 TSF Industrial Building
Industrial	15750 Jurupa Avenue	967.2 TSF Industrial Building
Industrial	11092 Oleander Avenue	1,800.0 TSF Industrial Warehousing
Industrial	16005 Santa Ana Avenue	639.473 TSF Industrial Building
Commercial/Industrial	N/S Jurupa Avenue between Catawba/Citrus	212.2 TSF Commercial/Industrial
Cardenas Market	16721 Valley Boulevard	30.0 TSF Addition to Existing Market
Industry Avenue Distribution Center	11751 Industry Avenue	245.24 TSF Industrial
Warehouse	NEC of Marlay Avenue and Pacific Avenue	326.945 TSF Warehouse
Sultana Distribution Center	8375 Sultana Avenue	700.712 Distribution Center
Hospital	**999 San Bernardino Rd**	**104 Beds Hospital Addition**
Upland Crossing/Harvest	South of Foothill Boulevard, East of Monte Vista Ave	193 Units Single-Family Residential
Citrus Grove	North of 8th Street and East of Sultana	209 Units Residential
The Enclave	SWC of Schleisman Road and Archibald Avenue	490 Units Single-Family Residential
Copper Sky	SEC of Schleisman Road and Scholar Way	224 Units Single-Family Residential
The Trails	NEC of Archibald Avenue and 65th Street	224 Units Single-Family Residential
San Antonio Medical Center	S of Limonite Avenue, W of I-15, E of Hamner Avenue	69.562 TSF Commercial Retail
Eastvale Business Park	SWC of Limonite Avenue and Archibald Avenue	33.6 TSF Business Park 10.6 TSF Commercial Retail 694.77 TSF Light Industrial

Table 4.2-8
Related Projects

Project Name	Location/Address	Description
The Ranch	W of end of 65th Street, E of Hellman Avenue	1,546.38 TSF Business Park 196.02 TSF Commercial Retail 2,334.816 TSF Light Industrial
Goodman Commerce Center	NEC of Bellegrave Avenue and Hammer Avenue	1,507.176 TSF Business Park 1,102.068 TSF Commercial Retail 6,333.624 TSF Light Industrial
The Paseos at Montclair North	NEC of Monte Vista Avenue and Moreno Street	385 DU
Brooks Street Industrial Building	4545 Brooks Street	130.0 TSF Industrial

Long-range (Year 2035) Traffic Growth

Long-range (Year 2035) peak hour traffic forecasts were based on modeled traffic projections prepared by SANBAG utilizing the San Bernardino Traffic Analysis Model (SBTAM) Year 2035 Model. Please refer to the Project TIA (TIA Section 6.4, "Year 2035 Traffic Conditions") for further detailed discussion of the SBTAM Year 2035 Model, its protocols, and its application within the TIA Long-term (Year 2035) analytic scenarios.

4.2.5 PROJECT IMPROVEMENTS

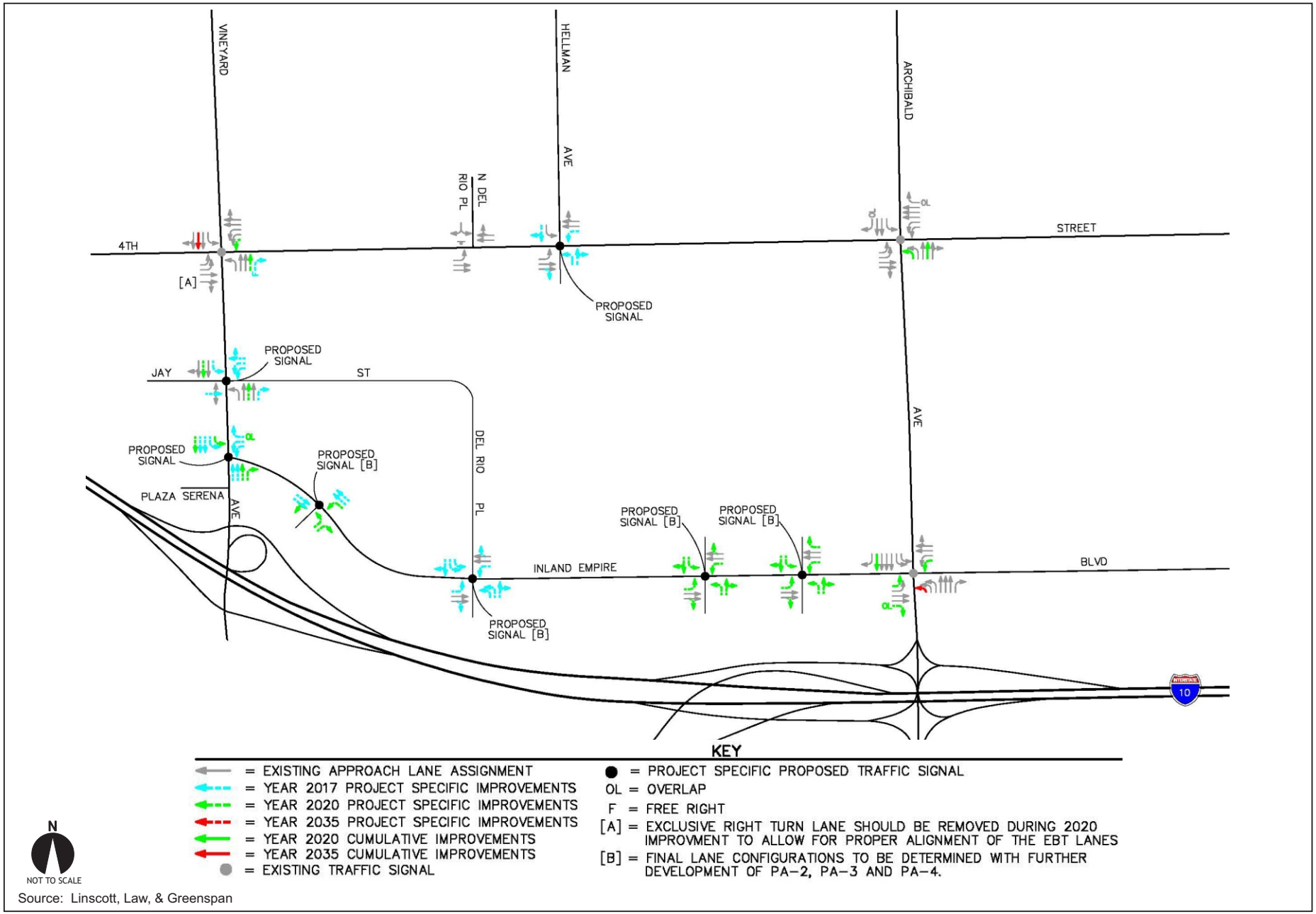
As discussed at EIR Section 3.0, "Project Description," Project implementation would involve the construction of a number of Project-specific roadway and intersection improvements. Under Existing-with-Project conditions analyzed in this Section, these improvements would act to avoid or preclude potentially significant impacts to the circulation system in the immediate vicinity of the Project site. These same improvements would, under Near-term Conditions (2017–2020) and Long-term Conditions (2035), act to avoid or incrementally reduce potentially significant cumulative impacts affecting the circulation system in the immediate vicinity of the Project site.

4.2.5.1 Vehicular Access and Circulation

The Project site and vicinity are served by a well-developed local roadway system consisting of Vineyard Avenue to the west, Archibald Avenue to the east, and Fourth Street to the north. Vehicular access and circulation improvements that would be required of, and would be constructed by, the Project are described below and are schematically presented at Figure 4.2-4. Final design and implementation of all improvements would be subject to review and approval by the City.

- **Vineyard Avenue, adjacent to the Project site to 4th Street:** Construct Vineyard Avenue bordering the Project site in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include three travel lanes in each direction separated by a landscaped median. The implementation of improvements along Vineyard Avenue and 4th Street would require modifications to the existing traffic signal at the intersection of Vineyard Avenue and 4th Street as well as new signals at the realigned Inland Empire Boulevard and Jay Street, which would be interconnected to provide coordinated timing.

- **Inland Empire Boulevard:** Within the Project site, realign Inland Empire Boulevard to the north as required by the City of Ontario to intersect with Vineyard Avenue. Design and construct Inland Empire Boulevard, between Vineyard Avenue and Archibald Avenue in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include two travel lanes in each direction separated by a landscaped median with on-street bike lanes. With the realignment of Inland Empire Boulevard, convert Vineyard Avenue at Plaza Serena from signalized access to an unsignalized right-turn in/out only access and install a new traffic signal at the intersection of Vineyard Avenue and Inland Empire Boulevard. The improvements associated with Inland Empire Boulevard include constructing the project frontage improvements at the intersection of Inland Empire Boulevard and Archibald Avenue.



Source: Linscott, Law, & Greenspan

Figure 4.2-4
Project Specific Improvements

- **4th Street, adjacent to the Project site to Vineyard Avenue:** Construct 4th Street bordering the Project site in accordance with the conditions of approval identified in the Specific Plan Amendment and Tract Map to be determined by the City, to include two travel lanes in each direction separated by a landscaped median. The improvements associated with 4th Street also include the installation of a traffic signal at the intersection of 4th Street and Hellman Avenue.

- **Jay Street:** Extend Jay Street easterly from Vineyard Avenue to connect with the future alignment of Del Rio Place. Design and construct Jay Street to the City of Ontario "Local Industrial" street standards. The improvements associated with Jay Street also include the installation of a traffic signal at the intersection of Vineyard Avenue and Jay Street with necessary widening at the intersection with Vineyard Avenue based on lane configurations recommended in the Project TIA.

- **Del Rio Place:** Extend Del Rio Place southerly from future Jay Street and intersect with Inland Empire Boulevard. Design and construct Del Rio Place to the City of Ontario "Local Industrial" street standards. The improvements associated with Del Rio Place also include the installation of a traffic signal at the intersection of Inland Empire Boulevard and Del Rio Place with necessary widening at the intersection with Inland Empire Boulevard based on lane configurations recommended in the Project TIA.

- **Other improvements the Lead Agency deems necessary to fulfill Map and/or Specific Plan Conditions of Approval.**

4.2.5.2 Non-Vehicular Access and Circulation

A network of sidewalks, walkways, and bikeways would be provided within the Specific Plan area. The non-vehicular circulation plan promotes pedestrian movement, bicycle use, encourages the use of available mass transit opportunities, and reduces reliance on personal vehicles.

Sidewalks and Pedestrian Paths

Sidewalks would be constructed along all internal roadways consistent with City roadway cross-sections. Additionally, other pedestrian paths would be constructed within the Specific Plan area consistent with concepts articulated at within the Meredith SPA at Section 3 B., "Non-Vehicular Circulation Plan." In areas with anticipated high volumes of vehicular traffic, pedestrian and vehicular traffic would be separated where it is feasible to provide such separation.

Bikeways/Bike Paths

Inland Empire Boulevard is a designated Class II Bikeway Corridor, and the Cucamonga Creek Multipurpose Trail is located between Planning Areas 1 and 4. Connections between the Inland Empire Boulevard Class II Bikeway Corridor, the City of Rancho Cucamonga 4th Street Class II Bike Lane, and the City's planned Cucamonga Creek Multipurpose Trail would be provided within the Specific Plan Area.

Transit Opportunities

As previously mentioned, the Gold Line Foothill Construction Authority is studying the extension of a light rail transit (LRT) line to the Los Angeles/Ontario International Airport (ONT), which is tentatively envisioned to parallel the Cucamonga Creek Channel immediately west of Planning Areas 3 and 4. The Meredith SPA acknowledges the potential off-site LRT alignment and anticipates its use by employees, visitors, and residents of the Specific Plan. Potential LRT alignment along Deer Creek Channel, as evaluated within the *Ontario Airport Rail Access Study Final Report* (SANBAG) November 2014**,** is also considered a feasible option.

4.2.6 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, traffic and circulation impacts would be considered potentially significant if the Project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Result in inadequate emergency access; or

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.2.7 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.2.7.1 Introduction

The following discussions focus on topical issues where it has been determined that the Project may result in potentially significant traffic and circulation impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study. Of the CEQA threshold considerations identified above at Section 4.2.6, and as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topic is determined to be less-than-significant, and is not further substantively discussed here:

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

All other CEQA topics concerning the Project's potential traffic/transportation impacts are discussed below. Please also refer to Initial Study Checklist Item XVI., "Transportation/Traffic."

4.2.7.2 Impact Considerations

Study Area traffic conditions without and with the Project are summarized within the following discussions, followed by identification of the Project's potential impacts to Study Area transportation/circulation systems and facilities.

Under the CEQA topic: "Potential to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system . . ." potential impacts are identified for Existing, 2017, 2020, and 2035 Conditions. Sub-topics evaluated under each of these scenarios include:

- Intersection LOS Analysis;
- Mainline Freeway Segment Analysis;
- Freeway Merge/Diverge Analysis; and
- Freeway Weaving Analysis.

Under the CEQA topic: "Conflict with an applicable congestion management program [CMP] but not limited to a level of service standards and travel demand measures. . ." CMP facilities within the Study Area are identified, and potentially significant Project impacts affecting these facilities are summarized.

Under the CEQA topics: "Substantially increase hazards to a design feature . . ." and "Result in inadequate emergency access . . ." the analysis presented summarizes Project design and operational concepts that act to avoid hazardous conditions and ensure adequate emergency access.

Under the CEQA topic: "Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks," the analysis summarizes and substantiates Project consistency with applicable provisions of the LA/Ontario International Airport Land Use Compatibility Plan.

4.2.7.3 Mitigation Considerations

Mitigation or avoidance of potentially significant transportation/circulation system impacts attributable to the Project would be achieved through construction of Project-specific Improvements, Project construction of required traffic mitigation improvements, and Project fee payments that would be assigned to construction of required traffic mitigation improvements.

Project-Specific Improvements

The Project would construct improvements necessary to ensure safe and efficient access and operating conditions along roadways and at intersections adjacent to or within the Project site. These improvements are incorporated as components of the Project as reflected in the EIR Project Description (please refer to EIR Section 3.4.4, "Access and Circulation"), and as such are not considered mitigation.

For ease of reference, traffic/circulation improvements that would be constructed by the Project are restated here:

- **Vineyard Avenue:** Construct Vineyard Avenue bordering the Project site in accordance with City Conditions of Approval, to include three travel lanes in each direction separated by a landscaped median. Any required modifications to the existing traffic signal at the intersection of Vineyard Avenue and 4th Street would also be implemented.

- **Inland Empire Boulevard:** Within the Project site, realign Inland Empire Boulevard to the north as required by the City of Ontario, to connect with Vineyard Avenue. Design and construct Inland Empire Boulevard, between Vineyard Avenue and Archibald Avenue in accordance with City Conditions of Approval, to include two travel lanes in each direction separated by a landscaped median with on-street bike lanes. With the realignment of Inland Empire Boulevard, convert Vineyard Avenue at Plaza Serena from signalized access to an unsignalized right-turn in/out only access and install a new traffic signal at the new intersection of Vineyard Avenue and Inland Empire Boulevard. The improvements associated with Inland Empire Boulevard would include construction of the Project frontage improvements at the intersection of Inland Empire Boulevard and Archibald Avenue.

- **4th Street:** Construct 4th Street bordering the Project site in accordance with City Conditions of Approval, to include two travel lanes in each direction separated by a landscaped median. The improvements associated with 4th Street would also include the installation of a traffic signal at the intersection of 4th Street and Hellman Avenue.

- **Jay Street:** Extend Jay Street easterly from Vineyard Avenue and connect with the future alignment of Del Rio Place. Design and construct Jay Street to the City of Ontario "Local Industrial" street standards. The improvements associated

with Jay Street also include the installation of a traffic signal at the intersection of Vineyard Avenue and Jay Street.

- **Del Rio Place:** Extend Del Rio Place southerly from future Jay Street to intersect with Inland Empire Boulevard. Design and construct Del Rio Place to the City of Ontario "Local Industrial" street standards. The improvements associated with Del Rio Place would also include the installation of a traffic signal at the intersection of Inland Empire Boulevard and Del Rio Place.

- **Archibald Avenue at Inland Empire Boulevard:** Improve the intersection of Archibald Avenue at Inland Empire Boulevard to include a 2nd EB left-turn land and a 2nd WB left-turn lane; or as otherwise deemed necessary by the City.

- **Other improvements the Lead Agency deems necessary to fulfill Map and/or Specific Plan Conditions of Approval.**

Project Fee Assessments

The Project would also pay all requisite fees directed to the completion of other necessary Study Area traffic improvements at locations where Project traffic would contribute to existing or projected circulation system deficiencies. Required Study Area Improvements and associated costs are identified for each of the analysis timeframes (2017, 2020, 2035); fees required of the Project would, however, be assessed and collected in total prior to Project implementation or as otherwise stipulated by the Lead Agency.

Improvements under each of the analytic scenarios (2017, 2020, 2035) tier off of the preceding scenario(s). That is, 2017 improvements reflect improvements required under Existing conditions, plus any additional improvements required to address increased traffic demands under 2017 conditions; 2020 improvements reflect improvements required under Existing and 2017 Conditions, plus any additional improvements required to address increased traffic demands under 2020 conditions; 2035 improvements reflect improvements required under Existing, 2017 Conditions, and

2020 conditions, plus any additional improvements required to address increased traffic demands under 2035 conditions. This tiered structure provides the Lead Agency with incremental as well as aggregated estimates of required improvements, and establishes approximate timeframe for their implementation. The final configuration and timing for implementation of improvements identified herein is, however, subject to prerogatives and priorities of the City and other affected jurisdictions.

Traffic impact fee assessment mechanisms and fee programs applicable to the Project and under which fees would be paid directly to the City include the City of Ontario Development Impact Fee (DIF) Program, and Project "Fair Share" fees. The Project would also generate Measure "I" sales tax revenues which would be assigned to San Bernardino County, such tax revenues to be used solely for transportation improvements within the County.

Project compliance with the City of Ontario DIF Program and payment of Fair Share Fees would fulfill mitigation requirements for Project contributions to potentially significant traffic/transportation impacts at facilities under the sole jurisdiction of the City of Ontario.[4] However, at extra-jurisdictional or shared jurisdictional locations determined to be subject to potentially significant Project-related traffic/transportation impacts, Project compliance with the City DIF Program and payment of Fair Share Fees would not ensure timely completion of required improvements. Further, at certain Study Area locations, implementation of required improvements would require additional right-of-way, acquisition of which may not feasible. Within these discussions, potentially significant Project-related traffic/transportation impacts at extra-jurisdictional or shared jurisdictional locations; or at locations where additional right-of-way be required, are considered to remain significant and unavoidable pending completion of the required improvements.

[4] Please refer to the Project TIA, Tables 11-1 through 11-6 for summaries of estimated costs of improvements, and DIF/fair share fee assignments.

Fair Share Fees

If an impacted facility requires improvements other than, or in addition to, those already identified within a regional or local fee program, the Project would contribute a "fair-share" percentage toward the costs of the recommended improvements. Fair share fees assessed of the Project in this manner would be collected by the City and deposited to a dedicated Capital Improvement Project account, created for the express purpose of constructing the required improvements. Please refer to TIA Tables 11-4 through 11-7 for estimated Project Fair Share Contributions.

City of Ontario Development Impact Fee (DIF) Program

After City traffic impact fees are collected, they are placed in a separate interest account, per the requirements of the Government Code sections 66000 et seq. The timing to use the transportation funds is determined by the fee program. The timing is established through the 5-year Capital Improvement Program. This program is also overseen by the City's Public Works Department. Periodic traffic counts, review of traffic accidents, and review of traffic trends throughout the City are also performed by City staff. The City uses this data to determine the timing for the improvements listed on the list of facilities. Improvements are identified within each of the 5 years and reviewed periodically to determine if improvements should be shifted into another year based on the traffic counts, accidents, and trends. The City uses this data to determine the timing for the improvements listed on the facilities list and to ensure that needed improvements are constructed prior to that time at which the LOS is forecast to fall below the performance levels established by the City. In this way, improvements are constructed before the LOS falls below the City's performance standards to ensure that significant impacts are avoided. The City's capital improvement program establishes a timeframe to fund the improvement as well as design improvements and for the City to hire a contractor to build the improvements.

The City has an established, proven track record with respect to implementing its transportation fee programs. Under these programs, as a result of its continual monitoring of the local circulation system, the City ensures that requisite facilities are

constructed prior to when the LOS would otherwise fall below the City's established performance criteria.

The City of Ontario has adopted and implemented a Development Impact Fee (DIF) program. Pursuant to the City DIF program, fees are assessed of new development projects for the purpose of providing facilities necessary to accommodate and support Buildout of the City anticipated under The Ontario Plan. After City traffic impact fees are collected, they are placed in a separate interest account, per the requirements of the Government Code sections 66000 et seq.

The timing and use of City DIF program funds is established through the City's Capital Improvement Program (CIP), overseen and periodically updated by the City Engineering Department. With specific regard to use of DIF monies for traffic/transportation system improvements, the City Engineering Department conducts periodic traffic counts, review of traffic accidents, and a review of traffic trends in order to scope and prioritize CIP traffic improvements.

The City has an established, proven track record with respect to timely implementation of DIF-funded improvements. As a result, requisite facilities have been constructed when and where necessary, thereby maintaining or achieving City's LOS performance criteria.

Certain of the traffic/transportation improvements that would be funded through the City DIF program are coincident with Study Area locations/facilities recommended for improvements in the Project TIA, and City DIF is tentatively identified as a funding source for Project-related improvements at these locations (please refer to TIA Tables 11-4, 11-5, 11-6). If the DIF-funded facilities tentatively listed in the TIA are ultimately excluded from the DIF program, the Project Applicant would be responsible for, and would be required to pay, fair share fees for improvement of affected facilities.

The City's current (as of May 2013) DIF Schedule is presented at Table 4.2-9; and estimated Project DIF payments (by Planning Area) are summarized at Table 4.2-10.

Table 4.2-9
City of Ontario
Development Impact Fee (DIF) Schedule

Development Category	Total DIF Per Unit/Sq. Ft.	Portion of Total DIF assigned to Traffic/Transportation Improvements
Residential		
▪ Detached Dwellings	$22,945 per unit	$2,413 per unit
▪ Attached Dwellings	$16,353 per unit	$1,611 per unit
▪ High Density Dwellings	$11,952 per unit	$997 per unit
▪ Mobile Home Dwellings	$15,875 per unit	$1,256 per unit
▪ Commercial Lodging Units	$3,929 per unit	$1,273 per unit
Retail/Commercial/Industrial		
▪ Retail/Services Uses	$7.185 per SF	$4.876 per SF
▪ Office Uses	$5.700 per SF	$2.787 per SF
▪ Business Park Uses	$5.960 per SF	$2.899 per SF
▪ Industrial Uses	$3.188 per SF	$1.494 per SF
▪ Institutional Uses	$5.905 per SF	$3.184 per SF

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis (Linscott Law & Greenspan) January 22, 2015.*

Table 4.2-10
Estimated Project DIF Payments by Planning Area

Planning Area / Development Category	Area/Size (TSF / Rms. / DUs)	Total DIF	Portion of Total DIF assigned to Traffic/Transportation Improvements
Planning Area 1			
▪ Industrial	3007 TSF	$9,586,316.00	$4,492,458.00
Planning Area 2			
▪ Commercial Lodging Units	200 Rooms	$785,800.00	$254,600.00
▪ Office Uses	180 TSF	$1,026,000.00	$501,660.00
▪ Retail/Services Uses	355 TSF	$2,550,675.00	$1,730,980.00
Total		$4,362,475.00	$2,487,240.00
Planning Area 3			
▪ Commercial Lodging Units	400 Rooms	$1,571,600.00	$509,200.00

Table 4.2-10
Estimated Project DIF Payments by Planning Area

▪ Office Uses	100 TSF	$570,000.00	$278,700.00
▪ Retail/Services Uses	150 TSF	$1,077,750.00	$731,400.00
Total		$3,219,350.00	$1,519,300.00
Planning Area 4			
▪ High Density Dwellings	800 DUs	$9,561,600.00	$797,600.00
PROJECT TOTAL		**$26,729,741.00**	**$9,296,598.00**

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.

San Bernardino County Measure "I" Sales Tax

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure "I", a one-half of one percent sales tax on retail transactions to be used for funding of transportation projects within the County. More specifically, as stipulated under Measure I Section VI., *Purposes*:

> Revenues from the tax shall be used for transportation purposes only and may include, but are not limited to, the administration of this division, including legal actions related thereto and costs of the initial preparation and election, the construction, maintenance, improvements, and operation of local streets, roads, and highways, state highways and freeways, public transit systems including rail, and related purposes. These purposes include expenditures for planning, environmental reviews, engineering and design costs, and related right-of-way acquisition. Expenditures also include, but are not limited to, debt service on bonds and expenses in connection with issuance of bonds.

San Bernardino Associated Governments (SANBAG) administers Measure I revenue and is responsible for determining which projects receive Measure I funding, and ensuring that transportation projects are implemented. Measure I-funded transportation improvements act to alleviate local and regional traffic/transportation impacts.

Freeway Improvements Plans and Programs (excerpted from Project TIA):

I-10 Corridor Project

The provided link, http://www.i10corridorproject.org/, has information on the project overview, alternatives and cost/funding for the I-10 Corridor Project. On December 4, 2013, the SANBAG Board voted to complete the Project Approval/Environmental Document (PA/ED) stage for the I-10 HOV and Express Lanes alternatives, and to initiate the Request for Proposal (RFP) process to initiate PA/ED for the I-15 Corridor Project.

The proposed I-10 Corridor Project consists of adding lane(s) and providing improvements along all or a portion of the existing 35-mile stretch of I-10 from approximately 2 miles west of the Los Angeles/San Bernardino county line in the City of Pomona to Ford Street in the City of Redlands. This project is a major element of the San Bernardino Associated Governments' (SANBAG) 10-year delivery plan, with an estimated construction cost of $500 million to more than $1 billion, depending on the alternative chosen. As a major regional east-west freeway corridor, I-10 is heavily used by travelers between Los Angeles and San Bernardino counties, and it is also a major truck route between southern California and the rest of the nation. Currently, I-10 is at capacity for many hours of the day, and that condition is expected to worsen significantly during the coming years if more capacity is not added.

The project study segments from Grand Avenue to Citrus Avenue along the I-10 freeway is one of the most congested in San Bernardino County, which is heavily used for commuting, freight movement and vacationing travelers. Heavy congestion is experienced by motorists during the peak hours on both directions along the I-10 (greater delays on Fridays and holiday weekends) on a regular basis. Up to approximately 263,000 vehicles, including 27,000 trucks, travel daily on this stretch of freeway and traffic congestion is anticipated to worsen with the projected daily

traffic increase of up to 340,000 vehicles by 2040. With the increase in future traffic, travel times will subsequently increase, hindering freight movement and commuter traffic through the corridor if no improvements are made to the corridor.

I-15 Corridor Project and Comprehensive Corridor Study

The provided link http://www.sanbag.ca.gov/planning2/I-15_study/I-15_03-06-.pdf includes detailed information on the proposed corridor project as assessed on the I-15 Comprehensive Corridor Study – Final Report. In April 2004, SCAG adopted Destination 2030, the 2004 RTP for the Southern California region. Destination 2030 delineates significant transportation infrastructure investments planned to occur within the Southern California region through the year 2030.

In addition, the provided link, http://www.i10corridorproject.org/i-15-corridor-project, has preliminary information on the project overview and alternatives, and fact sheet for the I-15 Corridor Project, which is separate from the I-10 Corridor Project. As a major regional north-south freeway corridor, I-15 is heavily used, similar to the I-10, by commuters and recreational travelers, and is also a truck route between southern California and the rest of the nation. Like the I-10, the I-15 is at capacity for many hours of the day, and is expected to worsen significantly in the future without additional capacity.

The I-15 Corridor Project will consider one alternative to the No Build option. Under the Build Alternative, Express Lanes would be added on the 35-mile stretch of I-15 from Cantu Galleano Ranch Road to US 395. The Strategic Plan and 10-Year Delivery Plan financial analysis concluded that traditional funds will not be available to construct additional lanes on the I-15 without an additional source of funding such as toll revenue. As such, High Occupancy Vehicle (HOV) lanes are not being considered as an alternative for the I-15 corridor (Project TIA, pp. 172-173).

4.2.8 IMPACT STATEMENTS

Potential Impact: *The Project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.*

Impact Analysis:

Existing, 2017, 2020, and 2035 Traffic Conditions

OVERVIEW

The following discussions summarize traffic conditions within the Study Area reflecting implementation of the Project under Existing conditions, as well as the anticipated 2017, 2020, and 2035 scenarios. For each of the considered scenarios, potentially significant traffic impacts (deficient conditions) are identified. Less-than-significant impacts are noted, and mitigation measures are proposed for those impacts determined to be potentially significant impacts. For all analytic scenarios, intersection improvements cited in the mitigation measures are summarized at Table 4.2-21 at the conclusion of these discussions. Following Table 4.2-21, improvements are schematically indicated at Figures 4.2-5 through 4.2-12.

EXISTING CONDITIONS WITHOUT-PROJECT AND WITH-PROJECT TRAFFIC ANALYSIS

The Existing Conditions Without-Project and With-Project (plus Project) Traffic Analysis identifies potential traffic/transportation impacts that would occur assuming implementation of the Project under Existing Conditions, and provides an indication of the incremental effects of the Project without the addition of assumed future cumulative traffic growth. In this manner, instances where Project traffic alone would cause or result in new potentially significant impacts can be identified. Related, the Existing-with-Project analysis indicates effects of cumulative traffic growth under the 2017, 2020, and 2035 analysis scenarios, not attributable to the Project. For Existing Conditions,

analyses are provided identifying potential transportation/traffic impacts attributable to Project Interim Development Conditions (development of Planning Area 1 uses and approximately 86,000 square feet of commercial/retail uses in Planning Area 2); and to Project Buildout Conditions reflecting completion and occupancy of all uses proposed.

The Existing-with-Project analysis also identifies currently deficient LOS conditions to which the Project would contribute additional traffic. Improvements that would resolve these pre-existing deficiencies are identified. Project driveways and those facilities to be constructed by the Project providing site access are assumed to be in place (e.g., intersection improvements at Project driveways).

Intersection LOS Analysis–Existing Conditions

Intersections with identified deficiencies under either Existing, Existing-with-Project conditions are presented at Tables 4.2-11 and 4.2-12. Where the Project would result in or cause potentially significant LOS impacts (deficiencies), applicable deficiency criteria are noted. Recommended improvements for each potentially affected intersection are listed subsequently. Project-specific improvements incorporated in the EIR Project Description would be constructed as part of the proposed development, or would be otherwise completed prior to the first Certificate of Occupancy, and are therefore not considered mitigation. At other potentially affected locations, the Project would construct the required improvements, or pay all requisite fees (DIF and/or Fair Share), acting to offset its proportional impacts.

Table 4.2-11
Existing and Existing-with-Project Conditions (Interim Development)
Peak Hour Intersection Deficiencies

Intersections					Existing Traffic Conditions			Existing-with-Project (Interim Development Traffic Conditions			Impact Significance/ Remarks
ID	Location	Jurisdiction	LOS Std.	Peak Hour	Delay	V/C	LOS	Delay	V/C	LOS	
14	I-10 EB Ramps at 4th Street	City of Ontario/ Caltrans	D	AM	19.6	0.652	B	19.7	0.673	B	***Potentially Significant/*** Existing PM Peak Hour Conditions (LOS E) already exceed Minimum Acceptable Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**78.1**	**0.808**	**E**	**83.2**	**0.821**	**F**	
22	Hellman Avenue at 4th Street	City of Ontario	E	AM	42.8	---	E	24.1	0.377	C	*Less-than-Significant/* Hellman Avenue at 4th Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**75.4**	**---**	**F**	25.7	0.483	C	
26	Vineyard Avenue at Jay Street	City of Ontario	E	AM	28.6	---	D	25.8	0.576	C	*Less-than-Significant/* Vineyard Avenue at Jay Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**50.7**	**---**	**F**	29.1	0.730	C	
30	Haven Avenue at Inland Empire Blvd.	City of Ontario	E	AM	52.1	0.537	D	52.1	0.538	D	***Potentially Significant/*** Existing PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**102.8**	**0.742**	**F**	**102.7**	**0.746**	**F**	

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: **Bold, shaded text** indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Table 4.2-12
Existing and Existing-with-Project Conditions (Project Buildout)
Peak Hour Intersection Deficiencies

Intersections					Existing Traffic Conditions			Existing-with-Project (Project Buildout) Traffic Conditions			Impact Significance/ Remarks
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**	
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	19.6	0.652	B	20.0	0.695	B	***Potentially Significant/*** Existing PM Peak Hour Conditions (LOS E) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**78.1**	**0.808**	**E**	**94.2**	**0.852**	**F**	
22.	Hellman Avenue at 4th Street	City of Ontario	E	AM	42.8	---	E	24.5	0.418	C	*Less-than-Significant/* Hellman Avenue at 4th Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**75.4**	**---**	**F**	26.9	0.550	C	
26.	Vineyard Avenue at Jay Street	City of Ontario	E	AM	28.6	---	D	28.3	0.651	C	*Less-than-Significant/* Vineyard Avenue at Jay Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**50.7**	**---**	**F**	41.9	0.831	D	
30.	Haven Avenue at Inland Empire Blvd.	City of Ontario	E	AM	52.1	0.537	D	52.0	0.541	D	***Potentially Significant/*** Existing PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**102.8**	**0.742**	**F**	**102.3**	**0.754**	**F**	

Source: Meredith International Centre Specific Plan Amendment Traffic Impact Analysis (Linscott Law & Greenspan) January 22, 2015.
Notes: Bold, shaded text indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance: Potentially Significant. As indicated at Tables 4.2-11 and 4.2-12, under Existing-with-Project (Interim Development Conditions), and Existing-with-Project (Project Buildout Conditions), additional traffic generated by the Project would result in potentially significant Project-specific impacts at the following Study Area Intersections:

- I-10 EB Ramp at 4th Street (Study Area Intersection 14), and
- Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).

Mitigation Measures:

4.2.1

- *Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of the improvements as summarized at Table 4.2-21 at the intersection of: I-10 EB Ramp at 4th Street (Study Area Intersection 14);*

- *Prior to the issuance of the first Certificate of Occupancy for the Project, the Project Applicant shall construct the improvements as summarized at Table 4.2-21 at the intersection of: Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).*

Improvements identified at the above Mitigation Measure would, when completed, reduce potential impacts at affected intersections to levels that are less-than significant. Tables 4.2-13 and 4.2-14 summarize LOS conditions at potentially affected intersections with and without improvements identified at Mitigation Measure 4.2.1.

Table 4.2-13
Summary of Intersection LOS
Existing-with-Project Conditions (Interim Development)
Without and With Recommended Improvements

Intersections					Without Improvements			With Improvements		
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	19.7	0.673	B	18.5	0.673	B
				PM	**83.2**	**0.821**	**F**	25.9	0.702	C
30.	Haven Avenue at Inland Empire Blvd.	City of Ontario	E	AM	52.1	0.538	D	31.6	0.534	C
				PM	**102.7**	**0.746**	**F**	46.0	0.746	D

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: **Bold, shaded text** indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Table 4.2-14
Summary of Intersection LOS
Existing-with-Project Conditions (Project Buildout)
Without and With Recommended Improvements

Intersections					Without Improvements			With Improvements		
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	20.0	0.695	B	18.6	0.695	B
				PM	**94.2**	**0.852**	**F**	21.8	0.756	C
30.	Haven Avenue at Inland Empire Blvd.	City of Ontario	E	AM	52.0	0.541	D	31.7	0.544	C
				PM	**102.3**	**0.754**	**F**	46.2	0.754	D

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: **Bold, shaded text** indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Notwithstanding the previous considerations, payment of fees pursuant to the above Mitigation Measure 4.2.1 would not ensure timely completion of required improvements at extra-jurisdictional intersections located within the City of Rancho Cucamonga, and/or at intersections under shared Caltrans/City of Ontario jurisdictional control. That is, within areas or at locations that are extra-jurisdictional to the City, or are under shared jurisdictional control, neither the Lead Agency nor the Project Applicant can autonomously construct improvements. Thus, while the physical

improvements identified at extra-jurisdictional or shared-jurisdictional locations may be capable of mitigating potentially significant impacts, these improvements cannot be feasibly implemented or assured by the Project Applicant or the City of Ontario, nor can their timely completion be assured. Moreover, there are not any plans to improve the affected intersection(s) within the Project's estimated opening date, and the City of Ontario does not have an existing agreement with extra-jurisdictional agencies regarding the improvement or timing of improvements at locations along, or beyond the City of Ontario corporate boundaries. Mitigation Measures 4.2.5 through 4.2.9, presented subsequently within this Section, have been incorporated to address the collection of fees for required traffic improvements.

Further, Mitigation Measures requiring additional right(s)-of-way cannot be timely assured because acquisition of required right(s)-of-way may not feasible. Potentially significant Project-related traffic/transportation impacts at locations where additional right-of-way would be required are therefore considered to remain significant and unavoidable pending completion of the required improvements.

In contrast, for intersections under the sole control of the City of Ontario and where sufficient right-of-way exists, improvements required to mitigate potentially significant impacts would be implemented consistent with demonstrated demands and pursuant to priorities established through the City's jurisdictional capital improvements programs. In these regards, the City of Ontario as the Lead Agency is considered authoritative in determining when and how City improvements should be programmed and implemented to ensure near-term and long-term adequacy of the City roadway system.

Level of Significance after Mitigation:

Existing Conditions: Significant and Unavoidable Intersection LOS Impacts

- **I-10 EB Ramps at 4th Street (Study Area Intersection 14).** Project-related impacts at I-10 EB Ramps at 4th Street (Study Area Intersection 14) are addressed through fee payments, directed to the completion of the required improvements. However, as substantiated in the discussions presented above, because of lack of jurisdictional control, and/or right-of-way acquisition requirements, payment of fees does not ensure timely completion of the required improvements. ***Therefore, pending completion of required improvements, Project-related impacts under Existing-with-Project Conditions (Interim Development and Project Buildout) are recognized as significant and unavoidable at I-10 EB Ramps at 4th Street (Study Area Intersection 14).***[5]

Existing Conditions: Less-than-Significant Intersection LOS Impacts

- **Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).** Improvements necessary to mitigate Project-related impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) would be constructed by the Project Applicant prior to the issuance of the first Certificate of Occupancy, thereby reducing potential impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) to levels that are less-than-significant.

<u>Freeway Facilities Analysis–Existing Conditions</u>

Mainline Freeway Segment Analysis

Consistent with the Caltrans *Guide for the Preparation of Traffic Impact Studies dated December 2002,* an analysis of the freeway mainline segments located on either side of

[5] Freeway and freeway interchange operational efficiencies would ultimately be improved through regional freeway improvement plans implemented by Caltrans. Please refer also to related discussions presented at TIA pp. 172-173.

the I-10 Freeway/Vineyard Avenue Interchange and I-10 Freeway/Archibald Avenue Interchange has been prepared. The freeway segments evaluated include mainline segments where the proposed Project is anticipated to contribute 100 two-way peak hour trips to existing and/or future conditions. Within the Study Area, 51 of the 68 freeway segments analyzed were found to operate unacceptably during peak hour periods under existing conditions. All freeway segments are under Caltrans Jurisdiction. Please refer also to TIA Appendix M.

Project Interim Development Conditions

Addition of Project traffic under Existing-with-Project Conditions (Interim Development) would further degrade existing freeway segment deficiencies occurring along 51 of the 68 freeway segments within the Study Area. However, Project traffic would not result in or cause new freeway segment deficiencies. Under Project Interim Development Conditions, Project traffic contributions to the existing 51 deficient Study Area freeway segments would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-2.

Level of Significance: Potentially Cumulatively Significant at the 51 Study Area freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. Mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. Germane to the Project, 1-10 Corridor Project and I-15 Corridor Project and Comprehensive Corridor Study would, when implemented, act to improve regional freeway operations, including freeways serving the Project. However, all freeway facilities within the Study Area are under Caltrans jurisdiction, and there is no mechanism by which the Lead Agency (City of Ontario) or the Project Applicant can autonomously construct, or guarantee the construction of, any improvements to these freeways segments. Traditional funding mechanisms used to improve the freeway mainline include San Bernardino County's

Measure "I" retail sales tax revenue for transportation, state and federal gas tax, and formula distributions from vehicle registration fees. Future employees/patrons of the project contribute indirectly to freeway improvements through these sources. **State Highway improvements are programmed pursuant to the State Transportation Improvement Program (STIP).**

> The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepare the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years). This process, as well as the fund distribution process are outlined in charts available on the Transportation Programming website http://www.dot.ca.gov/hq/transprog[6].

[6] Caltrans Division of Local Assistance. *State Transportation Improvement Program (STIP)*. Caltrans. Web. January 26, 2015. http://www.dot.ca.gov/hq/LocalPrograms/STIP.htm

Level of Significance After Mitigation: ***Under Existing-with-Project Conditions (Interim Development), Project traffic impacts would be considered cumulatively considerable at the 51 Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway segment deficiencies.

Project Buildout Conditions

Addition of Project traffic under Existing-with-Project Conditions (Project Buildout) would further degrade existing freeway segment deficiencies occurring along 51 of the 68 freeway segments within the Study Area. Additionally, under Project Buildout Conditions, Project traffic would create a new deficient condition along Eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21). Under Project Buildout Conditions, Project traffic contributions to the existing 51 deficient Study Area freeway segments would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Additionally, Project traffic contributions to eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21) would be considered potentially significant individually and cumulatively. Please refer also to TIA Table 12-3.

Level of Significance: Potentially Cumulatively Significant at the 51 Study Area freeway segments operating at deficient LOS without the Project. Additionally, Project traffic contributions to eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21) would be considered potentially significant individually and cumulatively.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Existing-with-Project Conditions (Project Buildout), Project traffic impacts would be considered cumulatively considerable at the 51 Study Area freeway segments which currently operate at deficient LOS without the Project. Additionally, Project traffic impacts affecting eastbound 1-10 between Milliken Avenue and I-15 (Study Area freeway segment No. 21) would be considered individually significant and cumulatively considerable.***

Freeway Merge/Diverge Ramp Junction Analysis

The Project TIA Freeway Merge/Diverge Ramp Junction Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix N. Within the Study Area, all freeway ramp junctions analyzed were found to operate unacceptably during peak hour periods under existing conditions. All freeway ramp junctions are under Caltrans Jurisdiction.

Project Interim Development Conditions

Addition of Project traffic under Existing-with-Project Conditions (Interim Development) would further degrade existing deficiencies for all analyzed Study Area freeway ramp junctions. However, Project traffic would not result in or cause new freeway ramp junction deficiencies. Under Project Interim Development Conditions, Project traffic contributions to existing deficient Study Area freeway ramp junctions would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-7.

Level of Significance: Potentially Cumulatively Significant at Study Area freeway ramp junctions operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Existing-with-Project Conditions (Interim Development), Project traffic impacts (merge/diverge) would be considered cumulatively considerable at Study Area freeway ramp junctions operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway ramp junction deficiencies.

Project Buildout Conditions

Addition of Project traffic under Existing-with-Project Conditions (Project Buildout) would further degrade existing deficiencies for all analyzed Study Area freeway ramp junctions. However, Project traffic would not result in or cause new freeway ramp junction deficiencies. Under Project Buildout Conditions, Project traffic contributions to existing deficient Study Area freeway ramp junctions would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-8.

Level of Significance: Potentially Cumulatively Significant at the 10 Study Area freeway ramp junctions operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation*: Under Existing-with-Project Conditions (Project Buildout), Project traffic impacts (merge/diverge) would be considered cumulatively considerable at Study Area freeway ramp junctions which currently operate at deficient LOS without the Project.* Project traffic would not, however, result in any new freeway ramp junction deficiencies.

Freeway Weaving Analysis

The Project TIA Freeway Weaving Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix O. Three Study Area freeway segments were evaluated for potential weaving deficiencies, and all were found to operate unacceptably during peak hour periods under existing conditions. All freeway segments are under Caltrans Jurisdiction. All freeway segments are under Caltrans Jurisdiction.

Project Interim Development Conditions

Addition of Project traffic under Existing-with-Project Conditions (Interim Development) would further degrade existing deficiencies for all freeway segments evaluated in the TIA Freeway Weaving Analysis. However, Project traffic would not result in or cause new freeway weaving deficiencies. Under Project Interim Development Conditions, Project traffic contributions to existing freeway weaving deficiencies would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-12.

Level of Significance: Potentially Cumulatively Significant at the three evaluated freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Existing-with-Project Conditions (Interim Development), Project traffic impacts (weaving) would be considered cumulatively considerable at the three Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway weaving deficiencies.

Project Buildout Conditions

Addition of Project traffic under Existing-with-Project Conditions (Project Buildout) would further degrade existing deficiencies occurring for all freeway segments evaluated in the TIA Freeway Weaving Analysis. However, Project traffic would not result in or cause new freeway weaving deficiencies. Under Project Buildout Conditions, Project traffic contributions to existing freeway weaving deficiencies would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-13.

Level of Significance: Potentially Cumulatively Significant at the three evaluated freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation*: Under Existing-with-Project Conditions (Project Buildout), Project traffic impacts (weaving) would be considered cumulatively considerable at the three Study Area freeway segments operating at deficient LOS without the Project.* Project traffic would not, however, result in new freeway weaving deficiencies.

YEAR 2017 WITHOUT-PROJECT AND WITH-PROJECT (PLUS PROJECT) TRAFFIC ANALYSIS

Year 2017 traffic volumes and levels of service reflect conditions which could be expected based on completion and occupancy of the Project uses under Year 2017 Conditions. The Year 2017 Without Project Condition reflects existing (2014) traffic volumes, plus additional background traffic that would be generated by generalized ambient growth within the region, as well as traffic generated by known or probable related projects (please refer also to the discussion of "Future Traffic Growth") presented in this Section. For Year 2017 Conditions, analyses are provided identifying potential transportation/traffic impacts attributable to Project Interim Development Conditions (development of Planning Area 1 uses and approximately 86,000 square feet of commercial/retail uses in Planning Area 2).

Intersection LOS Analysis–Year 2017 Conditions

Intersections with identified deficiencies under either Year 2017 Conditions Without Project or Year 2017-with-Project Conditions are presented in Table 4.2-15. These are considered potentially significant cumulative impacts resulting from existing traffic, ambient traffic growth within the region, traffic generated by related projects, and traffic generated by the proposed Meredith SPA Project.

Where the Project contributions to cumulative LOS deficiencies would be potentially significant, applicable deficiency criteria are noted. Recommended improvements for each potentially affected intersection are listed subsequently. Project-specific improvements incorporated in the EIR Project Description would be constructed as part of the proposed development, or would be otherwise completed prior to the first Certificate of Occupancy, and are therefore not considered mitigation. At other potentially affected locations, the Project would pay all requisite fees (DIF, and/or Fair Share), acting to offset its proportional impacts.

Table 4.2-15
Year 2017 w/o Project and Year 2017-with-Project (Interim Development)
Peak Hour Intersection Deficiencies

Intersections					Year 2017 w/o Project Traffic Conditions			Year 2017-with-Project (Interim Development) Traffic Conditions			Impact Significance/ Remarks
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**	
2.	Archibald Avenue at Arrow Route*	City of Rancho Cucamonga	D	AM	39.2	0.879	D	41.7	0.904	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**56.5**	**1.013**	**F**	**61.8**	**1.028**	**F**	
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	21.4	0.746	C	21.8	0.766	C	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**113.5**	**0.912**	**F**	**123.7**	**0.970**	**F**	
22.	Hellman Avenue at 4th Street	City of Ontario	E	AM	**79.9**	**--**	**F**	24.9	0.408	C	*Less-than-Significant/* Hellman Avenue at 4th Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**193.4**	**--**	**F**	26.5	0.534	C	
25.	Haven Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	38.3	0.702	D	38.3	0.710	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**73.1**	**1.034**	**F**	**73.5**	**1.043**	**F**	
26.	Vineyard Avenue at Jay Street	City of Ontario	E	AM	38.3	--	E	29.8	0.636	C	*Less-than-Significant/* Vineyard Avenue at Jay Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**89.2**	**--**	**F**	33.2	0.781	C	

Table 4.2-15
Year 2017 w/o Project and Year 2017-with-Project (Interim Development)
Peak Hour Intersection Deficiencies

Intersections					Year 2017 w/o Project Traffic Conditions			Year 2017-with-Project (Interim Development) Traffic Conditions			Impact Significance/ Remarks
28.	Archibald Avenue at Inland Empire Boulevard	City of Ontario	E	**AM**	56.9	0.645	E	43.7	0.614	D	*Less-than-Significant/* Archibald Avenue at Inland Empire Blvd. would be improved as part of the Project; improving intersection LOS to acceptable standards
				PM	**106.7**	**0.746**	**F**	51.0	0.742	D	
30.	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	AM	71.6	0.580	E	71.5	0.581	E	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**141.6**	**0.805**	**F**	**141.4**	**0.810**	**F**	

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: Bold, shaded text indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance: Potentially Cumulatively Significant. As indicated at Table 4.2-15, under Year 2017-with-Project Conditions, additional traffic generated by the Project would result in potentially significant cumulative impacts at the following Study Area Intersections:

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- I-10 EB Ramp at 4th Street (Study Area Intersection 14);
- Haven Avenue at 4th Street (Study Area Intersection 25); and
- Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).

Mitigation Measures:

4.2.2 *Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of Year 2017 improvements as summarized at Table 4.2-21 at the intersections of:*

- *Archibald Avenue at Arrow Route (Study Area Intersection 2);*
- *I-10 EB Ramp at 4th Street (Study Area Intersection 14); and*
- *Haven Avenue at 4th Street (Study Area Intersection 25).* [7]

Improvements identified at the previous Mitigation Measure would, when completed, reduce potential impacts at affected intersections to levels that are less-than significant. Table 4.2-16 summarizes Year 2017 with Project LOS conditions at potentially affected intersections with and without improvements identified at Mitigation Measure 4.2.2.

[7] Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) improvements would be constructed by the Project Applicant pursuant to Mitigation Measure 4.2.1. No additional mitigation is required under 2017 Conditions.

Table 4.2-16
Summary of Intersection LOS
Year 2017-with-Project (Interim Development)
Without and With Recommended Improvements

Intersections					Without Improvements			With Improvements		
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**
2.	Archibald Avenue at Arrow Route*	City of Rancho Cucamonga	D	AM	41.7	0.904	D	42.6	0.888	D
				PM	**61.8**	**1.028**	**F**	44.5	0.926	D
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	21.8	0.766	C	20.2	0.766	C
				PM	**123.7**	**0.970**	**F**	23.6	0.816	C
25.	Haven Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	38.3	0.710	D	37.5	0.686	D
				PM	**73.5**	**1.043**	**F**	54.2	0.938	D
30.	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	AM	71.5	0.581	E	33.7	0.581	C
				PM	**141.4**	**0.810**	**F**	58.6	0.810	E

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: **Bold, shaded text** indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance After Mitigation:

Notwithstanding the previous considerations, payment of fees pursuant to the above Mitigation Measure would not ensure their timely completion at extra-jurisdictional intersections located within the City of Rancho Cucamonga, and/or at intersections under shared Caltrans/City of Ontario jurisdictional control. That is, within areas or at locations that are extra-jurisdictional to the City, or are under shared jurisdictional control, neither the Lead Agency nor the Project Applicant can autonomously construct improvements. Thus, while the physical improvements identified at extra-jurisdictional or shared-jurisdictional locations may be capable of mitigating potentially significant impacts, these improvements cannot be feasibly implemented or assured by the Project Applicant or the City of Ontario, nor can their timely completion be assured. Moreover, there are not any plans to improve the affected intersection(s) within the Project's estimated opening date, and the City of Ontario does not have an existing agreement with extra-jurisdictional agencies regarding the improvement or timing of

improvements at locations along, or beyond the City of Ontario corporate boundaries. Mitigation Measures 4.2.5 through 4.2.9, presented subsequently within this Section, have been incorporated to address the collection of fees for required traffic improvements.

Further, Mitigation Measures requiring additional right(s)-of-way cannot be timely assured because acquisition of required right(s)-of-way may not feasible. Potentially significant Project-related traffic/transportation impacts at locations where additional right-of-way would be required are therefore considered to remain significant and unavoidable pending completion of the required improvements.

In contrast, for intersections under the sole control of the City of Ontario and where sufficient right-of-way exists, improvements required to mitigate potentially significant impacts would be implemented consistent with demonstrated demands and pursuant to priorities established through the City's jurisdictional capital improvements programs. In these regards, the City of Ontario as the Lead Agency is considered authoritative in determining when and how City improvements should be programmed and implemented to ensure near-term and long-term adequacy of the City roadway system.

Level of Significance After Mitigation:

Year 2017 Conditions: Significant and Unavoidable Intersection LOS Impacts

Project-related impacts at the below-listed intersection(s) are addressed through fee payments, directed to the completion of the required improvements. However, as substantiated in the discussions presented above, because of lack of jurisdictional control, and/or right-of-way acquisition requirements, payment of fees does not ensure timely completion of the required improvements. ***Therefore, pending completion of required improvements, Project-related impacts under Year 2017-with-Project Conditions are recognized as cumulatively significant and unavoidable at:***

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- I-10 EB Ramp at 4th Street (Study Area Intersection 14); and
- Haven Avenue at 4th Street (Study Area Intersection 25).

Year 2017 Conditions: Less-than-Significant Intersection LOS Impacts

- **Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).** Improvements necessary to mitigate Project-related impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) would be constructed by the Project Applicant prior to the issuance of the first Certificate of Occupancy, thereby reducing potential impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) to levels that are less-than-significant (please refer also to Mitigation Measure 4.2.1).

Freeway Facilities Analysis–Year 2017 Conditions

Mainline Freeway Segment Analysis

Consistent with the Caltrans *Guide for the Preparation of Traffic Impact Studies dated December 2002,* an analysis of the freeway mainline segments located on either side of the I-10 Freeway/Vineyard Avenue Interchange and I-10 Freeway/Archibald Avenue Interchange has been prepared. The freeway segments evaluated include mainline segments where the proposed Project is anticipated to contribute 100 two-way peak hour trips to existing and/or future conditions. Within the Study Area, 55 of the 68 freeway segments analyzed were found to operate unacceptably during peak hour periods under Year 2017 without Project Conditions. All freeway segments are under Caltrans Jurisdiction. Please refer also to TIA Appendix M.

Addition of Project traffic under 2017 Conditions would further degrade existing freeway segment deficiencies occurring along 55 of the 68 freeway segments within the Study Area. However, Project traffic would not result in or cause new freeway segment deficiencies. Under Year 2017 Conditions, Project traffic contributions to the pre-existing 55 deficient Study Area freeway segments would not be potentially significant

when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-4.

Level of Significance: Potentially Cumulatively Significant at the 55 Study Area freeway segments operating at deficient LOS under 2017 Conditions.

Mitigation Measures:

No Feasible Mitigation Measures. As discussed previously in this Section, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant**.**

Level of Significance After Mitigation: ***Under Year 2017-with-Project Conditions (Interim Development), Project traffic impacts would be considered cumulatively considerable at the 55 Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway segment deficiencies.

Freeway Merge/Diverge Ramp Junction Analysis

The Project TIA Freeway Merge/Diverge Ramp Junction Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix N. Within the Study Area, all freeway ramp junctions analyzed were found to operate unacceptably during peak hour periods under Year 2017 without Project Conditions. All freeway ramp junctions are under Caltrans Jurisdiction.

Addition of Project traffic under Year 2017 Conditions would further degrade Year 2017 deficiencies for all analyzed Study Area freeway ramp junctions. However, Project traffic would not result in or cause new freeway ramp junction deficiencies. Under Year 2017 Conditions, Project traffic contributions to pre-existing deficient Study Area freeway ramp junctions would not be potentially significant when considered

individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-9.

Level of Significance: Potentially Cumulatively Significant at the 10 Study Area freeway ramp junctions operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As discussed previously in this Section, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2017-with-Project Conditions (Interim Development), Project traffic impacts (merge/diverge) would be considered cumulatively considerable at Study Area freeway ramp junctions operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway ramp junction deficiencies.

Freeway Weaving Analysis

The Project TIA Freeway Weaving Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix O. Three Study Area freeway segments were evaluated for potential weaving deficiencies, and all were found to operate unacceptably during peak hour periods under existing conditions. All freeway segments are under Caltrans Jurisdiction. All freeway segments are under Caltrans Jurisdiction.

Addition of Project traffic under Year 2017 Conditions would further degrade existing deficiencies for all freeway segments evaluated in the TIA Freeway Weaving Analysis. However, Project traffic would not result in or cause new freeway weaving deficiencies. Under Year 2017 Conditions, Project traffic contributions to existing freeway weaving

deficiencies would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-14.

Level of Significance: Potentially Cumulatively Significant at the three evaluated freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2017-with-Project Conditions (Interim Development), Project traffic impacts (weaving) would be considered cumulatively considerable at the three Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway weaving deficiencies.

YEAR 2020 WITHOUT-PROJECT AND WITH-PROJECT (PLUS PROJECT) TRAFFIC ANALYSIS

Year 2020 traffic volumes and levels of service reflect conditions which could be expected based on completion and occupancy of the Project uses under Year 2020 Conditions. The Year 2020 Without Project Condition reflects existing (2014) traffic volumes, plus additional background traffic that would be generated by generalized ambient growth within the region, as well as traffic generated by known or probable related projects (please refer also to the discussion of "Future Traffic Growth") presented in this Section. For Year 2020 Conditions, analyses are provided identifying potential transportation/traffic impacts attributable to Project Buildout Conditions (development of Planning Areas 1, 2, 3, and 4).

Intersection LOS Analysis–Year 2020 Conditions

Intersections with identified deficiencies under either Year 2020 Conditions Without Project or Year 2020-with-Project Conditions are presented at Table 4.2-17. These are considered potentially significant cumulative impacts resulting from existing traffic, ambient traffic growth within the region, traffic generated by related projects, and traffic generated by the proposed Meredith SPA Project.

Where the Project contributions to cumulative LOS deficiencies would be potentially significant, applicable deficiency criteria are noted. Recommended improvements for each potentially affected intersection are listed subsequently. Project-specific improvements incorporated in the EIR Project Description would be constructed as part of the proposed development, or would be otherwise completed prior to the first Certificate of Occupancy, and are therefore not considered mitigation. At other potentially affected locations, the Project would pay all requisite fees (DIF, and/or Fair Share), acting to offset its proportional impacts.

Table 4.2-17
Year 2020 w/o Project and Year 2020-with-Project (Project Buildout)
Peak Hour Intersection Deficiencies

Intersections					Year 2020 w/o Project Traffic Conditions			Year 2020-with-Project (Interim Development) Traffic Conditions			Impact Significance/ Remarks
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**	
2.	Archibald Avenue at Arrow Route*	City of Rancho Cucamonga	D	AM	43.1	0.917	D	49.2	0.964	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**66.2**	**1.042**	**F**	**78.3**	**1.093**	**F**	
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	23.0	0.784	C	24.5	0.827	C	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**129.3**	**0.961**	**F**	**151.3**	**1.036**	**F**	
22.	Hellman Avenue at 4th Street	City of Ontario	E	AM	**125.6**	**--**	**F**	25.6	0.474	C	*Less-than-Significant/* Hellman Avenue at 4th Street would be signalized as part of the Project; improving intersection LOS to acceptable standards.
				PM	**297.4**	**--**	**F**	27.9	0.627	C	
23.	Archibald Avenue at 4th Street	City of Ontario	E	AM	36.6	0.635	D	41.6	0.676	D	***Potentially Significant/*** The addition of Project traffic would degrade the PM Peak Hour LOS from acceptable LOS D to unacceptable LOS F.
				PM	51.4	0.952	D	**83.7**	**1.108**	**F**	
25.	Haven Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	40.1	0.739	D	40.2	0.756	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**89.6**	**1.088**	**F**	**91.2**	**1.109**	**F**	

Table 4.2-17
Year 2020 w/o Project and Year 2020-with-Project (Project Buildout)
Peak Hour Intersection Deficiencies

Intersections					Year 2020 w/o Project Traffic Conditions			Year 2020-with-Project (Interim Development) Traffic Conditions			Impact Significance/ Remarks
26.	Vineyard Avenue at Jay Street	City of Ontario	E	AM	43.8	--	E	24.3	0.520	C	*Less-than-Significant*/ Vineyard Avenue at Jay Street would be signalized as part of the Project; improving intersection LOS to acceptable standards
				PM	**125.2**	**--**	**F**	24.8	0.671	C	
28.	Archibald Avenue at Inland Empire Boulevard	City of Ontario	E	**AM**	64.6	0.677	E	58.9	0.693	E	***Potentially Significant***/ The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable
				PM	**124.8**	**0.784**	**F**	**94.0**	**0.900**	**F**	
30.	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	AM	**92.3**	**0.612**	**F**	**91.9**	**0.616**	**F**	***Potentially Significant***/ The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**167.2**	**0.849**	**F**	**166.0**	**0.861**	**F**	
32.	Vineyard Avenue at I-10 EB Ramps*	City of Ontario/ Caltrans	D	AM	26.0	0.813	C	**42.7**	**1.001**	**F**	***Potentially Significant***/ The addition of Project traffic would degrade the AM and PM Peak Hour LOS from acceptable LOS C to unacceptable LOS F.
				PM	24.4	0.789	C	**41.6**	**1.003**	**F**	

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: Bold, shaded text indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance: Potentially Cumulatively Significant. As indicated at Table 4.2-17, under Year 2020-with-Project Conditions, additional traffic generated by the Project would result in potentially significant cumulative impacts at the following Study Area Intersections:

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- I-10 EB Ramp at 4th Street (Study Area Intersection 14);
- Archibald Avenue at 4th Street (Study Area Intersection 23)
- Haven Avenue at 4th Street (Study Area Intersection 25);
- Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28);
- Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30); and
- Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32).

Mitigation Measures:

4.2.3 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of required Year 2020 improvements as summarized at Table 4.2-21 at the intersections of:

- *Archibald Avenue at Arrow Route (Study Area Intersection 2);*
- *I-10 EB Ramp at 4th Street (Study Area Intersection 14);*
- *Archibald Avenue at 4th Street (Study Area Intersection 23)*
- *Haven Avenue at 4th Street (Study Area Intersection 25);*
- *Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and*
- *Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32).*[8]

Improvements identified at the previous Mitigation Measure would, when completed, reduce potential impacts at affected intersections to levels that are less-than significant.

[8] Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) improvements would be constructed by the Project Applicant pursuant to Mitigation Measure 4.2.1. No additional mitigation is required under 2020 Conditions.

Table 4.2-18 summarizes Year 2020 with Project LOS conditions at potentially affected intersections with and without improvements identified at Mitigation Measure 4.2.3.

Table 4.2-18
Summary of Intersection LOS
Year 2020-with-Project (Project Buildout)
Without and With Recommended Improvements

Intersections					Without Improvements			With Improvements		
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**
2.	Archibald Avenue at Arrow Route*	City of Rancho Cucamonga	D	AM	49.2	0.964	D	49.9	0.942	D
				PM	**78.3**	**1.093**	**F**	54.1	0.985	D
14.	I-10 EB Ramps at 4th Street*	City of Ontario/ Caltrans	D	AM	24.5	0.827	C	22.5	0.827	C
				PM	**151.3**	**1.036**	**F**	27.3	0.888	C
23.	Archibald Avenue at 4th Street	City of Ontario	E	Am	41.6	0.676	D	36.7	0.777	D
				PM	**83.7**	**1.108**	**F**	51.8	0.902	D
25.	Haven Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	40.2	0.756	D	37.4	0.640	D
				PM	**91.2**	**1.109**	**F**	53.4	0.883	D
28.	Archibald Avenue at Inland Empire Boulevard	City of Ontario	E	AM	58.9	0.693	E	56.5	0.630	E
				PM	**94.0**	**0.900**	**F**	72.7	0.801	E
30.	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	AM	**91.9**	**0.616**	**F**	35.6	0.622	D
				PM	**166.0**	**0.861**	**F**	71.3	0.861	E
32.	Vineyard Avenue at I-10 EB Ramps*	City of Ontario/ Caltrans	D	AM	**42.7**	**1.001**	**F**	40.4	0.938	D
				PM	**41.6**	**1.003**	**F**	40.1	0.904	D

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: **Bold, shaded text** indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance After Mitigation:

Notwithstanding the previous considerations, payment of fees pursuant to the above Mitigation Measure would not ensure their timely completion at extra-jurisdictional intersections located within the City of Rancho Cucamonga, and/or at intersections under shared Caltrans/City of Ontario jurisdictional control. That is, within areas or at locations that are extra-jurisdictional to the City, or are under shared jurisdictional

control, neither the Lead Agency nor the Project Applicant can autonomously construct improvements. Thus, while the physical improvements identified at extra-jurisdictional or shared-jurisdictional locations may be capable of mitigating potentially significant impacts, these improvements cannot be feasibly implemented or assured by the Project Applicant or the City of Ontario, nor can their timely completion be assured. Moreover, there are not any plans to improve the affected intersection(s) within the Project's estimated opening date, and the City of Ontario does not have an existing agreement with extra-jurisdictional agencies regarding the improvement or timing of improvements at locations along, or beyond the City of Ontario corporate boundaries. Mitigation Measures 4.2.5 through 4.2.9, presented subsequently within this Section, have been incorporated to address the collection of fees for required traffic improvements.

Further, Mitigation Measures requiring additional right(s)-of-way cannot be timely assured because acquisition of required right(s)-of-way may not feasible. Potentially significant Project-related traffic/transportation impacts at locations where additional right-of-way would be required are therefore considered to remain significant and unavoidable pending completion of the required improvements.

In contrast, for intersections under the sole control of the City of Ontario and where sufficient right-of-way exists, improvements required to mitigate potentially significant impacts would be implemented consistent with demonstrated demands and pursuant to priorities established through the City's jurisdictional capital improvements programs. In these regards, the City of Ontario as the Lead Agency is considered authoritative in determining when and how City improvements should be programmed and implemented to ensure near-term and long-term adequacy of the City roadway system.

Level of Significance After Mitigation:

Year 2020 Conditions: Significant and Unavoidable Intersection LOS Impacts

Project-related impacts at the below-listed intersection(s) are addressed through fee payments, directed to the completion of the required improvements. However, as substantiated in the discussions presented above, because of lack of jurisdictional control, and/or right-of-way acquisition requirements, payment of fees does not ensure timely completion of the required improvements. ***Therefore, pending completion of required improvements, Project-related impacts under Year 2020-with-Project Conditions are recognized as cumulatively significant and unavoidable at:***

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- I-10 EB Ramp at 4th Street (Study Area Intersection 14);
- Archibald Avenue at 4th Street (Study Area Intersection 23);
- Haven Avenue at 4th Street (Study Area Intersection 25);
- Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and
- Vineyard Avenue at I-10 EB Ramps (Study Area Intersection 32).

Year 2020 Conditions: Less-than-Significant Intersection LOS Impacts

- **Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30)** Improvements necessary to mitigate Project-related impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) would be constructed by the Project Applicant prior to the issuance of the first Certificate of Occupancy, thereby reducing potential impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) to levels that are less-than-significant (please refer also to Mitigation Measure 4.2.1).

Freeway Facilities Analysis–Year 2020 Conditions

Mainline Freeway Segment Analysis

Consistent with the Caltrans *Guide for the Preparation of Traffic Impact Studies dated December 2002,* an analysis of the freeway mainline segments located on either side of the I-10 Freeway/Vineyard Avenue Interchange and I-10 Freeway/Archibald Avenue Interchange has been prepared. The freeway segments evaluated include mainline segments where the proposed Project is anticipated to contribute 100 two-way peak hour trips to existing and/or future conditions. Within the Study Area, 58 of the 68 freeway segments analyzed were found to operate unacceptably during peak hour periods under Year 2020 without Project Conditions. All freeway segments are under Caltrans Jurisdiction. Please refer also to TIA Appendix M.

Addition of Project traffic under 2020 Conditions would further degrade existing freeway segment deficiencies occurring along 58 of the 68 freeway segments within the Study Area. However, Project traffic would not result in or cause new freeway segment deficiencies. Under Year 2020 Conditions, Project traffic contributions to the pre-existing 58 deficient Study Area freeway segments would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-5.

Level of Significance: Potentially Cumulatively Significant at the 58 Study Area freeway segments operating at deficient LOS under 2020 Conditions.

Mitigation Measures:

No Feasible Mitigation Measures. As discussed previously in this Section, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2020-with-Project Conditions, Project traffic impacts would be considered cumulatively considerable at the 58 Study***

Area freeway segments operating at deficient LOS without the Project. Project traffic would not, however, result in any new freeway segment deficiencies.

Freeway Merge/Diverge Ramp Junction Analysis

The Project TIA Freeway Merge/Diverge Ramp Junction Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix N. Within the Study Area, all freeway ramp junctions analyzed were found to operate unacceptably during peak hour periods under Year 2020 without Project Conditions. All freeway ramp junctions are under Caltrans Jurisdiction.

Addition of Project traffic under Year Conditions further degrade Year 2020 deficiencies for all analyzed Study Area freeway ramp junctions. However, Project traffic would not result in or cause new freeway ramp junction deficiencies. Under Year 2020 Conditions, Project traffic contributions to existing deficient Study Area freeway ramp junctions would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-10.

Level of Significance: Potentially Cumulatively Significant at Study Area freeway ramp junctions operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As discussed previously in this Section, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2020-with-Project Conditions, Project traffic impacts (merge/diverge) would be considered cumulatively considerable at Study Area freeway ramp junctions operating at deficient LOS without the Project.***

Project traffic would not, however, result in any new freeway ramp junction deficiencies.

Freeway Weaving Analysis

The Project TIA Freeway Weaving Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix O. Three Study Area freeway segments were evaluated for potential weaving deficiencies, and all were found to operate unacceptably during peak hour periods under 2020 Conditions. All freeway segments are under Caltrans Jurisdiction. All freeway segments are under Caltrans Jurisdiction.

Addition of Project traffic under Year 2020 Conditions would further degrade existing deficiencies for all freeway segments evaluated in the TIA Freeway Weaving Analysis. However, Project traffic would not result in or cause new freeway weaving deficiencies. Under Year 2020 Conditions, Project traffic contributions to pre-existing freeway weaving deficiencies would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-14.

Level of Significance: Potentially Cumulatively Significant at the three evaluated freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2020-with-Project Conditions, Project traffic impacts (weaving) would be considered cumulatively considerable at the three Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway weaving deficiencies.

YEAR 2035 WITHOUT-PROJECT AND WITH-PROJECT (PLUS PROJECT) TRAFFIC ANALYSIS

Year 2035 traffic volumes and levels of service reflect conditions which could be expected based on completion and occupancy of the Project uses under Year 2035 Conditions. The Year 2035 Without Project Condition reflects traffic conditions anticipated under The Ontario Plan Buildout Conditions. In this regard, traffic generation resulting from development of the subject site as envisioned under The Ontario Plan would be greater than would result from the proposed Meredith SPA. Accordingly, at certain locations, traffic impacts under the With-Project (plus Project) scenario are incrementally reduced when compared to the "Without-Project" scenario. For Year 2035 Conditions, analyses are provided identifying potential transportation/traffic impacts attributable to Project Buildout Conditions (development of Planning Areas 1, 2, 3, and 4).

Intersection LOS Analysis–Year 2035 Conditions

Intersections with identified deficiencies under either Year 2035 Conditions Without Project or Year 2035-with-Project Conditions are presented at Table 4.2-19. These are considered potentially significant cumulative impacts resulting from existing traffic, ambient traffic growth within the region, traffic generated by related projects, and traffic generated by the proposed Meredith SPA Project.

Where the Project contributions to cumulative LOS deficiencies would be potentially significant, applicable deficiency criteria are noted. Recommended improvements for each potentially affected intersection are listed subsequently. Project-specific improvements incorporated in the EIR Project Description would be constructed as part of the proposed development, or would be otherwise completed prior to the first Certificate of Occupancy, and are therefore not considered mitigation. At other potentially affected locations, the Project would pay all requisite fees (DIF, and/or Fair Share), acting to offset its proportional impacts.

Table 4.2-19
Year 2035 w/o Project and Year 2035-with-Project (Project Buildout)
Peak Hour Intersection Deficiencies

Intersections					Year 2035 w/o Project (TOP) Traffic Conditions			Year 2035-with-Project Traffic Conditions			Impact Significance/ Remarks
ID	Location	Jurisdiction	LOS Std.	Peak Hour	Delay	V/C	LOS	Delay	V/C	LOS	
2.	Archibald Avenue at Arrow Route*	City of Rancho Cucamonga	D	**AM**	**58.9**	**1.005**	**F**	54.1	0.983	D	***Potentially Significant/*** The "without Project" AM and PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). PM Peak Hour LOS conditions would be incrementally improved under the Project scenario, but would remain deficient. AM Peak Hour LOS conditions would be incrementally improved under the Project scenario, and acceptable LOS D would be maintained.
				PM	**103.6**	**1.197**	**F**	**87.5**	**1.133**	**F**	
3.	Baker Avenue at 8th Street	City of Rancho Cucamonga/ City of Ontario	D	**AM**	**47.4**	**--**	**E**	**54.4**	**--**	**F**	***Potentially Significant/*** The "without Project" AM and PM Peak Hour Conditions (LOS E) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**40.6**	**--**	**E**	**43.6**	**--**	**E**	
9.	Hellman Avenue at 6th Street	City of Rancho Cucamonga	D	AM	16.7	--	C	17.7	--	C	***Potentially Significant/*** The addition of Project traffic would degrade the PM Peak Hour LOS from acceptable LOS D to unacceptable LOS E.
				PM	32.1	--	D	**35.6**	**--**	**E**	
12.	Haven Avenue at 6th Street	City of Rancho Cucamonga	D	AM	47.1	0.710	D	45.0	0.691	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS E) already exceed the LOS Std. (LOS D). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**55.3**	**0.867**	**E**	**55.4**	**0.873**	**E**	

Table 4.2-19
Year 2035 w/o Project and Year 2035-with-Project (Project Buildout)
Peak Hour Intersection Deficiencies

Intersections					Year 2035 w/o Project (TOP) Traffic Conditions			Year 2035-with-Project Traffic Conditions			Impact Significance/ Remarks
20.	Vineyard Avenue at 4th Street	City of Ontario	E	AM	52.5	0.888	D	**76.2**	**0.983**	**E**	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**105.9**	**1.075**	**F**	**92.2**	**1.017**	**F**	
23.	Archibald Avenue at 4th Street	City of Ontario	E	AM	41.3	0.893	D	43.1	0.707	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**100.0**	**1.077**	**F**	**98.6**	**1.048**	**F**	
25.	Haven Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	45.7	0.836	D	43.0	0.824	D	***Potentially Significant/*** The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS D). PM Peak Hour LOS conditions would be incrementally improved under the Project scenario, but would remain deficient.
				PM	**102.5**	**1.122**	**F**	**97.3**	**1.111**	**F**	
27.	Vineyard Avenue at Inland Empire Boulevard	City of Ontario	E	AM	39.8	0.954	D	24.4	0.576	C	*Less-than-Significant/* The "without Project" PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). PM Peak Hour LOS conditions would be incrementally improved under the Project scenario and acceptable LOS D would be maintained.
				PM	**110.6**	**1.260**	**F**	37.7	0.935	D	
28.	Archibald Avenue at Inland Empire Boulevard	City of Ontario	E	**AM**	**166.9**	**1.305**	**F**	58.4	0.661	E	***Potentially Significant/*** The "without Project" AM and PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). PM Peak Hour LOS conditions would be incrementally improved under the Project scenario, but would remain deficient. AM Peak Hour LOS conditions would be incrementally improved under the Project scenario, and acceptable LOS E would be maintained.
				PM	**319.4**	**2.099**	**F**	**91.9**	**0.886**	**F**	

Table 4.2-19
Year 2035 w/o Project and Year 2035-with-Project (Project Buildout)
Peak Hour Intersection Deficiencies

Intersections					Year 2035 w/o Project (TOP) Traffic Conditions			Year 2035-with-Project Traffic Conditions			Impact Significance/ Remarks
30.	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	**AM**	**98.3**	**0.642**	**F**	**99.1**	**0.636**	**F**	***Potentially Significant/*** The "without Project" AM and PM Peak Hour Conditions (LOS F) already exceed the LOS Std. (LOS E). The addition of Project traffic would further degrade already unacceptable LOS conditions.
				PM	**181.0**	**0.955**	**F**	**184.1**	**0.927**	**F**	
32.	Vineyard Avenue at I-10 EB Ramps*	City of Ontario/ Caltrans	D	**AM**	**50.7**	**1.028**	**F**	36.3	0.775	D	*Less-than-Significant/* The "without Project" AM Peak Hour Conditions (LOS F) already exceeds the LOS Std. (LOS D). AM Peak Hour LOS conditions would be incrementally improved under the Project scenario, and acceptable LOS D would be maintained.
				PM	54.4	1.057	D	34.5	0.813	C	

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: Bold, shaded text indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance: Potentially Cumulatively Significant. As indicated at Table 4.2-19, under Year 2035-with-Project Conditions, additional traffic generated by the Project would result in potentially significant cumulative impacts at the following Study Area Intersections:

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- Baker Avenue at 8th Street (Study Area Intersection 3);
- Hellman Avenue at 6th Street (Study Area Intersection 9);
- Haven Avenue at 6th Street (Study Area Intersection 12);
- Vineyard Avenue at 4th Street (Study Area Intersection 20);
- Archibald Avenue at 4th Street (Study Area Intersection 23);
- Haven Avenue at 4th Street (Study Area Intersection 25);
- Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28); and
- Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).

Mitigation Measures:

4.2.4 *Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of Year 2035 improvements as summarized at Table 4.2-21 at the intersections of:*

- *Archibald Avenue at Arrow Route (Study Area Intersection 2);*
- *Baker Avenue at 8th Street (Study Area Intersection 3);*
- *Hellman Avenue at 6th Street (Study Area Intersection 9);*
- *Haven Avenue at 6th Street (Study Area Intersection 12);*
- *Vineyard Avenue at 4th Street (Study Area Intersection 20);*
- *Archibald Avenue at 4th Street (Study Area Intersection 23);*
- *Haven Avenue at 4th Street (Study Area Intersection 25); and*
- *Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28).*[9]

[9] Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) improvements would be constructed by the Project Applicant pursuant to Mitigation Measure 4.2.1. No additional mitigation is required under 2035 Conditions.

Improvements identified at the previous Mitigation Measure would, when completed, reduce potential impacts at affected intersections to levels that are less-than significant. Table 4.2-20 summarizes Year 2035 with Project LOS conditions at potentially affected intersections with and without improvements identified at Mitigation Measure 4.2.4.

Table 4.2-20
Summary of Intersection LOS
Year 2035-with-Project (Project Buildout)
Without and With Recommended Improvements

Intersections					Without Improvements			With Improvements		
ID	**Location**	**Jurisdiction**	**LOS Std.**	**Peak Hour**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**	**LOS**
2.	Archibald Avenue at Arrow Route*	City of Rancho Cucamonga	D	AM	54.1	0.983	D	48.5	0.942	D
				PM	**87.5**	**1.133**	**F**	52.5	0.986	D
3.	Baker Avenue at 8th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	**54.4**	**--**	**F**	16.8	--	B
				PM	**43.6**	**--**	**E**	16.1	--	B
9.	Hellman Avenue at 6th Street	City of Rancho Cucamonga	D	AM	17.7	--	C	15.3	--	B
				PM	**35.6**	**--**	**E**	15.9	--	B
12.	Haven Avenue at 6th Street	City of Rancho Cucamonga	D	AM	45.0	0.691	D	46.1	0.704	D
				PM	**55.4**	**0.873**	**E**	50.2	0.820	D
20.	Vineyard Avenue at 4th Street	City of Ontario	E	AM	76.2	0.983	E	47.0	0.807	D
				PM	**92.2**	**1.017**	**F**	61.1	0.862	E
23.	Archibald Avenue at 4th Street	City of Ontario	E	AM	43.1	0.707	D	37.3	0.795	D
				PM	**98.6**	**1.048**	**F**	53.9	0.924	D
25.	Haven Avenue at 4th Street	City of Rancho Cucamonga/ City of Ontario	D	AM	43.0	0.824	D	38.2	0.664	D
				PM	**97.3**	**1.111**	**F**	54.7	0.916	D
28.	Archibald Avenue at Inland Empire Boulevard	City of Ontario	E	AM	58.4	0.661	E	49.1	0.570	D
				PM	**91.9**	**0.886**	**F**	69.5	0.784	E
30.	Haven Avenue at Inland Empire Boulevard	City of Ontario	E	AM	**99.1**	**0.636**	**F**	36.1	0.645	D
				PM	**184.1**	**0.927**	**F**	77.7	0.916	E

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.
Notes: **Bold, shaded text** indicates locations with unacceptable levels of service. * denotes San Bernardino County CMP intersection.

Level of Significance After Mitigation:

Notwithstanding the previous considerations, payment of fees pursuant to the above Mitigation Measure would not ensure their timely completion at extra-jurisdictional intersections located within the City of Rancho Cucamonga, and/or at intersections under shared Caltrans/City of Ontario jurisdictional control. That is, within areas or at locations that are extra-jurisdictional to the City, or are under shared jurisdictional control, neither the Lead Agency nor the Project Applicant can autonomously construct improvements. Thus, while the physical improvements identified at extra-jurisdictional or shared-jurisdictional locations may be capable of mitigating potentially significant impacts, these improvements cannot be feasibly implemented or assured by the Project Applicant or the City of Ontario, nor can their timely completion be assured. Moreover, there are not any plans to improve the affected intersection(s) within the Project's estimated opening date, and the City of Ontario does not have an existing agreement with extra-jurisdictional agencies regarding the improvement or timing of improvements at locations along, or beyond the City of Ontario corporate boundaries. Mitigation Measures 4.2.5 through 4.2.9, presented subsequently within this Section, have been incorporated to address the collection of fees for required traffic improvements.

Further, Mitigation Measures requiring additional right(s)-of-way cannot be timely assured because acquisition of required right(s)-of-way may not feasible. Potentially significant Project-related traffic/transportation impacts at locations where additional right-of-way would be required are therefore considered to remain significant and unavoidable pending completion of the required improvements.

In contrast, for intersections under the sole control of the City of Ontario and where sufficient right-of-way exists, improvements required to mitigate potentially significant impacts would be implemented consistent with demonstrated demands and pursuant to priorities established through the City's jurisdictional capital improvements programs. In these regards, the City of Ontario as the Lead Agency is considered authoritative in determining when and how City improvements should be programmed

and implemented to ensure near-term and long-term adequacy of the City roadway system.

Level of Significance After Mitigation:

Year 2035 Conditions: Significant and Unavoidable Intersection LOS Impacts

Project-related impacts at the below-listed intersection(s) are addressed through fee payments, directed to the completion of the required improvements. However, as substantiated in the discussions presented above, because of lack of jurisdictional control, and/or right-of-way acquisition requirements, payment of fees does not ensure timely completion of the required improvements. ***Therefore, pending completion of required improvements, Project-related impacts under Year 2035-with-Project Conditions are recognized as cumulatively significant and unavoidable at:***

- Archibald Avenue at Arrow Route (Study Area Intersection 2);
- Baker Avenue at 8th Street (Study Area Intersection 3);
- Hellman Avenue at 6th Street (Study Area Intersection 9);
- Haven Avenue at 6th Street (Study Area Intersection 12);
- Vineyard Avenue at 4th Street (Study Area Intersection 20);
- Archibald Avenue at 4th Street (Study Area Intersection 23);
- Haven Avenue at 4th Street (Study Area Intersection 25); and
- Archibald Avenue at Inland Empire Boulevard (Study Area Intersection 28).

Year 2035 Conditions: Less-than-Significant Intersection LOS Impacts

- **Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30).** Improvements necessary to mitigate Project-related impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) would be constructed by the Project Applicant prior to the issuance of the first Certificate of Occupancy, thereby reducing potential impacts at Haven Avenue at Inland Empire Boulevard (Study Area Intersection 30) to levels that are less-than-significant (please refer also to Mitigation Measure 4.2.1).

Freeway Facilities Analysis–Year 2035 Conditions

Mainline Freeway Segment Analysis

Consistent with the Caltrans *Guide for the Preparation of Traffic Impact Studies dated December 2002,* an analysis of the freeway mainline segments located on either side of the I-10 Freeway/Vineyard Avenue Interchange and I-10 Freeway/Archibald Avenue Interchange has been prepared. The freeway segments evaluated include mainline segments where the proposed Project is anticipated to contribute 100 two-way peak hour trips to existing and/or future conditions. Within the Study Area, 66 of the 68 freeway segments analyzed were found to operate unacceptably during peak hour periods under Year 2035 without Project Conditions. All freeway segments are under Caltrans Jurisdiction. Please refer also to TIA Appendix M.

Addition of Project traffic under 2035 Conditions would further degrade existing freeway segment deficiencies occurring along 66 of the 68 freeway segments within the Study Area. However, Project traffic would not result in or cause new freeway segment deficiencies. Under Year 2035 Conditions, Project traffic contributions to the pre-existing 66 deficient Study Area freeway segments would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-6.

Level of Significance: Potentially Cumulatively Significant at the 66 Study Area freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As discussed previously in this Section, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant**.**

Level of Significance After Mitigation: ***Under Year 2035-with-Project Conditions, Project traffic impacts would be considered cumulatively considerable at the 66 Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway segment deficiencies.

Freeway Merge/Diverge Ramp Junction Analysis

The Project TIA Freeway Merge/Diverge Ramp Junction Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix N. Within the Study Area, all freeway ramp junctions analyzed were found to operate unacceptably during peak hour periods under Year 2035 without Project Conditions. All freeway ramp junctions are under Caltrans Jurisdiction.

Addition of Project traffic under Year Conditions further degrade Year 2035 deficiencies for all analyzed Study Area freeway ramp junctions. However, Project traffic would not result in or cause new freeway ramp junction deficiencies. Under Year 2035 Conditions, Project traffic contributions to existing deficient Study Area freeway ramp junctions would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-11.

Level of Significance: Potentially Cumulatively Significant at Study Area freeway ramp junctions operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As discussed previously in this Section, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2020-with-Project Conditions, Project traffic impacts (merge/diverge) would be considered cumulatively considerable at Study Area freeway ramp junctions operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway ramp junction deficiencies.

Freeway Weaving Analysis

The Project TIA Freeway Weaving Analysis was developed and prepared consistent with methodologies and protocols provided in the *Highway Capacity Manual 2000 (HCM 2000).* Please refer also to TIA Appendix O. Three Study Area freeway segments were evaluated for potential weaving deficiencies, and all were found to operate unacceptably during peak hour periods under 2035 Conditions. All freeway segments are under Caltrans Jurisdiction. All freeway segments are under Caltrans Jurisdiction.

Addition of Project traffic under Year 2035 Conditions would further degrade existing deficiencies for all freeway segments evaluated in the TIA Freeway Weaving Analysis. However, Project traffic would not result in or cause new freeway weaving deficiencies. Under Year 2035 Conditions, Project traffic contributions to pre-existing freeway weaving deficiencies would not be potentially significant when considered individually, but would be potentially significant when considered cumulatively. Please refer also to TIA Table 12-14.

Level of Significance: Potentially Cumulatively Significant at the three evaluated freeway segments operating at deficient LOS without the Project.

Mitigation Measures:

No Feasible Mitigation Measures. As noted above, mitigation of freeway facilities impacts is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant.

Level of Significance After Mitigation: ***Under Year 2035-with-Project Conditions, Project traffic impacts (weaving) would be considered cumulatively considerable at the three Study Area freeway segments operating at deficient LOS without the Project.*** Project traffic would not, however, result in any new freeway weaving deficiencies.

Fee-Based Mitigation Requirements and Associated Intersection Improvements

A summary of unmitigated and mitigated Study Area intersection impacts under Existing, Year 2017, Year 2020, and Year 2035 traffic conditions has been provided in the preceding Tables 4.2-13, 4.2-15, 4.2-17, and 4.2-19, respectively. Because the intersection deficiencies identified herein are considered potentially significant cumulative impacts, the payment of Development Impact Fees (DIF) and/or fair-share fees toward required intersection improvements is considered to appropriately and adequately mitigate the Project's proportional contributions to the identified cumulative impacts, and fulfills the Project's mitigation requirements.

Table 4.2-21, following, summarizes required intersection mitigation improvements noted at previous Mitigation Measures 4.2.1 through 4.2.4, and reflected in the mitigated with-Project condition reflected in Tables 4.2-13, 4.2-15, 4.2-17, and 4.2-19. Required improvements are identified for each development/analytic scenario considered herein (Existing Conditions, Year 2017 Conditions, Year 2020 Conditions, and Year 2035 Conditions). DIF and fair share fees paid by the Project would be directed to fund the required improvements. Mitigation Measures 4.2.5 through 4.2.9 establish the means for collection and assignment of Project DIF and fair share fees, and complement the requirements for the physical improvements identified in previous Mitigation Measures 4.2.1 through 4.2.4. Subsequent Figures 4.2-5 through 4.2-12 schematically illustrate ultimate configurations of required intersection improvements. Within these Figures, the illustrated "Existing Plus Project" improvements reflect Interim and Project Buildout Conditions; the illustrated "Near Term Plus Project" improvements reflect 2017 and 2020 Conditions; and the illustrated "Long Term Plus Project" improvements correlate with Year 2035 Conditions.

Table 4.2-21
Intersection Mitigation Improvements Summary

Intersections		Jurisdiction	Improvement Description	Improvements by Scenario				
				Existing Plus Project (Interim)	Existing Plus Project (Buildout)	Year 2017	Year 2020	Year 2035
2.	Archibald Avenue at Arrow Route	Rancho Cucamonga	▪ Construct an exclusive NB right-turn lane.	--	--	X	X	X
			▪ Construct an exclusive EB right-turn lane.	--	--	--	--	X
			▪ Construct an exclusive WB right-turn lane.	--	--	--	--	X
			▪ Modify existing traffic signal.	--	--	X	X	X
3.	Baker Avenue at 8th Street	Rancho Cucamonga/Ontario	▪ Install Traffic Signal	--	--	--	--	X
9.	Hellman Avenue at 6th Street	Rancho Cucamonga	▪ Install Traffic Signal	--	--	--	--	X
12.	Haven Avenue at 6th Street	Rancho Cucamonga	▪ Construct exclusive NB right-turn lane.	--	--	--	--	X
			▪ Modify existing traffic signal.	--	--	--	--	X
14.	I-10 EB Ramps at 4th Street	Ontario/Caltrans	▪ Construct an additional WB through-lane.	X	X	X	X	--
			▪ Restripe accordingly	X	X	X	X	--
			▪ Modify existing traffic signal.	X	X	X	X	--
20.	Vineyard Avenue at 4th Street	Ontario	▪ Construct an additional SB through-lane.	--	--	--	--	X
			▪ Modify existing traffic signal.	--	--	--	--	X
23.	Archibald Avenue at 4th Street	Rancho Cucamonga/Ontario	▪ Construct a 2nd exclusive NB left-turn lane.	--	--	--	X	X
			▪ Construct an additional NB through-lane.	--	--	--	X	X
			▪ Modify existing traffic signal.	--	--	--	X	X

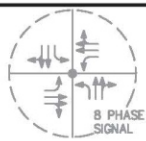
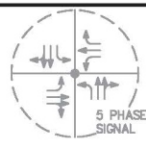
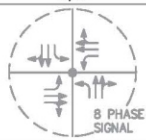
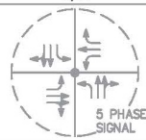
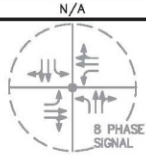
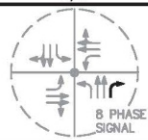
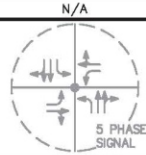
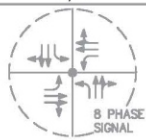
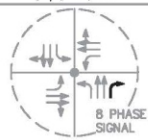
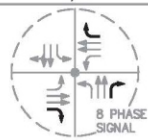
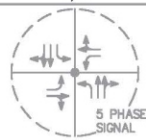
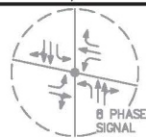
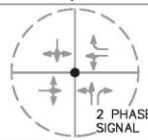
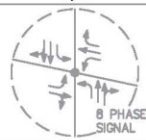
Table 4.2-21
Intersection Mitigation Improvements Summary

Intersections		Jurisdiction	Improvement Description	Improvements by Scenario				
				Existing Plus Project (Interim)	Existing Plus Project (Buildout)	Year 2017	Year 2020	Year 2035
25.	Haven Avenue at 4th Street	Rancho Cucamonga/Ontario	▪ Construct an additional NB through-lane.	--	--	X	X	X
			▪ Construct an additional SB through-lane.	--	--	--	X	X
			▪ Construct an exclusive EB right-turn lane.	--	--	X	X	X
			▪ Modify existing traffic signal.	--	--	X	X	X
28.	Archibald Avenue at Inland Empire Boulevard	Ontario	▪ Construct 3rd NB left-turn lane.	--	--	--	--	X
			▪ Construct an additional SB through-lane.	--	--	--	X	--
			▪ Modify existing traffic signal.	--	--	--	X	X
30.	Haven Avenue at Inland Empire Boulevard*	Ontario	▪ Modify existing traffic signal to install median pedestrian push buttons.	X	X	X	X	X
			▪ Modify median to provide 6′ refuge and provide minor restriping.	X	X	X	X	X
32.	Vineyard Avenue at I-10 EB Ramps	Ontario/Caltrans	▪ Construct an exclusive NB right-turn lane.	--	--	--	X	--
			▪ Modify existing traffic signal.	--	--	--	X	--

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.

Notes: X-Required Improvements; X-Improvements carried over from previous scenario; no additional improvements required.

* Haven Avenue at Inland Empire Boulevard (Intersection 30) improvements to be constructed by the Project Applicant prior to issuance of the first Certificate of Occupancy.

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
① VINEYARD AVE @ ARROW ROUTE (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	④ VINEYARD AVE @ 8TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
① VINEYARD AVE @ ARROW ROUTE (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE	④ VINEYARD AVE @ 8TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
② ARCHIBLAD AVE @ ARROW ROUTE (PA-1 & PA-2)		NO CHANGE		N/A	⑤ ARCHIBLAD AVE @ 8TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	$0/$125,000	N/A	COST	N/A	N/A	N/A	N/A
② ARCHIBLAD AVE @ ARROW ROUTE (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE			⑤ ARCHIBLAD AVE @ 8TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	$0/$0	$0/$175,000	COST	N/A	N/A	N/A	N/A
③ BAKER AVE @ 8TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	⑥ GROVE AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
③ BAKER AVE @ 8TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE		⑥ GROVE AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	$0/$250,000	COST	N/A	N/A	N/A	N/A

KEY

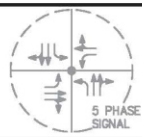
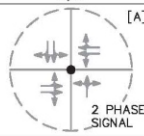
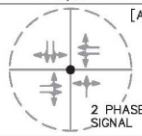
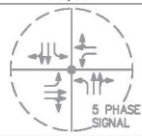
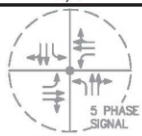
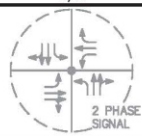
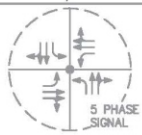
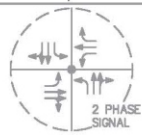
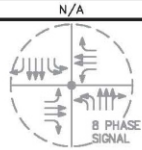
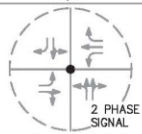
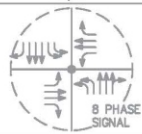
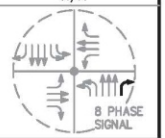
= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL

OL = OVERLAP
F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE
(NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)

Source: Linscott, Law, & Greenspan

applied planning inc

Figure 4.2-5
Planned and Recommended Improvements
Intersections 1 through 6

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
⑦ BAKER AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	⑩ ARCHIBALD AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑦ BAKER AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE			⑩ ARCHIBALD AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑧ VINEYARD AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	⑪ HERMOSA AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑧ VINEYARD AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE	⑪ HERMOSA AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑨ HELLMAN AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	⑫ HAVEN AVE @ 6TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑨ HELLMAN AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE		⑫ HAVEN AVE @ 6TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	
COST	N/A	N/A	N/A	$0/$250,000	COST	N/A	N/A	N/A	$0/$125,000

KEY

= EXISTING APPROACH LANE ASSIGNMENT
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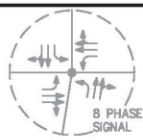
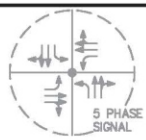
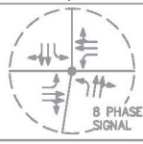
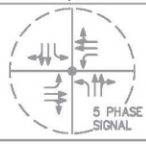
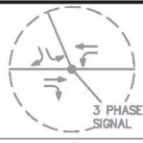
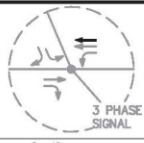
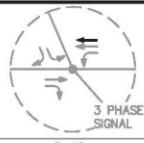
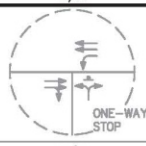
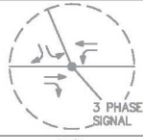
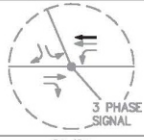
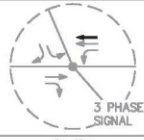
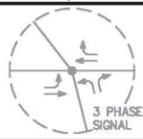
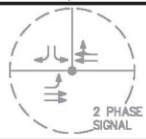
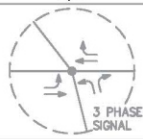
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL
OL = OVERLAP

F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE (NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)
[A] = CITY OF ONTARIO WILL BE SIGNALIZING BAKER AVENUE AT 6TH STREET BY YEAR 2020

Source: Linscott, Law, & Greenspan

applied planning inc

Figure 4.2-6
Planned and Recommended Improvements
Intersections 7 through 12

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
⑬ GROVE AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	⑯ BAKER AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑬ GROVE AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE	⑯ BAKER AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑭ I-10 EB RAMPS @ 4TH ST (PA-1 & PA-2)				N/A	⑰ MARIPOSA AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	$0/$230,000	$0/$0	N/A	COST	N/A	N/A	N/A	N/A
⑭ I-10 EB RAMPS @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)				TO BE REPLACED BY I-10/GROVE AVENUE INTERCHANGE FOR YEAR 2035	⑰ MARIPOSA AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	$0/$0	$0/$0	N/A	COST	N/A	N/A	N/A	N/A
⑮ I-10 WB RAMPS @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	⑱ CORONA AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
⑮ I-10 WB RAMPS @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	TO BE REPLACED BY I-10/GROVE AVENUE INTERCHANGE FOR YEAR 2035	⑱ CORONA AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A

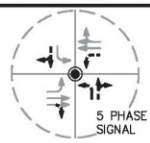
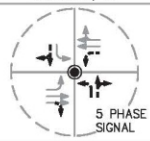
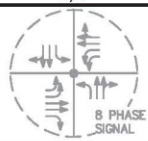
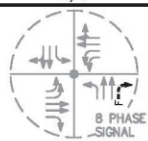
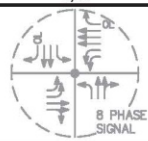
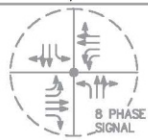
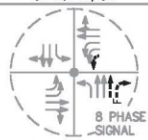
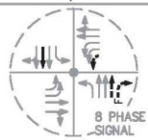
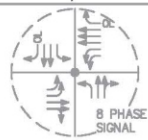
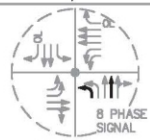
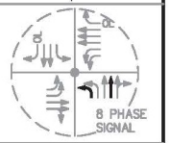
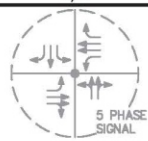
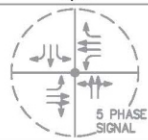
KEY

= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL

OL = OVERLAP
F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE
(NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)

Source: Linscott, Law, & Greenspan

Figure 4.2-7
Planned and Recommended Improvements
Intersections 13 through 18

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
⑲ ORANGE AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	㉒ HELLMAN AVE @ 4TH ST (PA-1 & PA-2)				N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	$250,000/$0	$0/$0	N/A
⑲ ORANGE AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE	㉒ HELLMAN AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)				
COST	N/A	N/A	N/A	N/A	COST	N/A	$0/$0	$0/$0	$0/$0
⑳ VINEYARD AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE		N/A	㉓ ARCHIBALD AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	$125,000/$0	N/A	COST	N/A	N/A	N/A	N/A
⑳ VINEYARD AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE			㉓ ARCHIBALD AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE		
COST	N/A	N/A	$255,000/$0	$0/$205,000	COST	N/A	N/A	$0/$255,000	$0/$0
㉑ N. DEL RIO PL @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	㉔ TURNER AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
㉑ N. DEL RIO PL @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE	㉔ TURNER AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A

KEY

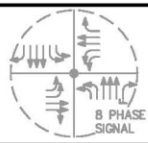
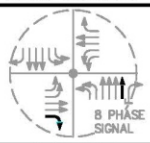
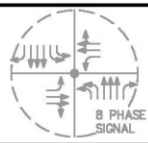
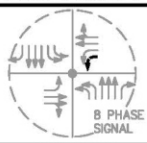
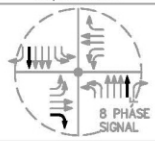
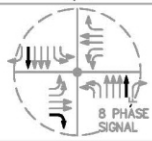
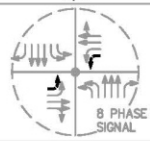
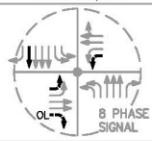
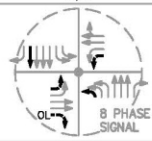
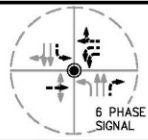
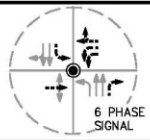
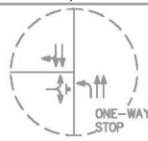
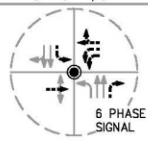
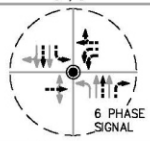
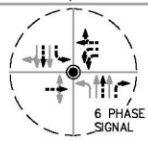
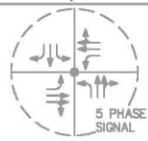
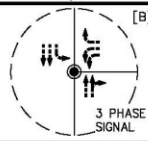
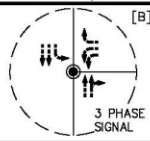
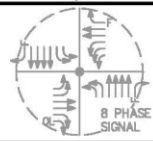
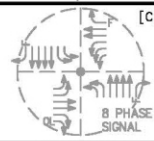
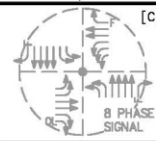
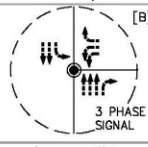
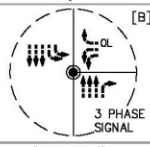
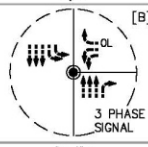
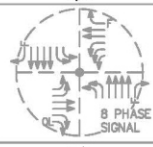
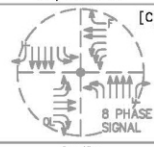
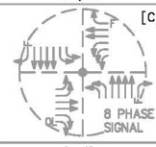
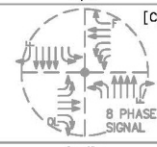
= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL

OL = OVERLAP
F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE
(NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)

Source: Linscott, Law, & Greenspan

applied planning inc

Figure 4.2-8
Planned and Recommended Improvements
Intersections 19 through 24

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
㉕ HAVEN AVE @ 4TH ST (PA-1 & PA-2)		NO CHANGE		N/A	㉘ ARCHIBALD AVE @ INLAND EMPIRE BLVD (PA-1 & PA-2)		NO CHANGE		N/A
COST	N/A	N/A	$0/$255,000	N/A	COST	N/A	N/A	$125,000/$0	N/A
㉕ HAVEN AVE @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE			㉘ ARCHIBALD AVE @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)				
COST	N/A	N/A	$0/$205,000	$0/$0	COST	N/A	$125,000/$0	$125,000/$205,000	$0/$125,000
㉖ VINEYARD AVE @ JAY ST (PA-1 & PA-2)				N/A	㉙ TURNER AVE @ INLAND EMPIRE BLVD (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	$250,000/$0	$0/$0	N/A	COST	N/A	N/A	N/A	N/A
㉖ VINEYARD AVE @ JAY ST (PA-1, PA-2, PA-3 & PA-4)					㉙ TURNER AVE @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	$0/$0	$335,000/$0	$0/$0	COST	N/A	N/A	N/A	N/A
㉗ VINEYARD AVE @ INLAND EMPIRE BLVD (PA-1 & PA-2)		[B] 	[B] 	N/A	㉚ HAVEN AVE @ INLAND EMPIRE BLVD (PA-1 & PA-2)		[C] 	[C] 	N/A
COST	N/A	$250,000/$0	$0/$0	N/A	COST	N/A	$0/$105,000	$0/$0	N/A
㉗ VINEYARD AVE @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)		[B] 	[B] 	[B] 	㉚ HAVEN AVE @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)		[C] 	[C] 	[C] 
COST	N/A	$255,000/$0	$255,000/$0	$0/$0	COST	N/A	$0/$0	$0/$0	$0/$0

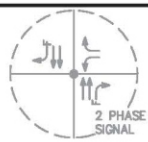
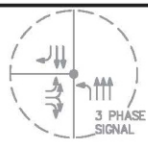
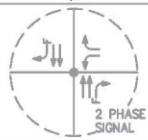
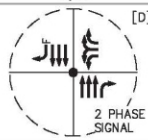
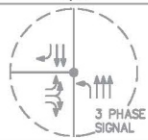
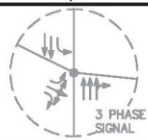
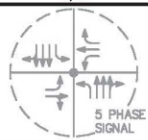
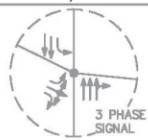
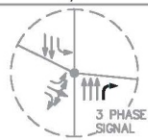
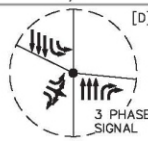
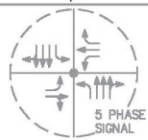
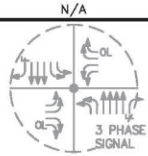
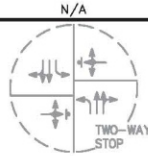
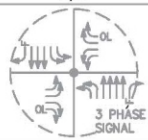
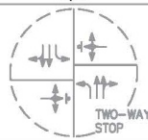
KEY

= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL
OL = OVERLAP

F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE (NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)
[B] = PROJECT SPECIFIC IMPROVEMENT RELATED TO IEB REALIGNMENT
[C] = CUMULATIVE IMPROVEMENT REQUIRES THE INSTALLATION OF MEDIAN PED PUSH BUTTON

Source: Linscott, Law, & Greenspan

Figure 4.2-9
Planned and Recommended Improvements
Intersections 25 through 30

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
(31) VINEYARD AVE @ I-10 WB RAMPS (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	(34) VINEYARD AVE @ G ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
(31) VINEYARD AVE @ I-10 WB RAMPS (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE		(34) VINYARD AVE @ G ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
(32) VINEYARD AVE @ I-10 EB RAMPS (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	(35) VINEYARD AVE @ D ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
(32) VINEYARD AVE @ I-10 EB RAMPS (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE			(35) VINEYARD AVE @ D ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	$0/$125,000	N/A	COST	N/A	N/A	N/A	N/A
(33) ARCHIBALD AVE @ I-10 FWY SINGLE POINT INTERCHANGE (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A	(36) VINEYARD AVE @ 7TH ST (PA-1 & PA-2)		NO CHANGE	NO CHANGE	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
(33) ARCHIBALD AVE @ I-10 FWY SINGLE POINT INTERCHANGE (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE	(36) VINEYARD AVE @ 7TH ST (PA-1, PA-2, PA-3 & PA-4)		NO CHANGE	NO CHANGE	NO CHANGE
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A

KEY

= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL
OL = OVERLAP

F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE (NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)
[D] = YEAR 2035 IMPROVEMENTS WILL BE IMPLEMENTED BY CALTRANS AS PART OF THE I-10/VINEYARD INTERCHANGE PROJECT

Source: Linscott, Law, & Greenspan

Figure 4.2-10
Planned and Recommended Improvements
Intersections 31 through 36

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
(37) VINEYARD AVE @ PLAZA SERENA (PA-1 & PA-2)	N/A	[E] ONE-WAY STOP	NO CHANGE	N/A	[F] (40) PROJECT DWY "C" @ INLAND EMPIRE BLVD (PA-1 & PA-2)	DOES NOT EXIST	DOES NOT EXIST	DOES NOT EXIST	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
(37) VINEYARD AVE @ PLAZA SERENA (PA-1, PA-2, PA-3 & PA-4)	N/A	[E] ONE-WAY STOP	[E] ONE-WAY STOP	[E] ONE-WAY STOP	[F] (40) PROJECT DWY "C" @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)	DOES NOT EXIST	5 PHASE SIGNAL	5 PHASE SIGNAL	5 PHASE SIGNAL
COST	N/A	N/A	$130,000/$0	$130,000/$0	COST	N/A	$250,000/$0	$0/$0	$0/$0
[F] (38) PROJECT DWY "A" @ INLAND EMPIRE BLVD (PA-1 & PA-2)	DOES NOT EXIST	DOES NOT EXIST	DOES NOT EXIST	N/A	[F] (41) PROJECT DWY "D" @ INLAND EMPIRE BLVD (PA-1 & PA-2)	DOES NOT EXIST	DOES NOT EXIST	DOES NOT EXIST	N/A
COST	N/A	N/A	N/A	N/A	COST	N/A	N/A	N/A	N/A
[F] (38) PROJECT DWY "A" @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)	DOES NOT EXIST	2 PHASE SIGNAL	2 PHASE SIGNAL	2 PHASE SIGNAL	[F] (41) PROJECT DWY "D" @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)	DOES NOT EXIST	5 PHASE SIGNAL	5 PHASE SIGNAL	5 PHASE SIGNAL
COST	N/A	$250,000/$0	$0/$0	$0/$0	COST	N/A	$250,000/$0	$0/$0	$0/$0
(39) DEL RIO PLACE @ INLAND EMPIRE BLVD (PA-1 & PA-2)	DOES NOT EXIST	8 PHASE SIGNAL	8 PHASE SIGNAL	N/A	[F] (42) PROJECT DWY "E" @ 4TH ST (PA-1 & PA-2)	DOES NOT EXIST	ONE-WAY STOP	ONE-WAY STOP	N/A
COST	N/A	$250,000/$0	$0/$0	N/A	COST	N/A	N/A	N/A	N/A
(39) DEL RIO PLACE @ INLAND EMPIRE BLVD (PA-1, PA-2, PA-3 & PA-4)	DOES NOT EXIST	8 PHASE SIGNAL	8 PHASE SIGNAL	8 PHASE SIGNAL	[F] (42) PROJECT DWY "E" @ 4TH ST (PA-1, PA-2, PA-3 & PA-4)	DOES NOT EXIST	ONE-WAY STOP	ONE-WAY STOP	ONE-WAY STOP
COST	N/A	$0/$0	$0/$0	$0/$0	COST	N/A	N/A	N/A	N/A

KEY

= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL
OL = OVERLAP

F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE (NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)
[E] = PROJECT SPECIFIC IMPROVEMENTS RELATED TO IEB REALIGNMENT
[F] = FINAL LANE CONFIGURATIONS WILL BE DETERMINED AT TIME OF SITE PLAN REVIEW FOR DEVELOPMENTS OF PA-2, PA-3 AND PA-4

Source: Linscott, Law, & Greenspan

Figure 4.2-11
Planned and Recommended Improvements
Intersections 37 through 42

INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT	INTERSECTION	EXISTING	EXISTING PLUS PROJECT	NEAR TERM PLUS PROJECT	LONG TERM PLUS PROJECT
(43) GROVE AVE @ I-10 WB RAMPS (PA-1 & PA-2)	N/A	N/A	N/A	N/A	--	--	--	--	--
COST	N/A	N/A	N/A	N/A		--	--	--	--
(43) GROVE AVE @ I-10 WB RAMPS (PA-1, PA-2, PA-3 & PA-4)	N/A	N/A	N/A	[G] 2 PHASE SIGNAL	--	--	--	--	--
COST	N/A	N/A	N/A	N/A	--	--	--	--	--
(44) GROVE AVE @ I-10 EB RAMPS (PA-1 & PA-2)	N/A	N/A	N/A	N/A	--	--	--	--	--
COST	N/A	N/A	N/A	N/A	--	--	--	--	--
(44) GROVE AVE @ I-10 EB RAMPS (PA-1, PA-2, PA-3 & PA-4)	N/A	N/A	N/A	[G] 2 PHASE SIGNAL	--	--	--	--	--
COST	N/A	N/A	N/A	N/A	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--

KEY

= EXISTING APPROACH LANE ASSIGNMENT
= PROJECT SPECIFIC IMPROVEMENTS
= CUMULATIVE IMPROVEMENTS
= EXISTING TRAFFIC SIGNAL
= PROJECT SPECIFIC TRAFFIC SIGNAL
= CUMULATIVE RECOMMENDED TRAFFIC SIGNAL
OL = OVERLAP

F = FREE RIGHT
COST = PROJECT SPECIFIC/CUMULATIVE (NOTE: COST DOES NOT INCLUDE ACQUISITION OF RIGHT-OF-WAY)
[G] = THE PARTIAL CLOVER LEAF OPTION FOR THE GROVE INTERCHANGE WAS ALSO ANALYZED

Source: Linscott, Law, & Greenspan

Figure 4.2-12
Planned and Recommended Improvements
Intersections 43 through 44

Mitigation Measures:

4.2.5 Prior to the issuance of building permits, the Project applicant shall participate in the City's DIF program and in addition shall pay the Project's fair share for the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 in the amount(s) agreed to by the City and Project Applicant. The City shall ensure that the improvements specified at Mitigation Measures 4.2.1 through 4.2.4 which are under the City of Ontario jurisdiction be constructed pursuant to the fee program at that point in time necessary to avoid identified potentially significant impacts.

4.2.6 Certain of the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 are proposed for intersections that either share a mutual border with the City of Rancho Cucamonga or are wholly located within the City of Rancho Cucamonga. Because the City of Ontario does not have plenary control over intersections that share a border with the City of Rancho Cucamonga or are wholly located within the City of Rancho Cucamonga, the City of Ontario cannot guarantee that such improvements will be constructed. Thus, the following additional mitigation is required: The City of Ontario shall participate in a multi-jurisdictional effort with the City of Rancho Cucamonga to develop a study to identify fair share contribution funding sources attributable to and paid from private and public development to supplement other regional and State funding sources necessary to implement the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 that are located in the City of Rancho Cucamonga. The study shall include fair-share contributions related to private and or public development based on nexus requirements contained in the Mitigation Fee Act (Govt. Code § 66000 et seq.) and 14 Cal. Code of Regs. §15126.4(a)(4) and, to this end, the study shall recognize that impacts attributable to City of Rancho Cucamonga facilities that are not attributable to development located within the City of Ontario are not paying in excess of such developments' fair share obligations. The fee study shall also be compliant with Government Code § 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other agreed-upon relevant criteria for implementation of the recommendations contained within the study to the extent the other agencies agree to participate in the fee study program. Because the City of Ontario and the City of Rancho

Cucamonga are responsible to implement this mitigation measure, the Project Applicant shall have no compliance obligations with respect to this Mitigation Measure.

4.2.7 *Fair-share amount(s) agreed to by the City and Project Applicant for non-DIF improvements at intersections that share a mutual border with the City of Rancho Cucamonga, or are wholly located within the City of Rancho Cucamonga, shall be paid by the Applicant to the City of Ontario prior to the issuance of the Project's final certificate of occupancy. The City of Ontario shall hold the Project Applicant's Fair Share Contribution in trust and shall apply the Project Applicant's Fair Share Contribution to any fee program adopted or agreed upon by the City of Ontario and the City of Rancho Cucamonga as a result of implementation of Mitigation Measure 4.2.6. If, within five (5) years of the date of collection of the Project Applicant's Fair Share Contribution the City of Ontario and the City of Rancho Cucamonga do not comply with Mitigation Measure 4.2.6, then the Project Applicant's Fair Share Contribution shall be returned to the Project Applicant.*

4.2.8 *Certain of the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 are proposed for intersections under shared City of Ontario/Caltrans jurisdiction. Because the City of Ontario does not have plenary control over intersections under shared City of Ontario/Caltrans jurisdiction, the City of Ontario cannot guarantee that such improvements will be constructed. Thus, the following additional mitigation is required: The City of Ontario shall participate in a multi-jurisdictional effort with Caltrans to develop a study to identify fair share contribution funding sources attributable to and paid from private and public development to supplement other regional and State funding sources necessary to implement the improvements identified at Mitigation Measures 4.2.1 through 4.2.4 that are under shared City of Ontario/Caltrans jurisdiction. The study shall include fair-share contributions related to private and or public development based on nexus requirements contained in the Mitigation Fee Act (Govt. Code § 66000 et seq.) and 14 Cal. Code of Regs. §15126.4(a)(4) and, to this end, the study shall recognize that impacts attributable to Caltrans facilities that are not attributable to development located within the City of Ontario are not paying in excess of such developments' fair share obligations. The fee study shall also be compliant with*

Government Code § 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other agreed-upon relevant criteria for implementation of the recommendations contained within the study to the extent the other agencies agree to participate in the fee study program. Because the City of Ontario and Caltrans are responsible to implement this mitigation measure, the Project Applicant shall have no compliance obligations with respect to this Mitigation Measure.

4.2.9 *Fair-share amount(s) agreed to by the City and Project Applicant for non-DIF improvements at intersections that are under City of Ontario/Caltrans jurisdiction, shall be paid by the Applicant to the City of Ontario prior to the issuance of the Project's final certificate of occupancy. The City of Ontario shall hold the Project Applicant's Fair Share Contribution in trust and shall apply the Project Applicant's Fair Share Contribution to any fee program adopted or agreed upon by the City of Ontario and Caltrans as a result of implementation of Mitigation Measure 4.2.8. If, within five (5) years of the date of collection of the Project Applicant's Fair Share Contribution the City of Ontario and Caltrans do not comply with Mitigation Measure 4.2.8, then the Project Applicant's Fair Share Contribution shall be returned to the Project Applicant.*

Despite the incorporation of Mitigation Measures 4.2.5 through 4.2.9, the Project's contribution to cumulative traffic impacts would be considered cumulatively significant and unavoidable, as noted previously in these discussions. Please refer also to the discussions of Project DIF and Fair Share fee responsibilities presented within the Project TIA (EIR Appendix C).

Mobility Element Policy Consistency

The Project is subject to plans, policies, guidelines, and regulations established under The Ontario Policy Plan Mobility Element. As indicated in Table 4.2-22, the Project is consistent with, and appropriately responds to applicable Mobility Element Plan Goal and Policies.

Table 4.2-22
The Ontario Plan-Policy Plan Goals and Policies Consistency Analysis

MOBILITY ELEMENT		
M1 Roadway		
Goal M1 A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.		
Policies		**Remarks**
M1-1	*Roadway Design and Maintenance.* We require our roadways to: • Comply with federal, state and local design and safety standards. • Meet the needs of multiple transportation modes and users. • Handle the capacity envisioned in the Functional Roadway Classification Plan. • Maintain a peak hour Level of Service (LOS) E or better at all intersections. • Be compatible with the streetscape and surrounding land uses. • Be maintained in accordance with best practices and our Right-of-Way Management Plan.	**Consistent.** The proposed Meredith SPA would improve all existing perimeter streets and new internal streets in accordance with the City's *Master Plan of Streets and Highways* and City design standards. City design review processes would also ensure compliance with applicable federal and state standards if/where applicable. Section 3, "Circulation Plan" of the Meredith SPA identifies and describes roadway, bikeway, and sidewalk/pathway improvements implemented under the Specific Plan that would to facilitate efficient vehicular and non-vehicular transportation. Analysis provided in this EIR substantiates that improvements incorporated in the Project in combination with ultimate implementation traffic/transportation mitigation would ensure that City intersections would operate at acceptable levels of service. In instances where timely implementation of required mitigation cannot be assured, intersection LOS impacts are recognized as cumulatively significant and unavoidable pending completion of required improvements. Streetscape design concepts identified and described in the Meredith SPA establish compatible continuation of existing perimeter streetscapes. All public roadways would be maintained in accordance with City requirements to include implementation of City Best Management Practices and City Right-of-Way Management Plan. On this basis, the Project is considered consistent with Policy M1-1.
M1-2	*Mitigation of Impacts.* We require development to mitigate its traffic impacts.	**Consistent.** Analysis provided in this EIR substantiates that improvements incorporated in the Project in combination with ultimate implementation traffic/transportation mitigation would ensure that City intersections would operate at acceptable levels of service. In instances where timely implementation of required mitigation cannot be assured, intersection LOS impacts are recognized as cumulatively significant and unavoidable pending completion of required improvements. On this basis, the Project is considered consistent with Policy M1-1.

Table 4.2-22
The Ontario Plan-Policy Plan Goals and Policies Consistency Analysis

MOBILITY ELEMENT		
M1-3	*Roadway Improvements.* We work with Caltrans, SANBAG and others to identify, fund and implement needed improvements to roadways identified in the Functional Roadway Classification Plan.	**Consistent.** Please refer to remarks at Policies M1-1, M1-2.
M1-4	*Adjacent Jurisdictions.* We work with neighboring jurisdictions to meet our level of service standards at the City limits.	**Consistent.** The EIR analysis accounts for and responds to extra-jurisdictional and/or shared jurisdictional LOS standards. Potentially significant Project traffic impacts at extra-jurisdictional and/or shared jurisdictional locations are mitigated consistent with the most restrictive applicable LOS standard of the affected jurisdiction(s). On this basis, the Project is considered consistent with Policy M1-4.
M2 Bicycle and Pedestrians		
Goal M2 A system of trails and corridors that facilitate and encourage bicycling and walking.		
Policies		**Remarks**
M2-3	*Pedestrian Walkways*. We require walkways that promote safe and convenient travel between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	**Consistent.** Pedestrian paths would be provided within the Project site and along the Project perimeter consistent with City standards. The proposed Meredith SPA would also implement a Class II Bikeway along Inland Empire Boulevard, in conformance with the City's *Multipurpose Trails & Bikeway Corridor Plan*. The proposed Specific Plan would not preclude implementation of the City's planned Cucamonga Creek Multipurpose Trail. Please refer also to the Meredith SPA Section 3. B, "Non-Vehicular Circulation Plan." On this basis, the Project is considered consistent with Policy M2-3.
M3 Public Transit		
Goal M3 A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit dependent.		
Policies		**Remarks**
M3-2	*Transit Facilities at New Development*. We require new development to provide transit facilities, such as bus shelters, transit bays and turnouts, as necessary.	**Consistent.** The proposed Meredith SPA requires that subsequent developers coordinate transit service options and provision of transit facilities with the local mass transit provider (Omnitrans). Adequate area for any bus turnouts would be provided consistent with City and Omnitrans requirements. On this basis, the Project is considered consistent with Policy M3-2.

Table 4.2-22
The Ontario Plan-Policy Plan Goals and Policies Consistency Analysis

MOBILITY ELEMENT		
M3-11	*Transit and Community Facilities.* We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.	**Consistent.** The Project is provided proximate access to regional transportation corridors (Interstate 10 and Interstate 15). In addition, the Project is located approximately ½-mile north of Ontario International Airport and adjacent to the planned Gold Line light rail corridor. Industrial, Urban Commercial, and Residential land uses established under the Project would establish destinations and a ridership base promoting implementation, extension and enhancement of transit facilities in the area. Please refer also to Remarks at Policy M3-2. On this basis, the Project is considered consistent with Policy M3-11.
M4 Goods Movement		
Goal M4 An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.		
Policies		**Remarks**
M4-1	*Truck Routes*. We designate and maintain a network of City truck routes that provide for the effective transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown in the Truck Routes Plan.	**Consistent.** Trucks accessing the Project site would utilize the City's designated truck routes. Vehicular-source noise and air quality impacts are evaluated within this EIR, and mitigation is proposed for those impacts determined to be potentially significant, thereby minimizing negative impacts on local circulation and noise-sensitive land uses. On this basis, the Project is considered consistent with Policy M4-1.
M4-2	*Regional Participation*. We work with regional and sub-regional transportation agencies to plan and implement goods movement strategies, including those that improve mobility, deliver goods efficiently and minimize negative environmental impacts.	**Consistent.** As noted at Policy M4-1 Remarks, the Project would act to minimize vehicular-source noise and air quality impacts. The Project land uses take advantage of proximate available regional transportation systems acting to facilitate mobility, goods movement, and goods delivery on a local, sub-regional and regional basis. The Project would not interfere with or otherwise obstruct City efforts and actions to coordinate regional and sub-regional plans and strategies facilitating mobility, goods movement, and goods delivery. On this basis, the Project is considered consistent with Policy M4-2.
M4-4	*Environmental Considerations.* We support efforts to reduce/eliminate the negative environmental impacts of goods movement.	*Please refer to Remarks at Policies M4-1, M4-2.*

Table 4.2-22
The Ontario Plan-Policy Plan Goals and Policies Consistency Analysis

MOBILITY ELEMENT		
LU5 Airport Planning		
Goal LU5 Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.		
Policies		**Remarks**
LU5-2	*Airport Planning Consistency.* We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations and/or adopted master plans and land use compatibility plans for the ONT and Chino Airport.	***Consistent:*** The Project does not propose or require development or operations that would conflict with state law, federal regulations and/or adopted master plans and land use compatibility plans for the ONT and/or Chino Airport. Nor does the Project propose elements or aspects that would interfere with or obstruct City coordination with laws, regulations or plans for the ONT and/or Chino Airport. On this basis, the Project is considered consistent with Policy LU5-2.
LU5-3	*Airport Impacts.* We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations.	***Consistent:*** The Project does not propose or require development or uses that would be adversely affected by airport operations. On this basis, the Project is considered consistent with Policy LU5-3.
LU5-4	*ONT Growth Forecast.* We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	***Consistent:*** Development of the currently underutilized Project site would act to promote City and regional economic growth, and in this manner would generally act to support growth of ONT. Further, the Project does not propose or require development or uses that would be interfere with or obstruct ONT Growth Forecasts. On this basis, the Project is considered consistent with Policy LU5-4.
LU5-5	*Airport Compatibility Planning for ONT.* We create and maintain the Airport Land Use Compatibility Plan for ONT.	***Consistent:*** The Project does not propose or require amendment to the Ontario International Airport Land Use Compatibility Plan (ONT ALUCP). Nor would the Project otherwise interfere or obstruct the City's administration and maintenance of the ONT ALUCP. The City fulfills its state Airport Land Compatibility requirements pursuant to the "Alternative Process." Under the Alternative Process affected agencies are responsible for conducting their own consistency evaluations for new development and/or major land use actions within their portions of the ONT AIA. In this regard, the City of Ontario is responsible for ALUCP consistency evaluations/determinations for the Project. Land uses and development that would be realized pursuant to the Project would conform to all applicable provisions and

Table 4.2-22
The Ontario Plan-Policy Plan Goals and Policies Consistency Analysis

MOBILITY ELEMENT		
		restrictions of the ONT ALUCP as determined by the City. In this latter regard, all future development on the Specific Plan area would be required to comply with development standards and design guidelines established in the Meredith SPA, as well as the applicable requirements of the City of Ontario Development Code (please refer to City of Ontario Municipal Code Title 9, Development Code, Chapter 1 Zoning and Land Use Requirements, Sec. 9-1.2980. Airport safety zones. In combination, compliance with provisions of the Meredith SPA and the City Development Code would preclude any potential inconsistencies with the ONT ALUCP. On this basis, the Project is considered consistent with Policy LU5-5.
LU5-6	*Alternative Process.* We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.	***Consistent:*** The Project does not propose or require development or uses that would interfere with or obstruct City responsibilities with regard to the Alternative Process for proper airport land use compatibility planning. On this basis, the Project is considered consistent with Policy LU5-6.
LU5-7	*ALUCP Consistency with Land Use Regulations.* We comply with state law that requires general plans, specific plans and all new development be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public use airport.	***Consistent:*** Please refer to Remarks at Policy LU5-5.

As outlined above, the Project would be implemented consistent with applicable provisions of the City's General Plan. Prior to the issuance of building permits, the City will review the final Project site plan and circulation designs to ensure consistency with applicable standards, design guidelines, and Municipal Code requirements. Based on the preceding analysis, the potential for the Project to conflict with any applicable circulation plan, policy, or regulation is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *The Project would conflict with an applicable congestion management program, including, but not limited to a level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.*

Impact Analysis: The most current San Bernardino County Congestion Management Program (CMP) states "Only project opening day and future scenarios with project require that traffic operational problems be mitigated to provide LOS E or better operation. If the lead agency or an affected adjacent jurisdiction requires mitigation to a higher LOS, this takes precedence over the CMP requirements." Based on this, LOS D is the minimum required LOS to be maintained on the CMP freeway segments [within the Study Area] since the I-10, SR-57 and I-15 are under Caltrans' jurisdiction (Project TIA, pp. 121-122). Freeway segments determined to be subject to LOS deficiencies under Existing, Year 2017, Year 2020, or Year 2035 scenarios considered herein would also be considered to conflict the LOS standards established under the San Bernardino County Congestion Management Program.

Study Area CMP intersections, jurisdictions, and acceptable LOS Standards are summarized at Table 4.2-23.

Table 4.2-23
Study Area CMP Intersections

No.	Intersection	Jurisdiction	LOS Standard
2	Archibald Avenue at Arrow Route	City of Rancho Cucamonga	D
13	Grove Avenue at 4th Street	City of Ontario	E
14	I-10 EB Ramps at 4th Street	City of Ontario/Caltrans	D
15	I-10 WB Ramps at 4th Street	City of Ontario/Caltrans	D
23	Archibald Avenue at 4th Street	City of Rancho Cucamonga/City of Ontario	D
25	Haven Avenue at 4th Street	City of Rancho Cucamonga/City of Ontario	D
33	Archibald Avenue at I-10 Freeway	City of Ontario/Caltrans	D

Source: *Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* (Linscott Law & Greenspan) January 22, 2015.

CMP intersections determined to be subject to LOS deficiencies under Existing, Year 2017, Year 2020, or Year 2035 scenarios considered herein would also be considered to conflict the LOS standards established under the San Bernardino County Congestion Management Program.

Level of Significance: Potentially Significant.

Mitigation Measures: As discussed previously in this Section, mitigation of freeway facilities impacts (including CMP deficiencies) is addressed through regional improvements plans and programs. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant**.**

Mitigation for CMP intersection deficiencies is coincident with intersection improvements identified herein.

Level of Significance After Mitigation: Cumulatively significant and unavoidable.
The Project would pay all requisite fees for improvements at Study Area CMP facilities. However, based on previously-noted jurisdictional constraints and/or right(s) of way limitations, timely completion of improvements required for mitigation of cumulatively significant impacts at CMP facilities within the Study Area cannot be assured. Pending completion of required improvements, Project contributions to impacts affecting Study Area CMP facilities are therefore considered cumulatively considerable.

Potential Impact: *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.*

Impact Analysis: To ensure appropriate design and implementation of all Project circulation improvements, the final design of the Project site plan, to include locations and design of proposed driveways, shall be reviewed and approved by the City Traffic Engineer. In addition, representatives of the City's Police and Fire Departments will review the Project's plans in regard to emergency access. Efficient and safe operations of

the Project are provided by on-site and localized circulation and intersection improvements included as components of the Project. These roadway and intersection improvements are detailed at Draft EIR Section 3.0, "Project Description," and within the Meredith Specific Plan Amendment (EIR Appendix B).

On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the Project site. Sight distance at each project access point should be reviewed with respect to standard Caltrans and City of Ontario sight distance standards at the time of preparation of final grading, landscape and street improvement plans. Based on the preceding, the implemented Project inclusive of the design features noted at EIR Section 3.0, "Project Description" and detailed in the Meredith SPA would not substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.

It is also recognized that temporary and short-term traffic detours and traffic disruption could result during Project construction activities. These interim and transient impacts are considered potentially significant for the duration of Project construction activities. Management and control of construction traffic would be addressed through the preparation and submittal of a construction area traffic management plan, to be reviewed and approved by City prior to or concurrent with Project building plan review(s). The Project Construction Area Traffic Management Plan (Plan), also summarized within the EIR Project Description, would identify traffic controls for any street closures, detours, or other potential disruptions to traffic circulation during Project construction. The Plan would also be required to identify construction vehicle access routes, and hours of construction traffic.

As supported by the preceding discussions and information presented in the EIR Project Description and within the Meredith SPA, the potential for the Project to substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.*

Impact Analysis: The Ontario International Airport (ONT) is located southerly adjacent to these properties, across East Airport Drive. No other airports of airfields are located proximate to the Project site or would otherwise be potentially affected by the Project.

The Project does not propose or require development or operations that would conflict with state law, federal regulations and/or adopted master plans and land use compatibility plans for the ONT and/or Chino Airport. Nor does the Project propose elements or aspects that would interfere with or obstruct City coordination with laws, regulations or plans for the ONT and/or Chino Airport. The Project does not propose or require amendment to the Ontario International Airport Land Use Compatibility Plan (ONT ALUCP). Nor would the Project otherwise interfere or obstruct the City's administration and maintenance of the ONT ALUCP. The City fulfills its state Airport Land Compatibility requirements pursuant to the "Alternative Process." Under the Alternative Process affected agencies are responsible for conducting their own consistency evaluations for new development and/or major land use actions within their portions of the ONT AIA. In this regard, the City of Ontario is responsible for ALUCP consistency evaluations/determinations for the Project.

Land uses and development that would be realized pursuant to the Project would conform to all applicable provisions and restrictions of the ONT ALUCP as determined by the City. In this latter regard, all future development on the Specific Plan area would be required to comply with development standards and design guidelines established in the Meredith SPA, as well as the applicable requirements of the City of Ontario Development Code (please refer to City of Ontario Municipal Code Title 9, Development Code, Chapter 1 Zoning and Land Use Requirements, Sec. 9-1.2980. Airport Safety Zones. In combination, compliance with provisions of the Meredith SPA and the City Development Code would preclude any potential inconsistencies with the

ONT ALUCP, including but not limited to potential fro the Project to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

As supported by the preceding discussion, the potential for the Project to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.3 AIR QUALITY

4.3 AIR QUALITY

Abstract

This Section identifies and addresses potential air quality impacts that may result from construction and operations of the Project. More specifically, the air quality analysis evaluates the potential for the Project to result in the following impacts:

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

On the basis of the analysis presented herein, even after the application of mitigation measures, the Project would cause or result in the following significant and unavoidable air quality impacts:

- *Project maximum daily construction-source emissions of volatile organic compounds (VOC),oxides of nitrogen (NO_x) and Carbon Monoxide (CO) would exceed applicable*

South Coast Air Quality Management District (SCAQMD) regional thresholds. These are significant individual and cumulative air quality impacts.

- *Under 2017 Conditions, Project maximum daily operational-source emissions of VOC, NO_x, Carbon Monoxide (CO), Particulate Matter ≤ 10 microns in diameter (PM_{10}), and Particulate Matter ≤ 2.5 microns in diameter ($PM_{2.5}$), would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds.[1] These are significant individual and cumulative air quality impacts.*

- *Under Project Buildout Conditions in 2020, Project maximum daily operational-source emissions of VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds. These are significant individual and cumulative air quality impacts.*

Moreover, the South Coast Air Basin encompassing the Project site is designated as non-attainment for ozone, PM_{10}, and $PM_{2.5}$ (VOC and NO_x are both ozone precursors; NO_x is a precursor to PM_{10}/$PM_{2.5}$).

- *Project construction-source VOC and NO_x emissions regional threshold exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone and PM_{10}/$PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.*

- *Project operational-source VOC, NO_x, PM_{10}, and $PM_{2.5}$ emissions regional threshold exceedances would therefore result in a cumulatively considerable net increase in criteria*

[1] Under 2017 Interim Development Conditions, the Project AQIA indicates operational-source PM 2.5 emissions would not exceed SCAQMD regional thresholds. If employing the *Draft Warehouse Truck Trip Study* protocols and assumptions, there would be a PM 2.5 emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source PM 2.5 emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions. Please refer also to *Meredith International Centre Supplemental Assessment* (Urban Crossroads) January 22, 2015 (supplemental air quality analyses) presented at EIR Appendix D.

pollutants (ozone and PM_{10}/$PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.

Other potential air quality impacts of the Project including potential health risks are either less-than-significant or can be reduced to levels that are less-than-significant with application of the mitigation measures proposed herein.

4.3.1 INTRODUCTION

This Section presents existing air quality conditions and identifies potential air quality impacts resulting from construction and operation of the Project. Local and regional climate, meteorology and air quality are discussed, as well as existing federal, state and regional air quality regulations. The information presented in this Section is summarized from the *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015 (Project AQIA); *Meredith International Centre Specific Plan Amendment Mobile Source Diesel Health Risk Assessment, City of Ontario* (Urban Crossroads, Inc.) November 12, 2014 (Project HRA); and *Meredith International Centre Specific Plan Amendment Offsite Freeway-Source Air Toxic and Criteria Pollutant Health Risk Assessment, City of Ontario* (Urban Crossroads, Inc.) November 12, 2014 (Freeway-Source HRA). The Project AQIA, Project HRA, and Freeway-Source HRA and all supporting information, are presented in their entirety at Draft EIR Appendix D.

Supplementing the above analyses, and as a point of reference, Project mobile-source emissions air quality impacts have also been evaluated employing assumptions and protocols reflected in the South Coast Air Quality Management District (SCAQMD) *Draft Warehouse Truck Trip Study* (SCAQMD) December 2014 (*Draft Warehouse Truck Trip Study)*. Please refer to *Meredith International Centre Supplemental Assessment* (Urban Crossroads) January 22, 2015 (supplemental air quality impact analyses) reflecting assumptions and protocols of the *Draft Warehouse Truck Trip Study*, also included at Draft EIR Appendix D.

4.3.2 AIR QUALITY FUNDAMENTALS

Air pollution comprises many substances generated from a variety of sources, both man-made and natural. Since the rapid industrialization of the twentieth century, almost every human endeavor, especially those relying on the burning of fossil fuels, creates air pollution. Most contaminants are actually wasted energy in the form of unburned fuels or by-products of the combustion process. Motor vehicles are by far the most significant source of air pollutants in urban areas, emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Air pollutants are generally classified as either primary or secondary pollutants. Primary pollutants are generated daily and emitted directly from the source, whereas secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. Examples of primary pollutants include carbon monoxide (CO), oxides of nitrogen (NO_2 and NO), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and various hydrocarbons or volatile organic compounds (VOC). Examples of secondary pollutants include ozone (O_3), which is a product of the reaction between NO_x and VOC in the presence of sunlight. Other secondary pollutants include photochemical aerosols.

To aid in the review of discussions presented subsequently in this Section, recurring terms, abbreviations, and acronyms are defined as follows: PPM - Parts per Million; $\mu g/m^3$ - Micrograms Per Cubic Meter; PM_{10} - Particulate Matter Less Than 10 Microns In Diameter; $PM_{2.5}$ - Particulate Matter Less Than 2.5 Microns In Diameter.

4.3.2.1 Criteria Air Pollutants

Criteria air pollutants are those air contaminants for which air quality standards currently exist. Currently, state and federal air quality standards exist for ozone, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), suspended particulate matter (PM_{10} and $PM_{2.5}$), and lead. California has also set standards for visibility, sulfates, hydrogen sulfide, and vinyl chloride. Evaluated criteria air

contaminants, or their precursors, typically also include volatile organic compounds (VOC), oxides of nitrogen (NO_x), sulfur oxides (SO_x), and respirable particulate matter (PM_{10} and $PM_{2.5}$). In general, the Basin as a whole has experienced decreases in criteria air pollutant levels when compared to historic conditions (please refer to EIR Section 4.3.5, Regional Air Quality Trends). Pollutant properties and sources, and potential health effects are summarized below.

Carbon Monoxide

Properties and Sources

Carbon monoxide (CO) is a colorless, odorless, toxic gas formed by incomplete combustion of fossil fuels. CO levels tend to be highest during the winter mornings, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest CO concentrations are generally found near congested transportation corridors and intersections. Other sources include aircraft, off-road vehicles, stationary equipment (e.g., fuel-fired furnaces, gas water heaters, fireplaces, gas stoves, gas dryers, charcoal grills), and landscape maintenance equipment such as lawnmowers and leaf blowers.

Human Health Effects

A consistent association between increased ambient CO levels and higher-than-average rates of hospital admissions for heart diseases (such as congestive heart failure) has been observed. Carbon monoxide can cause decreased exercise capacity, and adversely affects conditions with an increased demand for oxygen supply (fetal development, chronic hypoxemia, anemia, and diseases involving the heart and blood vessels). Exposure to CO can cause impairment of time interval estimation and visual function.

Ozone

Properties and Sources Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOC) and oxides of nitrogen (NO_x), which are both

byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of the pollutant.

Human Health Effects

Short-term exposure to ozone can cause a decline in pulmonary function in healthy individuals including breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and immunological changes. Additionally, an increase in the frequency of asthma attacks, cough, chest discomfort and headache can result.

A correlation has been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality as a result of long-term ozone exposure. A risk to public health implied by altered connective tissue metabolism and host defense in animals has also been reported.

Oxides of Nitrogen

Properties and Sources

Oxides of nitrogen (NO_x) serve as integral participants in the process of photochemical smog production. During combustion, oxygen reacts with nitrogen to produce NO_x. Two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). Natural causal sources or originators of NO_x include lightning, soils, wildfires, stratospheric intrusion, and the oceans. Natural sources accounted for approximately seven percent of 1990 emissions of NO_x for the United States (EPA 1997). Atmospheric deposition of NO_x occurs when atmospheric or airborne nitrogen is transferred to water, vegetation, soil, or other materials. Acid deposition involves the deposition of nitrogen and/or sulfur acidic compounds that can harm natural resources and materials. The major source of NO_x in the Basin is on-road vehicles. Stationary commercial and service source fuel combustion are other contributors.

Human Health Effects

Exposure to NO_x may alter sensory responses or impair pulmonary function, and may increase incidence of acute respiratory disease including infections and respiratory symptoms in children. Difficulty in breathing in healthy individuals as well as bronchitic groups may also occur. NO_x is also an ozone precursor. Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Sulfur Dioxide

Properties and Sources

Sulfur dioxide (SO_2) is a colorless, pungent gas. At levels greater than 0.5 ppm, SO_2 has a strong odor. Sulfuric acid is formed from sulfur dioxide, which is an aerosol particle component that affects acid deposition. Anthropogenic, or human-caused, sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. SO_2 is a precursor to sulfates and PM_{10}.

Human Health Effects

Health effects of SO_2 include higher frequencies of acute respiratory symptoms (including airway constriction in some asthmatics and reduction in breathing capacity leading to severe difficulties) and diminished ventilatory function in children. Very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Lead

Properties and Sources

Lead (Pb) is a solid heavy metal that can exist in air pollution as an aerosol particle component. An aerosol is a collection of solid, liquid, or mixed-phase particles suspended in the air. It was first regulated as an air pollutant in 1976. Leaded gasoline

was first marketed in 1923 and was used in motor vehicles until around 1970. The exclusion of lead from gasoline helped to decrease emissions of lead in the United States from 219,000 to 4,000 short tons per year between 1970 and 1997. Lead-ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources emanate from the dust of soils contaminated with lead-based paint and solid waste disposal.

Lead concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Lead is no longer a gasoline additive, accounting for substantive reductions in airborne lead concentrations throughout the Basin.

Human Health Effects

Lead adversely affects the development and function of the central nervous system, leading to learning disorders, distractibility, lower IQ and increased blood pressure. An increase in blood lead levels may impair or decrease hemoglobin synthesis. Lead poisoning can cause anemia, lethargy, seizures, and death.

Particulate Matter

Properties and Sources

Particulate matter is a generic term that defines a broad group of chemically and physically different particles (either liquid droplets or solids) that can exist over a wide range of sizes. Examples of atmospheric particles include those produced from combustion (diesel soot or fly ash), light (urban haze), sea spray (salt particles), and soil-like particles from re-suspended dust. Fugitive dust is defined as any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of human activities (Rule 403, Fugitive Dust, SCAQMD).

Within air quality analyses, particulate matter is categorized by diameter: PM_{10} and $PM_{2.5}$. PM_{10} refers to particulate matter that is 10 microns or less in diameter (1 micron is one millionth of a meter, or one micrometer [µm]). $PM_{2.5}$ refers to particulate matter that

is 2.5 microns or less in diameter. The size of particles can determine the residence time of the material in the atmosphere. $PM_{2.5}$ has a longer atmospheric lifetime than PM_{10} and, therefore, can be transported over longer distances.

Particulate matter originates from a variety of stationary and mobile sources. Stationary sources that generate particulate matter include: fuel combustion for electric utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources that generate particulate matter include highway vehicles, non-road vehicles and fugitive dust from paved and unpaved roads. Diesel Particulate Matter (DPM) is a mixture of many exhaust particles and gases that is produced when an engine burns diesel fuel. As the result California Air Resources Board (CARB) regulatory actions, DPM emissions within the Basin have been reduced when compared to historic levels, and will continue to decline (please refer to EIR Section 4.3.5.2, Diesel Emissions and Diesel Particulate Matter (DPM) Reduced Basin-wide).

Human Health Effects

A consistent correlation between elevated ambient PM_{10} levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed.

Many compounds found in diesel exhaust are carcinogenic, including sixteen compounds that are classified as possibly carcinogenic by the International Agency for Research on Cancer. DPM includes the particle-phase constituents in diesel exhaust. Some short-term (acute) effects of diesel exhaust include eye, nose, throat and lung irritation, as well as coughs, headaches, light-headedness and nausea. Diesel exhaust is a major source of ambient particulate matter pollution, and numerous studies have linked elevated particle levels in the air to increased hospital admission, emergency room visits, asthma attacks, and premature deaths among those suffering from

respiratory problems. DPM in the Basin poses the greatest cancer risk of all identified toxic air pollutants.

Valley Fever may also be transmitted through PM_{10} and $PM_{2.5}$ emissions. "Valley Fever is a fungal infection caused by coccidioides (kok-sid-e-OY-deze) organisms. It can cause fever, chest pain and coughing, among other signs and symptoms. Two species of coccidioides fungi cause valley fever. These fungi are commonly found in the soil in specific areas and can be stirred into the air by anything that disrupts the soil, such as farming, construction and wind. The fungi can then be breathed into the lungs and cause valley fever, also known as acute coccidioidomycosis (kok-sid-e-oy-doh-my-KOH-sis). Mild cases of valley fever usually resolve on their own. In more severe cases, doctors prescribe antifungal medications that can treat the underlying infection."[2]

Volatile Organic Compounds

Properties and Sources

Volatile Organic Compounds (VOCs), also termed Reactive Organic Gases (ROGs) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there is no state or national ambient air quality standard for VOCs because they are not classified as criteria pollutants. They are regulated, however, because a reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility. The major sources of VOCs in the Basin are on-road motor vehicles and solvent evaporation. VOCs are also an ozone precursor.

Benzene is a commonly occurring VOC within the Basin. Typical sources of benzene emissions include: gasoline service stations (fuel evaporation), motor vehicle exhaust,

[2] *Diseases and Conditions–Valley Fever*. Mayo Clinic.Web.January 7, 2015. <http://www.mayoclinic.org/diseases-conditions/valley-fever/basics/definition/con-20027390>

tobacco smoke, and oil and coal incineration. Benzene is also sometimes employed as a solvent for paints, inks, oils, waxes, plastic, and rubber. It is used in the extraction of oils from seeds and nuts. It is also used in the manufacture of detergents, explosives, dyestuffs, and pharmaceuticals.

Human Health Effects

Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Benzene is a known carcinogen. Short-term (acute) exposure to high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, unconsciousness can occur. Long-term (chronic) occupational exposure to high doses by inhalation has caused blood disorders, including aplastic anemia and lower levels of red blood cells.

4.3.3 SETTING

4.3.3.1 Local and Regional Climate

The Project site is located in the SCAB within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties), and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin.

The 6,745-square-mile SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel

Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

Regional climate and variations in temperature, wind, humidity, precipitation, and amount of sunshine influence air quality within the SCAB. The annual average temperatures throughout the Basin vary from the low to middle 60s (degrees Fahrenheit). Due to a decreased marine influence, the eastern portion of the SCAB experiences greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. It should be noted that these effects decrease with distance from the coast.

More than 90 percent of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB, with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14-½ hours of possible sunshine.

The importance of wind to air pollution is considerable. Wind speed and direction determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas," each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal areas.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO_x and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

4.3.3.2 Existing Air Quality

Existing air quality is monitored and evaluated in the context of National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). These Standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. For further information regarding NAAQS and CAAQS currently in effect, please refer to the Project Air Quality Impact Analysis at Table 2-1, "Ambient Air Quality Standards." NAAQS and CAAQS can also be accessed at: http://www.arb.ca.gov/research/aaqs/aaqs.htm. Determination of whether a region's air quality is healthful or unhealthful is established by comparing sampled air contaminant levels to the state and federal standards.

Regional Air Quality

The SCAQMD monitors levels of various criteria pollutants at 30 monitoring stations throughout the Basin. Attainment status for Basin air pollutants is based on monitored conformance with applicable CAAQS) and/or NAAQS. SCAB attainment status reflecting current (2013) criteria pollutant monitoring data is summarized at Table 4.3-1.

Table 4.3-1
SCAB Attainment Status

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1 hour standard	Nonattainment	No Standard
Ozone – 8 hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Nonattainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead*	Nonattainment	Nonattainment

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015. **Notes: *** The State and Federal nonattainment designation for lead is only applicable for the Los Angeles County portion of the SCAB. The Basin is otherwise classified as attainment for lead.

Local Air Quality

Relative to the Project site, the nearest long-term air quality monitoring site for Ozone (O_3), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2) is the South Coast Air Quality Management District Northwest San Bernardino Valley monitoring station(Source Receptor Area 32, SRA 32), located approximately 2.25 miles northwesterly of the Project site. Relative to the Project site, the nearest long-term air quality monitoring site for Inhalable Particulates (PM_{10}) and Ultra-Fine Particulates ($PM_{2.5}$) is the South Coast Air Quality Management District Southwest San Bernardino Valley monitoring station (SRA 33), located approximately 2.25 miles southerly of the Project site.

The most recent three years of available air quality monitoring data is presented at Table 4.3-2. Identified at Table 4.3-2 are the number of days the NAAQS and/or CAAQS were exceeded at the above-identified monitoring stations (SRA 32, SRA 33), which conditions are considered representative of localized air quality at the Project site. Data for SO_2 has been omitted from Table 4.3-2 as attainment is regularly met in the South Coast Air Basin and few monitoring stations record SO_2 concentrations.

Table 4.3-2
Area Air Quality Monitoring Summary 2011-2013

Pollutant	Standard	Year		
		2011	2012	2013
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.145	0.136	0.143
Maximum 8-Hour Concentration (ppm)		0.122	0.111	0.111
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	36	42	--
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	45	66	--
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	5	4	3
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	36	45	27
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		--	--	3.0
Maximum 8-Hour Concentration (ppm)		1.3	1.1	1.1
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	--	--	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.069	0.067	0.052
Annual Arithmetic Mean Concentration (ppm)		0.020	0.020	--
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (μg/m³)		70	57	60
Number of Samples		60	61	117
Number of Samples Exceeding State Standard	> 50 μg/m³	3	4	--
Number of Samples Exceeding Federal Standard	> 150 μg/m³	0	0	0
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (μg/m³)		52.9	35.2	29.8
Annual Arithmetic Mean (μg/m³)		13.2	12.4	13.4
Number of Samples Exceeding Federal 24-Hour Standard	> 35 μg/m³	119	120	27

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015. **Note:** -- data not available

4.3.4 REGULATORY BACKGROUND

4.3.4.1 Federal Regulations

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O_3, CO, NO_x, SO_2, PM_{10}, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the California Air Resource Board (CARB).

The Federal Clean Air Act (CAA) was first enacted in 1955, and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the NAAQS and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards would be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and lead. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 4.3-1 (previously presented) provides the NAAQS within the basin.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels

such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and nitrogen oxides (NO_x). NO_x is a collective term that includes all forms of nitrogen oxides (NO, NO_2, NO_3) which are emitted as byproducts of the combustion process.

4.3.4.2 California Regulations

The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the SCAQMD, regulate air emissions from commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;

- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);

- A District-permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;

- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;

- Significant use of low emissions vehicles by fleet operators;

- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for VOCs, NO_x, CO and PM_{10}. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

4.3.4.3 Regional Air Quality Management Planning

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. Further discussion on the AQMP and Project consistency with the AQMP is provided subsequently at Section 4.3.6, "Potential Impacts and Mitigation Measures."

4.3.5 REGIONAL AIR QUALITY TRENDS

The Project site lies within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) is the agency responsible for regulating stationary air pollution sources within the Basin.[3] To these ends, SCAQMD develops comprehensive plans and regulatory programs for the region in order to attain federal air quality standards by dates specified under federal law. SCAQMD responsibilities

[3] Separately, the California Air Resources Board (CARB) regulates mobile-source air pollutants within the Basin.

also include attainment of state air quality standards at the earliest achievable date, employing reasonably available control measures.

SCAQMD rule development through the 1970s and 1980s realized substantial improvement in Basin air quality. Subsequent SCAQMD pollution prevention and control programs developed during the 1990s relied on: (i) development and application of cleaner technologies; (ii) add-on emission controls; and (iii) uniform CEQA review throughout the Basin. Industrial-source air pollutant emissions within the Basin have been significantly reduced through this approach. Additionally, Basin-wide vehicular-source emissions have been reduced by technologies implemented at the state level by CARB.

4.3.5.1 Criteria Pollutants Reduced Basin-wide

Air Quality Management Plans (AQMPs) prepared and periodically updated by SCAQMD establish air quality attainment targets and related strategies intended to achieve federal and state air quality standards. The Basin's historical improvement in air quality since the 1970's is the direct result of the comprehensive, multi-year air pollution reduction strategies outlined in the AQMP(s), and by utilizing uniform CEQA review throughout the Basin. Under the AQMPs, Ozone, NO_x, VOC, and CO emissions within the Basin have demonstrably decreased since 1975, with continuing substantive decreases anticipated through 2020.

Diminished air pollutant emissions with the Basin are primarily the result of replacement of older vehicles with newer more fuel-efficient and/or alternative fuel vehicles; and increasingly effective motor vehicle emissions controls, including evaporative emissions controls. Because of the mandated controls on motor vehicles and the replacement of older polluting vehicles, although vehicle miles traveled in the Basin continue to increase, NO_x and VOC levels continue to decrease. NO_x emissions resulting from electric power generation have also decreased, largely due to use of cleaner fuels and renewable energy. Relative decreases in ambient levels of Ozone, particulate matter (PM_{10} and $PM_{2.5}$), and CO are also evident Basin-wide.

Ozone air quality in the SCAB has improved substantially over historic conditions. For example:

- During the 1960s, maximum 1-hour concentrations exceeded 0.60 ppm. Currently, maximum measured concentrations approximate 0.20 ppm or less;

- The 2007 peak 8-hour indicator value for Ozone was 42 percent lower than the 1988 value;

- The 2008 three-year average of the maximum 8-hour concentration for Ozone was over 41 percent lower than in 1990; and

- The number of days that the Basin Ozone levels exceeded state and federal standards has also declined dramatically.

The overall trends for particulate matter emissions (PM_{10} and $PM_{2.5}$) also show an overall improvement when compared to historic conditions. Direct emissions of PM_{10} have remained somewhat constant in the Basin and direct emissions of $PM_{2.5}$ have decreased slightly since 1975. Area-wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions. Despite the overall decrease, ambient concentrations still exceed the State annual and 24-hour PM_{10} standards; and the Basin is also currently designated as nonattainment under the State and national $PM_{2.5}$ standards. Measures adopted under the Basin $PM_{2.5}$ State Implementation Plan (SIP), as well as programs to reduce ozone and diesel particulate matter (DPM) will help in reducing regional ambient $PM_{2.5}$ levels.

CO concentrations in the Basin have also decreased markedly when compared to past conditions — evidenced by a more than 72 percent in the peak 8-hour CO indicator since 1988. The number of CO exceedance days has also declined. During 1988 there were 73 days above the State standard and 65 days above the national standard.

However, since 2003, there were no exceedance days for either standard. The Basin in its entirety is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations.

4.3.5.2 Diesel Emissions and Diesel Particulate Matter (DPM) Reduced Basin-wide

CARB, and the Ports of Los Angeles and Long Beach have adopted regulations acting to reduce levels of DPM. In summary, these regulations require that older, more polluting trucks be replaced with newer, cleaner trucks. These regulatory requirements have yielded reductions in DPM emissions generated per mile traveled and associated reductions in ambient DPM levels within the Basin. Further DPM emissions reductions are anticipated as additional inefficient and polluting vehicles are retired from service.
DPM emissions are a known source of increased cancer risks. Paralleling the decline in Basin-wide DPM levels noted above, information available from CARB indicates that overall cancer risk throughout the basin has had a declining trend since 1990. Additional reductions in diesel risk exposure are anticipated to result from CARB's Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. The key elements of the Plan include: retrofit emission control devices for older diesel engines; adoption of stringent standards for new diesel engines; and reduced sulfur content of diesel fuel to protect advanced technology emission control devices on newer diesel engines.

4.3.6 STANDARDS OF SIGNIFICANCE

As identified within the *CEQA Guidelines*, air quality impacts would be considered potentially significant if the Project would:

- Conflict with or obstruct implementation of the applicable air quality plan;

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors;

- Expose sensitive receptors to substantial pollutant concentrations; or

- Create objectionable odors affecting a substantial number of people.

4.3.6.1 SCAQMD Thresholds

In order to determine whether or not a given project would cause a significant effect on air quality, the impact of the project must be determined by examining the types and levels of emissions generated and their impacts on factors that affect air quality. To accomplish this determination of significance, the SCAQMD has established air pollution thresholds against which a proposed project can be evaluated and assist lead agencies in determining whether or not the impacts of a project are significant. If the project's air pollutant emissions exceed applicable SCAQMD thresholds, then the impact should be considered significant. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the State *CEQA Guidelines*, the SCAQMD recommends that its regional and local air quality thresholds for regulated pollutants (summarized below) be employed by lead agencies in determining whether criteria air pollutant emissions impacts generated by construction or operations of a given project are significant.

Regional Thresholds

The SCAQMD has developed regional significance thresholds for regulated pollutants, as summarized at Table 4.3-3. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2011) indicate that any projects in the SCAB with daily emissions that exceed applicable thresholds should be considered as having an individually and cumulatively significant air quality impact. Conversely, projects in the SCAB with daily

emissions not exceeding applicable thresholds should be considered as having an individually and cumulatively less-than-significant air quality impact.

Table 4.3-3
Regional Thresholds

Pollutant	Construction Threshold (Maximum Daily Emissions)	Operational Threshold (Maximum Daily Emissions)
NO_x	100 lbs./day	55 lbs./day
VOC	75 lbs./day	55 lbs./day
PM_{10}	150 lbs./day	150 lbs./day
$PM_{2.5}$	55 lbs./day	55 lbs./day
SO_x	150 lbs./day	150 lbs./day
CO	550 lbs./day	550 lbs./day
Lead	3 lbs./day	3 lbs./day

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

Carbon Monoxide Concentrations (CO "hot spots") Thresholds

CO "hot spots" are areas of carbon monoxide concentrations exceeding national or state air quality standards. CO hotspots typically occur as a result of excessive vehicular idling, often associated with traffic backups at underperforming intersections or congested roadway links. SCAQMD also recommends an evaluation of potential localized CO "hot spot" impacts for projects that may adversely affect, or substantially contribute to, level of service impacts along area roadway segments or at area intersections. Based on the SCAQMD *CEQA Air Quality Handbook* (1993), a project's localized CO emissions impacts would be significant if they exceed the following California standards for localized CO concentrations:

- 1-hour CO standard of 20.0 parts per million (ppm);
- 8-hour CO standard of 9.0 ppm.

Localized Significance Thresholds (LSTs)

The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standard (NAAQS or CAAQS) at the nearest residence or sensitive receptor. LSTs applicable to the Project are presented at Table 4.3-4.

Table 4.3-4
Localized Significance Thresholds

Pollutant	Construction Threshold (Maximum Concentration at Receptor)	Operational Threshold (Maximum Concentration at Receptor)
CO (1-Hour Concentration)	20.0 ppm	20.0 ppm
CO (8-Hour Concentration)	9.0 ppm	9.0 ppm
NO_2	0.18 ppm	0.18 ppm
PM_{10}	10.4 μg/m^3	2.5 μg/m^3
$PM_{2.5}$	10.4 μg/m^3	2.5 μg/m^3

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes:
LSTs for CO and NO_2 are inclusive of ambient pollutant concentrations. Impacts would be potentially significant if Project-source pollutant emissions plus ambient concentrations would exceed the indicated LST(s) for CO and/or NO_2.
LSTs for PM_{10} and $PM_{2.5}$ are based on SCAQMD Rule 403. That is, the Basin is in nonattainment for PM_{10} and $PM_{2.5}$, and the threshold is therefore established as an allowable change in concentration. Background concentrations are irrelevant.

Health Risk Assessment (HRA) Thresholds

Carcinogenic Risks

The SCAQMD *CEQA Air Quality Handbook* (1993) states that emissions of Toxic Air Contaminants (TACs) are considered significant if a Health Risk Assessment shows an increased cancer risk of greater than 10 incidents per million population. Consistent with the aforementioned SCAQMD *Handbook* cancer risk threshold, for the purposes of this analysis, an increase in cancer risk of 10 incidents per million population is considered significant.

Noncarcinogenic Risks

Noncarcinogenic risks are numerically expressed as a Hazard Index (HI), with a threshold HI of 1.0. Noncarcinogenic Hazard Indices calculated to be less than 1.0 are considered less-than-significant.

4.3.7 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.3.7.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant air quality impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study. All CEQA checklist considerations addressing air quality were determined to have potentially significant impacts warranting further analysis, and are discussed below. Please also refer to Initial Study Checklist Item III., "Air Quality."

4.3.7.2 Impact Statements

Following is an analysis of potential air quality impacts that are expected to occur as a result of the Project. Potential emissions are considered for Project construction and operation. For each topical discussion, potential impacts are evaluated under applicable criteria established above at Section 4.3.6, "Standards of Significance."

Potential Impact: ***Conflict with or obstruct implementation of the applicable air quality plan.***

Impact Analysis: The Project site is located within the SCAB, which is characterized by relatively poor air quality as measured under existing NAAQS and CAAQS The SCAQMD has jurisdiction over an approximately 12,000-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with

the SCAG, county transportation commissions, and local governments, as well as state and federal agencies, to reduce emissions from stationary, mobile, and indirect sources to meet state and national ambient air quality standards.

Currently, these state and national air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) outlining strategies to achieve state and national ambient air quality standards. AQMPs are periodically updated to reflect technological advances, recognize new or pending regulations, more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy.

AQMP Consistency

The AQMP, last updated in 2012, incorporates the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy ("2012 RTP") and updated emission inventory methodologies for various emissions source categories. Air quality conditions and trends presented in the 2012 AQMP assume that regional development will occur in accordance with population growth projections identified by SCAG in its 2012 RTP.

The SCAG 2012 RTP in turn derives its assumptions, in part, from general plans of cities located within the SCAG region. Accordingly, if a project is consistent with the development and growth projections reflected in the adopted general plan, it is considered consistent with the growth assumptions in the 2012 AQMP. The 2012 AQMP further assumes that development projects within the region will implement appropriate strategies to reduce air pollutant emissions, thereby promoting timely implementation of the AQMP.

Criteria for determining consistency with the AQMP are identified at Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD *CEQA Air Quality Handbook* (1993), as listed below. Project consistency with, and support of these criteria is presented subsequently.

- Criterion No. 1: The project under consideration will not result in an increase in the frequency or severity of existing NAAQS/CAAQS air quality violations or cause or contribute to new NAAQS/CAAQS violations; or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- Criterion No. 2: The project under consideration will not exceed the assumptions in the AQMP in 2011 or increments based on the years of Project build-out phase.

Criterion No. 1

The violations that Criterion No. 1 refers to are the CAAQS and NAAQS. The CAAQS and NAAQS comprise, and are reflected in, the SCAQMD Localized Significance Thresholds (LSTs) described within this Section. It is noted here that the CAAQS and NAAQS are not equivalent to SCAQMD regional emissions thresholds. The first AQMP consistency criterion specifically inquires whether or not a project would "result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations . . ." The only way to effectively answer this question is to determine if the NAAQS or CAAQS are exceeded – both of which are concentration-based thresholds, as opposed to the regional burden emissions "pounds per day" thresholds established by the SCAQMD. The SCAQMD employs these regional thresholds to allow for and establish uniform mitigation requirements for all projects. However, evaluating whether a project would generate emissions exceeding SCAQMD regional thresholds does not answer the first criterion question since these regional thresholds are not tied back to the CAAQS/NAAQS.

As discussed subsequently in this Section, the Project LST analysis substantiates that Project construction-source emissions and operational-source emissions would not exceed applicable LSTs, and therefore would not violate NAAQS or CAAQS Further, the Project would implement applicable best available control measures (BACMs), and would comply with applicable SCAQMD rules, acting to further reduce its already less-than-significant air pollutant emissions. Moreover, the mixed-use characteristics of the

Project, complemented by its urban location proximate to local and regional transportation facilities acts to reduce vehicle miles traveled (VMT) and associated mobile-source (vehicular) emissions. Additionally, Project incorporation of contemporary energy-efficiency/energy conservation technologies and operational programs; and compliance with SCAQMD emissions reductions and control requirements act to reduce stationary-source air emissions. These Project attributes and features are consistent with and support AQMP air pollution reduction strategies and promote timely attainment of AQMP air quality standards. On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

Criterion No. 2

Criterion No. 2 addresses consistency (or inconsistency) of a given project with approved local and regional land use plans, and associated potential AQMP implications. That is, AQMP emissions models and emissions control strategies are based in part on land use data provided by local general plan documentation; and regional plans, which reflect and incorporate local general plan information. Projects that propose general plan amendments may increase the intensity of use and/or result in higher traffic volumes, thereby resulting in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. However, if a given project is consistent with and does not otherwise exceed the growth projections in the applicable local general plan, then that project would be considered consistent with the growth assumptions in the AQMP and would not affect the AQMP's regional emissions inventory for the Basin.

The General Plan Amendment and Zone Change proposed by the Project are not specifically reflected in the current AQMP land use and growth assumptions. The changes in land use designations proposed by the Project would, however, decrease rather than increase the effective development intensity of the subject site when compared to assumptions reflected in The Ontario Plan (TOP) Policy Plan, TOP EIR and the current AQMP. More specifically, The Ontario Plan Policy Plan, and Policy Plan EIR reflect buildout of the subject site consisting of more than 2,900 residential units and approximately 7.5 million square feet of non-residential (hotel/office/retail) uses. This is

substantially more intense than the Project, which proposes approximately 800 residential units, and approximately 4.15 million square feet of non-residential (hotel/office/retail/industrial) uses. Largely because of decreased trip generation characteristics, the Project would likely result in an incremental decrease in operational-source air pollutant emissions when compared to emissions that would be generated pursuant to development of the site as envisioned under the Policy Plan and The Ontario Plan EIR. The comparative decrease in operational-source emissions that would result from the Project's proposed change in land use designations would not require revision to the AQMP growth assumptions for the City and region, nor would the proposed change in land use designations affect the current regional emissions inventory for the Basin. On this basis, the Project would conform to Consistency Criterion No. 2.

AQMP Consistency Conclusion

The Project would not result in or cause NAAQS or CAAQS violations. The Project's proposed land use designation for the subject site does not materially affect potential development intensities when compared to those assumed in the adopted The Ontario Plan Policy Plan, The Ontario Plan EIR, and the current AQMP. Further, the Project's proposed change in land use designation for the subject site would not generate operational-source criteria pollutant emissions not already reflected in the current AQMP regional emissions inventory. Based on the preceding, the Project is considered to be consistent with the AQMP.

Potential Impact: ***Violate any air quality standard or contribute substantially to an existing or projected air quality violation.***

Impact Analysis: The latest SCAQMD/California Air Pollution Control Officers Association (CAPCOA)-approved version of the California Emissions Estimator Model (CalEEMod, v2013.2.2) was utilized to estimate Project-related air pollutant emissions levels. Project emissions levels were then compared to applicable SCAQMD thresholds in order to determine if air quality standards would be violated; or if Project emissions

would contribute substantially to existing or projected air quality violations. Unless otherwise noted, CalEEMod default values and assumptions were applied throughout.

REGIONAL IMPACTS

Construction-Source Air Pollutant Emissions

Project construction is anticipated to occur June 2015 through September 2016. Typical Project construction activities (listed below) would generate emissions of CO, VOC, NO_x, SOx, PM_{10}, and $PM_{2.5}$.

- Grading;
- Building Construction;
- Paving; and
- Architectural Coatings.

Modeled construction-source emissions reflect all on-site construction activities and also account for associated construction worker commutes and vendor deliveries. Estimated maximum daily Project construction-source emissions are summarized at Table 4.3-5.

Table 4.3-5
Construction-Source Emissions Summary (lbs/day)

	Emissions (pounds per day)					
Year	**VOC**	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
2015	49.16	588.45	356.84	0.45	85.74	52.00
2016	46.93	555.90	341.72	0.45	84.19	50.58
2017	330.25	208.17	262.23	0.52	33.56	16.66
2018	330.47	521.05	618.07	1.36	124.78	61.24
2019	327.65	392.34	612.76	1.40	85.55	35.48
2020	201.75	206.56	303.84	0.66	36.74	16.74
Maximum Daily Emissions	**330.47**	**588.45**	**618.07**	**1.40**	**124.78**	**61.24**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**YES**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

As indicated at Table 4.3-5, unmitigated Project construction-source air pollutant emissions would exceed applicable SCAQMD regional thresholds for VOC and NO_x, CO, and $PM_{2.5}$. These are potentially significant impacts.

Level of Significance: Potentially Significant.

Mitigation Measures:

4.3.1 The following requirements shall be incorporated into Project plans and specifications in order to ensure implementation of SCAQMD Rule 403 and limit fugitive dust emissions:

- *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour;*

- *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day;*

- *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less; and*

- *Only "Zero-Volatile Organic Compounds" paints (no more than 150 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used.*

4.3.2 Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.

4.3.3 During grading activity, all rubber tired dozers and scrapers (≥ 150 horsepower) shall be CARB Tier 3 Certified or better. Additionally, during grading activity, total horsepower-

hours per day for all equipment shall not exceed 149,840; and the maximum (actively graded) disturbance area shall not exceed 26 acres per day.

Level of Significance After Mitigation: ***Significant and Unavoidable.*** Table 4.3-6 summarizes Project construction-source emissions after the implementation of Mitigation Measures 4.3.1 through 4.3.3. As indicated at Table 4.3-6, even with the application of mitigation, maximum daily Project construction-source emissions would exceed applicable SCAQMD regional thresholds for VOC, NO_x, and CO.

Table 4.3-6
Construction-Source Emissions Summary–With Mitigation (lbs/day)

	Emissions (pounds per day)					
Year	**VOC**	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
2015	15.05	249.63	248.07	0.45	33.82	20.95
2016	22.06	242.91	246.23	0.45	33.47	20.63
2017	206.92	178.10	263.72	0.52	32.11	15.38
2018	217.62	352.42	624.52	1.36	83.84	37.32
2019	201.72	354.00	621.90	1.40	83.78	33.95
2020	132.47	196.19	307.58	0.66	36.28	16.35
Maximum Daily Emissions	**217.62**	**354.00**	**624.52**	**1.40**	**83.84**	**37.32**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

Mitigation measures proposed by the Project are consistent with and would support construction-source air quality mitigation measures identified at The Ontario Plan EIR Mitigation Measure 3-1 (please refer to The Ontario Plan EIR, pp. 5.3-27, 5.3-28). In this latter regard, and paralleling the Project AQIA findings presented here, The Ontario Plan EIR air quality impact analysis concludes that even with the application of mitigation:

"... the likely scale and extent of construction activities pursuant to The Ontario Plan would likely continue to exceed the relevant SCAQMD

> thresholds for at least some projects. Consequently, construction-related air quality impacts associated with development of the Proposed Land Use Plan are deemed to be significant" (The Ontario Plan Draft EIR, p. 5.3-11).

The Project would not result in significant construction-source air quality impacts not already considered and addressed in The Ontario Plan EIR.

Operational-Source Air Pollutant Emissions

Project operational activities associated with the Project would result in emissions of VOC, NO_x, CO, SO_X, PM_{10}, and $PM_{2.5}$. Project operational emissions would be generated by the mobile and stationary/area sources listed below:

Mobile Sources

- Car and truck traffic; and
- Fugitive dust related to vehicular travel.

Stationary/Area Sources

- Combustion emissions associated with natural gas and electricity use;
- Landscape maintenance equipment;
- On-site equipment operations (e.g., yard trucks, utility tractors);
- Hearths/fireplaces emissions;
- Emissions from consumer products; and
- Architectural coatings.

Project operational emissions sources are described in the following paragraphs, and source emissions are quantified and summarized subsequently. Unless otherwise noted, CalEEMod default parameters were employed throughout.

Mobile Sources

Vehicle Exhaust/Tailpipe Emissions

Project-related operational-source air quality impacts derive primarily from vehicle trips generated by the Project. The Project would generate additional car and truck traffic, resulting in additional vehicle exhaust air pollutant emissions impacts. Vehicle exhaust impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. Vehicle trip characteristics available from the Project Traffic Impact Analysis (Project TIA, EIR Appendix C) were employed in the Project AQIA. Resulting vehicular-source emissions impacts are considered to accurately reflect likely maximum air quality impacts that would result from the Project described herein (please refer to Draft EIR Section 3.0, Project Description). As a point of reference, vehicular-source emissions have also been modeled employing the more generalized trip generation rates and fleet mix assumptions presented in SCAQMD's *Draft Warehouse Truck Trip Study.*

Comparison of emissions estimates as modeled in the Project AQIA with emissions estimates based on the *Draft Warehouse Truck Trip Study* indicates that vehicular-source emissions would be increased employing the Draft Warehouse Truck Trip Study modeling assumptions and protocols. This would however, have no material effect on Project AQIA conclusions regarding the significance of air quality impacts under Project Buildout Conditions. That is, operational-source air quality impacts determined to be significant under Project Buildout Conditions pursuant to the Project AQIA would remain significant if employing the *Draft Warehouse Truck Trip Study* protocols and assumptions. Likewise, operational-source air quality impacts determined to be less-than-significant under Project Buildout Conditions pursuant to the Project AQIA would

remain less-than-significant if employing the *Draft Warehouse Truck Trip Study* protocols and assumptions.[4]

In these regards, the predominance of Project operational-source emissions would be the byproduct of mobile-source (Project traffic) emissions (approximately 90 percent of the Project operational-source emissions, by weight, would be generated by Project traffic. Employing the *Draft Warehouse Truck Trip Study* protocols and assumptions affects only the mobile-source emissions component of the Project AQIA operational-source emissions analyses.

Mobile-source vehicle tail pipe emissions cannot be materially controlled or mitigated by the Lead Agency or the Project Applicant. Rather, these emissions sources are regulated by CARB and USEPA. Thus, while quantified emissions estimates may increase employing the *Draft Warehouse Truck Trip Study* protocols and assumptions, the significance of air quality impacts and their ability to be mitigated as presented in the Project AQIA and summarized herein would not be substantively altered. As summarized herein at Section 4.3.5, Regional Air Quality Trends, as the result of CARB and USEPA actions, Basin-wide vehicular-source emissions have been reduced dramatically over the past years and are expected to further decline as clean vehicle and fuel technologies improve. Future CARB and USEPA actions could be expected to have a positive effect on Project-related vehicular-source emissions, resulting in incremental reductions in vehicular-source emissions when compared to either the Project AQIA emissions estimates, or emissions estimates based the *Draft Warehouse Truck Trip Study* protocols and assumptions.

Moreover, it is again noted that Project AQIA is considered accurate in describing and quantifying the Project air quality impacts based on the best available Project-specific

[4] Under 2017 Interim Development Conditions, the Project AQIA indicates operational-source $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds. If employing the *Draft Warehouse Truck Trip Study* protocols and assumptions there would be a $PM_{2.5}$ emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source $PM_{2.5}$ emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions. Please refer also to the supplemental air quality analyses presented at EIR Appendix D.

information; as opposed to the more generalized approach reflected in the Warehouse Truck Trip Study. It is further recognized that as of the date of this EIR (January 2015), the *Draft Warehouse Truck Trip Study* has not been formally adopted for use in CEQA analyses, and is provided here as a point of reference.

Fugitive Dust Related to Vehicular Travel

Project traffic would be a source of fugitive emissions due to the generation of road dust including particulate matter resulting from tire wear.

Stationary/Area Sources

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every development project. Criteria pollutants are emitted through the generation of electricity and the consumption of natural gas. Because electrical generating facilities for the Project area are located either outside the region, are separately evaluated under their own environmental analyses, and/or are offset through the use of pollution credits for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity have been excluded from the analysis presented here.

Landscape Maintenance Emissions

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project.

On-Site Equipment Operations

Industrial warehouse uses such as those that would be implemented under the Project typically require use of cargo handling equipment for on-site movement of containers and chassis. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard

goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks typically have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD, high-cube warehouse projects typically employ 3.6 yard trucks per million square feet of building space. For the Project, assumed on-site operational equipment supporting the Project industrial land uses would include a total of twelve 200 hp yard tractors, operating at 4 hours a day for 260 days of the year. All on-site equipment would be electrically powered.

Hearth/Fireplace Emissions

The emissions associated with use of hearths/fireplaces were calculated based on assumptions provided in the CalEEMod model. The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. In order to account for the requirements of this Rule, the unmitigated CalEEMod model estimates were adjusted to remove wood burning stoves and fireplaces. As the Project is required to comply with SCAQMD Rule 445, the removal of wood burning stoves and fireplaces is not considered "mitigation" although it must be identified as such in CalEEMod in order to accurately estimate hearth/fireplace emissions.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which, when released in the atmosphere, can react to form ozone and other photochemically reactive pollutants. In the case of the commercial/retail uses proposed by the Project, no substantive on-site use of consumer products is anticipated.

Architectural Coatings

Over time, maintenance of Project facilities would require exterior application of architectural coatings. Such facility maintenance would generate air pollutant emissions

resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings.

Operational Emissions Summary

Maximum daily Project operational-source air pollutant emissions are summarized at Tables 4.3-7 and 4.3-8. Applicable SCAQMD regional significance thresholds are also indicated.

Table 4.3-7 presents unmitigated operational-source emissions for 2017, reflecting the completion of all industrial uses proposed within the Planning Area 1 of the proposed Meredith SPA. Table 4.3-7 also reflects operational emissions generated by currently (2014) requested entitlements for 86,000 SF of commercial/retail uses within Planning Area 2. These commercial/retail uses are anticipated to be complete and occupied by 2017. Table 4.3-8 presents unmitigated operational-source emissions for Project Buildout conditions in 2020.

Table 4.3-7
Operational-Source Emissions Summary-2017
Maximum Daily Winter/Summer (lbs/day)

Emissions Source	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Planning Area 1						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	78.66	2.96e-3	0.31	2.00e-5	1.13e-3	1.13e-3
Building Energy Consumption	0.56	5.13	4.31	0.03	0.39	0.39
On-Site Equipment	2.40	33.35	10.76	0.04	1.09	1.00
Stationary/Area Sources-Subtotal	81.62	38.48	15.38	0.07	1.48	1.39
Mobile Sources						
Passenger Cars	14.86	17.02	234.86	0.67	60.35	16.22
Trucks	35.71	617.39	358.34	1.88	71.33	26.19
Mobile Sources-Subtotal	50.57	634.41	593.20	2.55	131.68	42.41
Planning Area 1 Subtotal	**132.19**	**672.89**	**608.58**	**2.62**	**133.16**	**43.80**
Planning Area 2						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	2.25	8.00e-5	8.95e-3	---	3.00e-5	3.00e-5
Building Energy Consumption	5.03e-3	0.05	0.04	2.70e-4	3.48e-3	3.48e-3
Stationary/Area Sources-Subtotal	2.25	0.05	0.04	---	---	---
Mobile Sources	14.42	36.71	140.65	0.31	20.18	5.69

Table 4.3-7
Operational-Source Emissions Summary-2017
Maximum Daily Winter/Summer (lbs/day)

Emissions Source	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Planning Area 2 Subtotal	**16.67**	**36.75**	**140.69**	**0.31**	**20.18**	**5.70**
Planning Areas 1 and 2 Total	**148.86**	**709.64**	**749.27**	**2.93**	**153.34**	**49.50**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Modeling results may not total 100% due to rounding. Scientific notation (e-3, et al.) expresses exponential quantities; e.g., 2.96 e-3 = 2.93 $x10^{-3}$ = 2.96 x 0.001 = 0.00296.

Table 4.3-8
Operational-Source Emissions Summary-2020
Maximum Daily Winter/Summer (lbs/day)

Emissions Source	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Planning Area 1						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	78.66	2.85e-3	0.31	2.00e-5	1.11e-3	1.11e-3
Building Energy Consumption	0.69	6.24	5.24	0.04	0.48	0.48
On-Site Equipment	1.85	22.60	9.87	0.04	0.75	0.68
Stationary/Area Sources-Subtotal	81.20	28.84	15.42	0.08	1.23	1.16
Mobile Sources						
Passenger Cars	10.56	13.19	179.45	0.67	60.37	16.23
Trucks	31.39	457.59	300.49	1.86	70.38	25.31
Mobile Sources-Subtotal	41.95	470.78	479.94	2.53	130.75	41.54
Planning Area 1 Subtotal	**122.60**	**499.62**	**495.36**	**2.61**	**131.98**	**42.70**
Planning Areas 2, 3, & 4						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	73.10	0.77	66.74	3.52e-3	1.44	1.43
Building Energy Consumption	0.91	8.07	5.67	0.05	0.63	0.63
Stationary/Area Sources-Subtotal	74.01	8.84	72.41	0.05	2.07	2.06
Mobile Sources	111.16	289.86	1,131.00	3.15	208.74	58.65
Planning Areas 2, 3, & 4 Subtotal	**185.17**	**298.70**	**1,203.40**	**3.20**	**210.81**	**60.70**
SPECIFIC PLAN AREA TOTAL	**307.77**	**798.32**	**1,698.76**	**5.89**	**342.79**	**103.40**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Modeling results may not total 100% due to rounding. Scientific notation (e-3, et al.) expresses exponential quantities; e.g., 2.85 e-3 = 2.85 $x10^{-3}$ = 2.85x 0.001 = 0.00285.

Level of Significance: Potentially Significant. As indicated at Table 4.3-7, operational-source emissions generated by the 2017 increment of Project development would exceed the applicable SCAQMD regional thresholds for VOC, NO_x, CO and PM_{10}.[5] These are potentially significant impacts. As indicated at Table 4.3-8, under Project Buildout conditions in 2020, Project operational-source emissions would exceed the applicable SCAQMD regional thresholds for VOC, NO_x, CO, PM_{10} and $PM_{2.5}$. These are potentially significant impacts.

Operational-source emissions are reduced in part through the Project's conservation/sustainability design features and attributes described at EIR Section 3.4.10, "Energy Efficiency/Sustainability," and restated below:

- Energy-saving and sustainable design features and operational programs would be incorporated into all facilities developed pursuant to the Meredith SPA. Planning Areas 1 through 4 would provide sustainable design features necessary to achieve a "Certified" rating under the United States Green Building Council's Leadership in Energy & Environmental Design (LEED) programs. The Project also incorporates and expresses the following design features and attributes promoting energy efficiency and sustainability. Because these features/attributes are integral to the Project, and/or are regulatory requirements, they are not considered to be mitigation measures.

- The developer of the industrial phase of the Project (Planning Area 1) will install on the roofs of the warehouse buildings a photo-voltaic electrical generation system (PV system) capable of generating 1,600,000 kilowatt hours per year.[6] The developer may install the required PV system in phases on a pro rata square foot

[5] Under 2017 Interim Development Conditions, the Project AQIA indicates operational-source $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds. If employing the *Draft Warehouse Truck Trip Study* protocols and assumptions there would be a $PM_{2.5}$ emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source $PM_{2.5}$ emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions. Please refer also to the supplemental air quality analyses presented at EIR Appendix D.

[6] This electricity generation estimate is based on the amount of electricity to be consumed within Planning Area 1 at buildout and full occupancy.

basis as each building is completed; or if the PV system is to be installed on a single building, all of the PV system necessary to supply the PV estimated electrical generation shall be installed within two years (24 months) of the first building that does not include a PV system receives a certificate of occupancy.

- All on-site cargo handling equipment (CHE) would be powered by non-diesel fueled engines (i.e., electric engines).

- Regional vehicle miles traveled (VMT) and associated vehicular-source emissions are reduced by the following Project design features/attributes:

    - Pedestrian connections shall be provided to surrounding areas consistent with the City's General Plan. Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. The Project would provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The Project would minimize barriers to pedestrian access and interconnectivity

    - The Project's mixed-use configuration and proposed collocation of Industrial, Urban Commercial and Urban Residential land uses together with supporting amenities would tend to decrease the propensity for, and length of, commuter vehicle travel.

- To reduce water demands and associated energy use, subsequent development proposals within the Project site would be required to implement a Water Conservation Strategy and demonstrate a minimum 20% reduction in indoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy)[7].

[7] Reduction of 20% indoor water usage is consistent with the current CalGreen Code performance standards for residential and non-residential land uses. Per CalGreen, the reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code.

Development proposals within the Specific Plan Area would also be required to implement the following:

- Landscaping palette emphasizing drought tolerant plants consistent with provisions of the Meredith SPA and/or City requirements;

- Use of water-efficient irrigation techniques consistent with provisions of the Meredith SPA and/or City requirements;

- U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

Project operational-source emissions are further reduced through application of the following mitigation measures.

Mitigation Measures:

4.3.4 *Prior to the issuance of building permits, the Project Applicant shall submit energy demand calculations to the City (Planning and Building Departments) demonstrating that the increment of the Project for which building permits are being requested would achieve a minimum 5% increase in energy efficiencies beyond incumbent California Building Code Title 24 performance standards. Representative energy efficiency/energy conservation measures to be incorporated in the Project would include, but would not be limited to, those listed below (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that would comparably reduce energy consumption and promote energy conservation would also be acceptable):*

- *Increase in insulation such that heat transfer and thermal bridging is minimized;*
- *Limit air leakage through the structure and/or within the heating and cooling distribution system;*
- *Use of energy-efficient space heating and cooling equipment;*

- *Installation of electrical hook-ups at loading dock areas;*
- *Installation of dual-paned or other energy efficient windows;*
- *Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards;*
- *Installation of automatic devices to turn off lights where they are not needed;*
- *Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;*
- *Design of buildings with "cool roofs" using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;*
- *Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; and*
- *Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.*

4.3.5 *The developer of the industrial phase of the Project (Planning Area 1) will install on the roofs of the warehouse buildings a photo-voltaic electrical generation system (PV system) capable of generating 1,600,000 kilowatt hours per year. The developer may install the required PV system in phases on a pro rata square foot basis as each building is completed; or if the PV system is to be installed on a single building, all of the PV system necessary to supply the PV estimated electrical generation shall be installed within two years (24 months) of the first building that does not include a PV system receives a certificate of occupancy.*

Level of Significance After Mitigation: *Significant and Unavoidable*. Mitigated Project operational-source emissions under year 2017 conditions are summarized at Table 4.3-9; Year 2020 mitigated Project operational-source emissions are summarized at Table 4.3-10.

Table 4.3-9
2017 Operational-Source Emissions Summary–With Mitigation
Maximum Daily Winter/Summer (lbs/day)

Emissions Sources	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Planning Area 1						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	78.66	2.96e-3	0.31	2.00e-5	1.13e-3	1.13e-3
Building Energy Consumption	0.55	5.02	4.21	0.03	0.38	0.38
On-Site Equipment	2.40	33.35	10.76	0.04	1.09	1.00
Stationary/Area Sources-Subtotal	**81.61**	**38.37**	**15.28**	**0.07**	**1.47**	**1.38**
Mobile Sources						
Passenger Cars	14.86	17.02	234.93	0.67	60.35	16.22
Trucks	35.07	617.39	338.09	1.88	71.33	26.19
Mobile Sources-Subtotal	**49.93**	**634.41**	**573.02**	**2.55**	**131.68**	**42.41**
Planning Area 1 Subtotal	**131.54**	**672.78**	**588.30**	**2.62**	**133.15**	**43.79**
Planning Area 2						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	2.25	8.00e-5	8.95e-3	---	3.00e-5	3.00e-5
Building Energy Consumption	4.82e-3	0.04	0.04	2.60e-4	3.33e-3	3.33e-3
Stationary/Area Sources-Subtotal	**2.25**	**0.04**	**0.05**	**---**	**---**	**---**
Mobile Sources	**14.42**	**36.71**	**140.65**	**0.31**	**20.18**	**5.69**
Planning Area 2 Subtotal	**16.67**	**36.71**	**140.70**	**0.31**	**20.18**	**5.69**
SPECIFIC PLAN AREA TOTAL	**148.21**	**709.49**	**729.00**	**2.93**	**153.33**	**49.48**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Modeling results may not total 100% due to rounding. Scientific notation (e-3, et al.) expresses exponential quantities; e.g., 2.96 e-3 = 2.93 $x10^{-3}$ = 2.96 x 0.001 = 0.00296.

Table 4.3-10
2020 Operational-Source Emissions Summary–With Mitigation
Maximum Daily Winter/Summer (lbs/day)

Emissions Sources	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Planning Area 1						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	78.66	2.85e-3	0.31	2.00e-5	1.11e-3	1.11e-3
Building Energy Consumption	0.67	6.07	5.10	0.04	0.46	0.46
On-Site Equipment	1.85	22.60	9.87	0.04	0.75	0.68
Stationary/Area Sources-Subtotal	81.18	28.67	15.28	0.08	1.21	1.14
Mobile Sources						
Passenger Cars	10.57	13.26	180.45	0.67	60.74	16.33
Trucks	31.39	457.59	321.54	1.86	70.38	25.31
Mobile Sources-Subtotal	41.96	470.85	501.99	2.53	131.12	41.64
Planning Area 1 Sub-total	**122.59**	**499.52**	**517.27**	**2.61**	**132.33**	**42.78**
Planning Areas 2, 3, & 4						
Stationary/Area Sources						
Landscaping, Maintenance, et al.	73.10	0.77	66.74	3.52e-3	1.44	1.43
Building Energy Consumption	0.87	7.72	5.41	0.05	0.60	0.60
Stationary/Area Sources-Subtotal	73.97	8.49	72.15	0.05	2.04	2.03
Mobile Sources	103.20	225.89	912.75	2.32	151.78	42.71
Planning Areas 2, 3, & 4 Subtotal	**177.17**	**234.37**	**984.89**	**2.37**	**153.82**	**44.73**
SPECIFIC PLAN AREA TOTAL	**300.31**	**733.89**	**1502.16**	**4.98**	**286.15**	**87.51**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Modeling results may not total 100% due to rounding. Scientific notation (e-3, et al.) expresses exponential quantities; e.g., 2.85 e-3 = 2.85 $x10^{-3}$ = 2.85x 0.001 = 0.00285.

As indicated at Table 4.3-9, under 2017 conditions, even with the application of mitigation, Project operational-source VOC, NO_x, CO, and PM_{10} emissions would exceed applicable thresholds.[8] Similarly, as indicated at Table 4.3-10, under 2020 conditions, even with the application of mitigation, Project operational-source VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions would exceed applicable thresholds. ***Individually and cumulatively, these are significant and unavoidable air quality impacts.***

As also indicated at Tables 4.3-9 and 4.3-10, the predominance of Project operational-source emissions would be the byproduct of mobile-source (Project traffic) fuel combustion (approximately 90 percent of the Project operational-source emissions, by weight, would be generated by Project traffic). Neither the Project Applicant nor the City has any regulatory control over these tail pipe emissions. Rather, vehicle tail pipe source emissions are regulated by CARB and USEPA. As summarized previously at 4.3.5, Regional Air Quality Trends, as the result of CARB and USEPA actions, Basin-wide vehicular-source emissions have been reduced dramatically over the past years and are expected to further decline as clean vehicle and fuel technologies improve. The Project would implement design features, and operational programs acting to reduce operational-source emissions. Mitigation measures identified in this EIR and compliance with all applicable SCAQMD Rules would further reduce Project operational-source emissions.

Regional Air Quality Impact Summary

- Even with the application of mitigation, Project maximum daily construction-source emissions would exceed SCAQMD regional thresholds for VOC, NO_x, and CO. Project construction-source emissions of VOC, NO_x, and CO would therefore be considered individually and cumulatively significant.

[8] Under 2017 Interim Development Conditions, the Project AQIA indicates the operational-source $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds. If employing the *Draft Warehouse Truck Trip Study* protocols and assumptions, there would be a $PM_{2.5}$ emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source $PM_{2.5}$ emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions. Please refer also to the supplemental air quality analyses presented at EIR Appendix D.

- Under 2017 conditions, even with the application of mitigation, Project maximum daily operational-source emissions would exceed applicable SCAQMD thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$.[9] These Project operational-source exceedances would therefore be considered individually and cumulatively significant.

- Under 2020 conditions, even with the application of mitigation, Project maximum daily operational-source emissions would exceed applicable SCAQMD thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$. These Project operational-source exceedances would therefore be considered individually and cumulatively significant.

LOCALIZED IMPACTS

Localized Significance Threshold (LST) Analysis

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the national and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, the NAAQS/CAAQS establish LSTs.

LSTs were developed in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. More specifically, to address potential Environmental Justice implications of localized air pollutant impacts, the SCAQMD adopted LSTs indicating whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). LSTs represent the maximum

[9] Under 2017 Interim Development Conditions, the Project AQIA indicates the operational-source $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds. If employing the *Draft Warehouse Truck Trip Study* protocols and assumptions there would be a $PM_{2.5}$ emissions regional threshold exceedance under 2017 Interim Development Conditions. Conservatively, and as a matter of public disclosure, operational-source $PM_{2.5}$ emissions are recognized as significant and unavoidable under 2017 Interim Development Conditions. Please refer also to the supplemental air quality analyses presented at EIR Appendix D.

emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standard at the nearest residence or sensitive receptor. Though not required, lead agencies may employ LSTs as another indicator of significance in its air quality impact analyses.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of the project are above or below state standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. For the nonattainment pollutants PM_{10} and $PM_{2.5}$, background ambient concentrations already exceed state and/or national standards. LSTs for PM_{10} and $PM_{2.5}$ are therefore based on SCAQMD Rules 403/1303 (construction-source/operational-source emissions respectively) and are established as an allowable change in concentration. Background concentrations are irrelevant.

Emissions Considered/Methodology

LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). The Project LST analysis incorporates, and is consistent with, protocols and procedures established by the SCAQMD *Final Localized Significance Threshold Methodology* (Methodology) (SCAQMD, June 2003). The SCAQMD Methodology clearly states that "off-site mobile emissions from the Project should NOT be included in the emissions compared to LSTs." Therefore, for purposes of the LST analysis, only "on-site" emissions were considered.

Receptors

Localized air quality impacts were evaluated at proximate sensitive receptor land uses. The nearest sensitive receptor land use (the Bernt School site) would abut industrial land uses proposed in Meredith SPA Planning Area 1. The Methodology recognizes that . . . "it is possible that a project may have receptors closer than 25 meters" [as is the case here]. Continuing, the Methodology states: "Projects with boundaries located closer

than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Accordingly, LSTs for the abutting Bernt School site were established at 25 meters.

Construction-Source Emissions LST Analysis

The SCAQMD has issued guidance on applying CalEEMod to LST analyses. In this regard, CalEEMod calculates construction emissions (off-road exhaust and fugitive dust) based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment.

Since CalEEMod calculates construction-source emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, the information at Table 4.3-11 is used to determine the maximum daily disturbed-acreage for comparison to LSTs. To ensure consistency with LST modeling of construction-source emissions provided herein, maximum use of Project construction equipment types and their hours of operation (during grading activity) would be limited through Mitigation Measures 4.3.1 through 4.3.3, and as further detailed at Table 4.3-11.

Table 4.3-11
Construction-Source Emissions LST Analysis-Site Disturbance

Equipment Type	Quantity	Operating Hours (each piece of equipment) per Day	Acres Disturbed (each piece of equipment) per 8 Hour Period	Total Acres Disturbed (equipment type) per Day
Graders	8	0.5	8	4.0
Rubber Tired Dozers	8	0.5	8	4.0
Crawler Tractors	4	0.5	8	2.0
Scrapers	16	1	8	16.0
Total Acres Disturbed per Day (all equipment)				**26.0**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

Based on the information presented at Table 4.3-11, localized emissions concentrations for construction-source were estimated employing the SCREEN3 dispersion model. Detailed modeling protocols are presented in the Project AQIA, included at EIR Appendix D. Table 4.3-12 summarizes maximum daily localized construction-source emissions impacts at the nearest sensitive receptor (the Bernt School site). As indicated, absent mitigation, maximum daily construction-source emissions would exceed applicable LSTs for PM_{10}. This is a potentially significant impact.

Table 4.3-12
Localized Construction-Source Emissions Summary (lbs/day)

	CO		**NO_2**	**PM_{10}**	**$PM_{2.5}$**
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	
Peak Day Localized Emissions	0.714	0.517	0.0424	14.20	8.64
Background Concentration*	3.0	1.3	0.069	---	---
Total Concentration	**3.71**	**1.82**	**0.11**	**14.20**	**8.64**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**YES**	**NO**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Background concentrations for CO and NO_2 are reported maximums from the last three years of available data. The Basin is non-attainment for PM_{10} and $PM_{2.5}$. Thresholds for PM_{10} and $PM_{2.5}$ therefore reflect absolute incremental increases in pollutant concentrations; irrespective of background concentrations. PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to previous Mitigation Measures 4.3.1 through 4.3.4.

Level of Significance After Mitigation: Less-Than-Significant. Table 4.3-13 identifies the maximum daily localized construction-source emissions impacts at the nearest receptor, as mitigated. With the implementation of Mitigation Measures 4.3.1 through 4.3.4, maximum-daily construction-source emissions would not exceed applicable SCAQMD LSTs.

Table 4.3-13
Localized Construction-Source Emissions Summary-With Mitigation (lbs/day)

	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	
Peak Day Localized Emissions	0.494	0.358	0.0179	5.53	3.46
Background Concentration*	3.0	1.3	0.069	---	---
Total Concentration	**3.49**	**1.66**	**0.09**	**5.53**	**3.46**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Background concentrations for CO and NO_2 are reported maximums from the last three years of available data. The Basin is non-attainment for PM_{10} and $PM_{2.5}$. Thresholds for PM_{10} and $PM_{2.5}$ therefore reflect absolute incremental increases in pollutant concentrations; irrespective of background concentrations. PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

Operational-Source Emissions LST Analysis

The Project Operational-Source Emissions LST Analysis evaluates emissions generated by all on-site stationary/area sources inclusive of on-site landscaping/maintenance activities, facility energy consumption, on-site equipment use (yard trucks, etc.), and all on-site passenger car and truck travel. Detailed operational-source localized emissions modeling information is presented in the Project AQIA, AQIA Appendix 3.2. Project operational-source localized emissions impacts are summarized at Table 4.3-14. As indicated, Project maximum daily operational-source emissions concentrations would not exceed applicable LSTs, and therefore would be less-than-significant.

Table 4.3-14
Localized Operational-Source Emissions Impacts Summary (lbs/day)

	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Operations)	
Peak Day Localized Emissions	0.062	0.045	0.003	0.332	0.320
Background Concentration*	3.0	1.3	0.069	---	---
Total Concentration	**3.06**	**1.35**	**0.07**	**0.332**	**0.320**
SCAQMD Localized Significance Threshold	20	9	0.18	2.5	2.5
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Notes: Background concentrations for CO and NO_2 are reported maximums from the last three years of available data. The Basin is non-attainment for PM_{10} and $PM_{2.5}$. LSTs for PM_{10} and $PM_{2.5}$ therefore reflect absolute incremental increases in pollutant concentrations; irrespective of background concentrations. PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

Level of Significance: Less-Than-Significant.

CO "Hot Spot" Analysis

As discussed below, the Project would not result in potentially adverse localized CO concentrations or "hot spots."

Adverse localized CO concentrations ("hot spots") are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentrations in the Project vicinity have declined over time, and have not violated applicable AAQS in the last three years of record.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. When the SCAQMD CEQA

Handbook was first prepared in 1993, the SCAB was designated nonattainment under the California AAQS and National AAQS for CO. As identified in the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) and subsequently within the SCAQMD's 2003 AQMP, peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon traffic periods. This hot spot analysis did not predict any violation of CO standards. It can, therefore, be reasonably concluded that projects (such as the proposed Project) that are not subject to the extremes in vehicle volumes and vehicle congestion that was evidenced in the 2003 Los Angeles hot spot analysis (as indicated at Table 4.3-15, none of the Project Study Area intersections would approach, much less exceed, traffic volumes and traffic congestion reflected in the 2003 Los Angeles hot spot analysis), would similarly not create or result in CO hot spots. Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts.

More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant localized CO emissions impact. The Project would not produce maximum peak hour traffic volumes traffic required to generate a CO hot spot either in the context of the 2003 Los Angeles hot spot study, or based on representative BAAQMD CO threshold considerations (please refer to Table 4.3-15). Therefore, CO hotspots are not an environmental impact of concern for the Project.

Table 4.3-15
TIA Study Area Intersection Maximum Peak Hour Traffic Volumes

Intersection	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Haven Ave & Fourth St	2,775/3,153	1,818/2,397	726/1,119	1,031/1,304	6,350/7,973
Archibald Ave & Inland Empire Blvd	2,310/2,680	1,945/2,080	570/1,276	655/776	5,480/6,812
Haven Ave & Inland Empire Blvd	4,076/3,636	2,212/2,943	506/869	290/818	7,084/8,266
Archibald Ave & I-10 Fwy Interchange	585/1,792	2,106/2,587	1,413/1,459	1,100/889	5,204/6,727

Source: *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

Level of Significance: Less-Than-Significant.

TOXIC AIR CONTAMINANTS HEALTH RISK ANALYSIS

Toxic Air Contaminants (TACs) of primary concern for the Project would be Diesel Particulate Matter (DPM) emissions generated by delivery trucks accessing the Project site. Project DPM sources are discussed below. Potential health risks of Project-related DPM emissions are described and evaluated subsequently.

Diesel Particulate Matter (DPM) Emissions

The Project would generate truck traffic, a portion of which may be diesel-powered. Diesel emissions DPM are known carcinogens and could increase area health risks. Accordingly, an analysis of potential long-term diesel exposure health risks is provided. To this end, the Project Health Risk Assessment (included at EIR Appendix D) characterizes and quantifies potential diesel emissions generated by, and health risk exposure resulting from, Project operations.

Truck trip generation characteristics presented in the Project TIA (*Meredith International Centre Specific Plan Amendment Traffic Impact Analysis* [Linscott Law & Greenspan Engineers] 2014) were utilized in the Project HRA. It should be noted that the Project TIA presents truck trips in terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of larger/longer truck vehicles at Study Area

intersections. For purposes of the HRA, however, the actual number and types of vehicles accessing the Project site (not PCEs) establishes the basis of the emissions quantification and analysis, and truck PCEs were not used. Rather, to more accurately estimate and model vehicular-source emissions, the actual number of vehicles, by vehicle classification [e.g., passenger cars (including light trucks) and heavy trucks] were used in the analysis.

Reflecting the greatest potential concentration of DPM sources within the Specific Plan Area, the Project HRA conservatively assumes that all of the Project's diesel truck traffic trips would be generated by the Meredith SPA Planning Area 1 light industrial uses and distribution warehouse facilities. DPM emissions modeling was then conducted for the Project Development "A" and "B" Options (please refer to EIR Section 3.0, Project Description for further discussion of and details regarding the "A" and "B" Development Options).[10]

For that portion of Planning Area 1 assumed to be developed with industrial uses (other than high-cube distribution warehouses) the vehicle fleet mix, as derived from the Project TIA, would be approximately 78.60% passenger cars and approximately 21.40% total trucks. Based on information provided in the Project TIA, and for the purposes of this analysis, 37.38% of all trucks are assumed to be Light-Heavy-Duty (LHD), 18.22% of all trucks are assumed to be Medium-Heavy-Duty (MHD), and 44.40% of all trucks are assumed to be Heavy-Heavy-Duty (HHD).

For that portion of Planning Area 1 assumed to be developed with high-cube distribution warehouses the vehicle fleet mix, as derived from the Project TIA, would be approximately 79.58% passenger cars and approximately 20.42% total trucks. Based on information provided in the Project TIA, and for the purposes of this analysis, 22.71% of

[10] Potential health risks were also modeled employing assumptions and protocols reflected in the SCAQMD *Draft Warehouse Truck Trip Study*. Under all analytic scenarios, Project-related DPM-source health risks would be reduced if employing methodologies and protocols identified in the *Draft Warehouse Truck Trip Study*. Please refer also to the supplemental air quality analyses presented at EIR Appendix D.

all trucks are assumed to be Medium-Heavy-Duty (MHD), and 60.35% of all trucks are assumed to be Heavy-Heavy-Duty (HHD).

The Project is required to comply with CARB's on-site truck idling limit of 5 minutes. SCAQMD staff recommends that HRA's assume a minimum of 15 minutes of on-site truck idling, which would take into account potential protracted on-site idling which could occur at loading/unloading areas, or other areas or instances where on-site truck traffic movements may be impeded or delayed. Consistent with SCAQMD recommendations, the Project HRA analysis assumed on-site truck idling for a period of 15 minutes.

Carcinogenic and Chronic Illness Impacts

The SCAQMD *CEQA Air Quality Handbook* (1993) states that emissions of Toxic Air Contaminants (TACs) are considered significant if a Health Risk Assessment shows an increased cancer risk of greater than 10 incidents per million population. Consistent with the stated SCAQMD *Handbook* cancer risk threshold, for the purposes of this analysis, an increase in cancer risk of 10 incidents per million population is considered significant. Also germane to the Project HRA, specific guidance in determining health risks from diesel emissions is provided in *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD) 2003.

Health risks associated with exposure to carcinogenic compounds are defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF is a measure of carcinogenic potential of a chemical when a dose is received through the inhalation pathway, and represents an upper-bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu g/m^3$) over a 70-year lifetime. The URFs utilized in this analysis were obtained from the California Environmental Protection Agency, Office of Environmental Health

Hazard Assessment (OEHHA). Please refer also to the Project HRA presented at EIR Appendix D for greater detail regarding calculated DPM exposures and resulting health DPM-source cancer risks. Consistent with OEHHA guidance and SCAQMD HRA protocols, Project-related DPM-source cancer risks were evaluated for three exposure scenarios: "Residential," "Worker," and "School Site/School Child." OEHHA-recommended exposure parameters for each scenario are summarized at Table 4.3-16.

Table 4.3-16
OEHHA Recommended Exposure Scenario Parameters

Exposure Parameter	Units	Residential	Worker	School Site/Child
Frequency	days/year	350	245	180
Duration	years	70	40	9
Inhalation Rate	L/kg-day	302	149	581
Exposure Duration	Years	70	40	9
Exposure Time	hours/day	24	12	10

Source: *Meredith International Centre Specific Plan Amendment Mobile Source Diesel Heath Risk Assessment,* City of Ontario (Urban Crossroads, Inc.) November 12, 2014.

Carcinogenic Risk Exposure: Quantification Results

The Project HRA results for residential (maximally exposed individual receptor, MEIR), worker (maximally exposed individual worker, MEIW), and school site (maximally exposed individual school child, MEISC), carcinogenic risk exposures are summarized below. Locations of the MEIR, MEIW, and MEISC relative to the Project site are presented at Figures 4.3-1 through 4.3-3. Please refer also to the Project HRA (included at EIR Appendix D) for detailed exposure modeling inputs and results.

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.3-1
MEIR Locations

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.3-2
MEIW Locations

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.3-3
MEISC Locations

Residential Exposures

For the Residential Exposure Scenario, the Project HRA indicates that DPM emissions generated by the Project will have a less-than-significant health risk at the maximally impacted residential land use. Under Development Option A, at the maximally exposed individual receptor (MEIR), the maximum risk is estimated to be 8.22 in one million, which does not exceed the SCAQMD DPM-source cancer risk threshold of 10 in one million. Under Development Option B, at the maximally exposed individual receptor (MEIR), the maximum risk is estimated to be 9.44 in one million, which does not exceed the SCAQMD DPM-source cancer risk threshold of 10 in one million.[11]

Worker Exposures

For the Worker Exposure Scenario, the Project HRA indicates that DPM emissions generated by the Project will have a less-than-significant health risk at the maximally impacted worker location. Under Development Option A, for the maximally exposed individual worker (MEIW), the maximum risk is estimated to be 1.47 in one million, which does not exceed the SCAQMD DPM-source cancer risk threshold of 10 in one million. Under Development Option B, for the maximally exposed individual worker (MEIW), the maximum risk is estimated to be 1.68 in one million,[12] which does not exceed the SCAQMD DPM-source cancer risk threshold of 10 in one million.

School Site Exposures

For the School Child Exposure Scenario, the Project HRA indicates that DPM emissions generated by the Project will have a less-than-significant health risk at the maximally impacted school site. Under Development Option A, for the maximally exposed individual school child (MEISC), the maximum risk is estimated to be 0.11 in one million, which does not exceed the SCAQMD DPM-source cancer risk threshold of 10 in

[11] The increased cancer risk at the MEIR under Development Option B is due largely to the increase in warehouse floor area in an area of the Project site proximate to the MEIR and related increase in truck traffic at this location.

[12] The increased cancer risk at the MEIW under Development Option B is due largely to the increase in warehouse floor area in an area of the Project site proximate to the MEIW and related increase in truck traffic at this location.

one million. Under Development Option B, for the maximally exposed individual school child (MEISC), the maximum risk is estimated to be 1.08 in one million,[13] which does not exceed the SCAQMD DPM-source cancer risk threshold of 10 in one million.

Non-Carcinogenic Risk

An evaluation of the potential non-carcinogenic effects of chronic exposure to TACs was also conducted. Adverse health effects are evaluated by comparing a compound's annual concentration with its toxicity factor or Reference Exposure Level (REL). RELs employed in the Project HRA were obtained from the California Environmental Protection Agency, Office of Environmental Health Hazard (OEHHA); http://www.oehha.org/risk/chemicaldb/index.asp. Noncarcinogenic risks are numerically expressed as a Hazard Index (HI), with a threshold HI of 1.0. Noncarcinogenic Hazard Indices calculated to be less than 1.0 are considered less-than-significant.

Non-Carcinogenic Risk Exposure: Quantification Results

Non-carcinogenic risk exposures were quantified consistent with applicable SCAQMD methodology, and are expressed relative to Hazard Index threshold of 1.0. As noted above, non-carcinogenic Hazard Indices calculated to be less than 1.0 are considered less-than-significant. The Project HRA results for residential, worker, and school non-carcinogenic risk exposures are summarized below.

Residential Exposures

Under Development Option A, the calculated HI at the MEIR is estimated to be 0.0052, which would not exceed the applicable threshold of 1.0, and is therefore less-than-significant. Under Development Option B, the calculated HI at the MEIR is estimated to

[13] The increased cancer risk at the MEISC under Development Option B is due largely to decreased source-receptor separation. That is, under Development Option A, the MEISC location (the Mariposa Elementary School) is approximately 0.50 miles southwesterly of the Project site. In comparison, under Development Option B, the MEISC location (the Bernt Elementary School) abuts the Project site.

be 0.0059, which would not exceed the applicable threshold of 1.0, and is therefore less-than-significant.[14]

Worker Exposures

Under Development Option A, the calculated HI at the MEIW is estimated to be 0.0047, which would not exceed the applicable threshold of 1.0, and is therefore less-than-significant. Under Development Option B, the calculated HI at the MEIR is estimated to be 0.0053, which would not exceed the applicable threshold of 1.0, and is therefore less-than-significant.[15]

School Site Exposures

Under Development Option A the calculated HI at the MEISC is estimated to be 0.0056, which would not exceed the applicable threshold of 1.0, and is therefore less-than-significant. Under Development Option B the calculated HI at the MEISC is estimated to be 0.0053, which would not exceed the applicable threshold of 1.0, and is therefore less-than-significant.[16]

[14] The increased non-cancer risk at the MEIR under Development Option B is due largely to the increase in warehouse floor area in an area of the Project site proximate to the MEIR and related increase in truck traffic at this location.

[15] The increased non-cancer risk at the MEIW under Development Option B is due largely to the increase in warehouse floor area in an area of the Project site proximate to the MEIW and related increase in truck traffic at this location.

[16] The increased non-cancer risk at the MEISC under Development Option B is due largely to decreased source-receptor separation. That is, under Development Option A, the MEISC location (the Mariposa Elementary School) is approximately 0.50 miles southwesterly of the Project site. In comparison, under Development Option B, the MEISC location (the Bernt Elementary School) abuts the Project site.

Cumulative TAC Impacts

Background

The South Coast Air Quality Management District (SCAQMD)[17] has conducted an analysis of the cumulative effects of Toxic Air Contaminants (TACs) within the South Coast Air Basin (Basin). This cumulative analysis, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-III)*, expresses cumulative TAC impacts in terms of potential increased cancer risks.[18] *MATES-III* estimates that the Basin-wide average excess cancer risk level resulting from exposure to cumulative TACs is approximately 1,200 incidents per one million population. Related, *MATES-III* estimates the cumulative TAC-source cancer risk for the localized area encompassing the Project site at a maximum of 1,426 incidents per million population.[19] Diesel Particulate Matter (DPM)-source cancer risks, are reflected in the area's ambient cumulative cancer risk along with all other TAC-source risks, and accounts for the predominance (83.6%) of the total risk shown in *MATES-III*.

Ambient TAC Impacts Presumed Cumulatively Significant

The SCAQMD has established a significance threshold for incremental project-level TAC impacts. Specifically, if a given project would generate TACs resulting in or causing an increase in cancer risks of 10 or more incidents per million population, that project's incremental cancer risk would be considered significant. This same significance threshold (10 in one million) is applied by SCAQMD in determining whether a given project's incremental contribution to ambient TAC-source cancer risks

[17] SCAQMD is the Responsible Agency providing guidance on applicable air quality analysis methodologies and air quality-related issues.

[18] Cancer risk refers to the probability of contracting cancer associated with exposure to a substance. It is expressed as the chance per million of a cancer case occurring. A risk of one per million, for example, would mean that in a population of one million individuals exposed over a 70 year lifetime, one additional cancer case would be expected.

[19] SCAQMD 2008, MATES-III Carcinogenic Interactive Map–http://www3.aqmd.gov/webappl/matesiii/ Localized background TAC-source cancer risk estimates are extrapolated from TAC monitoring data collected at ten fixed sites within the South Coast Air Basin. MATES-III extrapolates cancer risk levels throughout the Basin at 1.25 mile by 1.25 mile grids.

is cumulatively considerable. The SCAQMD has not, however, established a significance threshold for ambient cumulative TAC impacts affecting the Basin. Likewise, the City of Ontario (the Lead Agency) has no adopted cumulative TAC impacts significance threshold.

Absent an established threshold for cumulative TAC impacts, the following discussion assesses whether, in the light of other available existing information, the ambient cumulative TAC-source impacts affecting the Basin and the area encompassing the Project site could be characterized as significant.

As noted previously, MATES-III estimates the average ambient cumulative TAC-source cancer risk for the Basin as a whole at 1,200 incidents per million population; in the localized area encompassing the Project site the risk is estimated at 1,426 incidents per million population. Either of these existing cumulative TAC-source cancer risk levels (1,200 per million, or 1,426 per million) far exceeds the 10 in one million cancer risk at which project-level TAC-source cancer risks would be determined significant employing SCAQMD thresholds.

Comparing the ambient cumulative TAC-source cancer risk (1,200 per million Basin-wide; or 1,426 per million locally) to the SCAQMD's established threshold for project-level TAC-source cancer risks (10 in one million), the ambient cumulative TAC-source cancer risk is approximately 120.0 to 149.6 times greater than the incremental risk at which project-level TAC-source cancer risks would be considered significant.

Although there is not yet an established significance threshold for ambient cumulative TAC impacts, given the magnitude by which the ambient cumulative condition exceeds SCAQMD's established project-level significance threshold (ambient cumulative TAC conditions are 120.0 to 149.6 times greater than the project-level threshold), the ambient cumulative condition would likely exceed whatever significance threshold may be established for cumulative impacts affecting the Basin. On this basis, and absent a prevailing threshold adopted by the Lead or Responsible Agency, ambient cumulative

TAC impacts are presumed to be significant under existing conditions without the Project.

Related Projects Contribution to Cumulative TAC Impacts

In addition to the MATES-III cumulative TAC-source cancer risk noted above, other new or proposed potential TAC-generating projects (related projects) in the Study Area could contribute to cumulative TAC impacts. These related projects, due to their recent and/or tentative nature, are not reflected in the cumulative TAC impacts identified in the MATES-III study.

In consultation with the Lead Agency, related TAC-generating projects located within a one-quarter mile radius of the Project were identified and are reflected in this cumulative TAC analysis. The one-quarter mile radius encompassed within the cumulative TAC analysis reflects CARB and South Coast District analyses indicating an 80-percent drop-off in TAC concentrations at approximately 1,000 feet from the DPM source under consideration.[20] Beyond 1,000 feet, the TAC emissions would be reduced and diffused such that they would not substantively and discernibly contribute to or interact with TAC emissions from other distinct sources. The one-quarter mile (1,320 feet) Study Area radius employed in the Project HRA therefore encompasses and extends beyond the distance at which related projects would generate TACs that would likely interact with TACs generated by the proposed Meredith International Centre SPA Project.

The only related TAC-generating project located within a one-quarter mile radius of the Project site is the "Guasti" project, which proposes approximately 197,820 square feet of shopping center uses and 114,654 square feet of office building. The primary source of TACs generated by this related project would be DPM emissions generated by delivery trucks accessing the subject site. DPM emissions generated by this related project could potentially contribute to, or interact with, the Project's DPM emissions.

[20] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective.* 2005.

Past experience in preparing risk assessments for like facilities indicates that the DPM-source health risks associated with the proposed Guasti Shopping Center and Office Building project would not exceed 5 incidents per million population.

Project Contribution to Cumulative TAC Impacts

Project-source TACs would incrementally increase the background cancer risk by a maximum of 9.44 incidents per million population. The applicable SCAQMD significance threshold for Project-level DPM-source cancer risk impacts is 10 incidents per million population. Similarly, SCAQMD significance thresholds state that Project contributions to cumulative DPM-source cancer risks would be cumulatively considerable if greater than 10 incidents per million population would occur. The 9.44 incidents per million population increment resulting from the Project is therefore not significant, nor cumulatively considerable.

Summary and Conclusions

To provide context for, and quantify cumulative TAC effects within the Study Area, the Project TAC-source cancer risk, and the TAC-source cancer risks from the related project identified herein, were added to the total background risk derived by the MATES-III study, yielding a maximum potential cumulative TAC-source risk affecting the Study Area. As indicated at Table 4.3-17, the maximum potential cumulative cancer risk within the Study Area is estimated at 1,440.44 incidents per million.[21]

[21] Although cumulative impacts typically represent a General Plan Buildout Scenario, there is no such data available for what General Plan Buildout DPM emissions impacts would be. The background risk, however, would likely overstate, rather than understate future DPM impacts and is assumed to be inclusive of future growth. Due to improved DPM emissions control technologies and increasingly stringent DPM emissions regulations, the cancer risk incidence in the seven (7) years between the Mates II and Mates-III studies declined by approximately 15% even as population and business growth occurred throughout the region. Similar future declines in area-wide DPM source emissions are anticipated pursuant to enactment of further emissions regulations, including but not limited to anticipated greenhouse gas (GHG) reduction and control measures to be implemented by the state (see also: emissions regulatory measures discussed within *Meredith International Centre Specific Plan Amendment Air Quality Impact Analysis* (Urban Crossroads, Inc.) January 21, 2015; and *Meredith International Centre Specific Plan Amendment Greenhouse Gas Impact Analysis* (Urban Crossroads, Inc.) January 21, 2015.

Table 4.3-17
Study Area Cumulative TAC-Source Cancer Risk

Cumulative Impact Scenario	Risk Sources			Maximum Cumulative Risk
	Background TACs	Related Projects TACs	Project TACs	
	Cancer Risk Per Million Population			
Cumulative Impact Without Project	1,426.00	---	---	**1,426.00**
Maximum Cumulative Impact With Project	1,426.00	---	9.44	**1,435.44**
Maximum Cumulative Impact With Project and Related Projects	1,426.00	5.00	9.44	**1,440.44**

Source: *Meredith International Centre Specific Plan Amendment Mobile Source Diesel Heath Risk Assessment,* City of Ontario (Urban Crossroads, Inc.) November 12, 2014.
Notes: Background DPM risk from: *MATES-III Carcinogenic Risk Interactive Map*. SCAQMD 2008. Web. October 2014. <http://www2.aqmd.gov/webappl/matesiii/>.

The MATES-III ambient cumulative TAC impact represents approximately 99.9 percent of the total cumulative impact identified at Table 4.3-17 and due to its magnitude when compared to project-level TAC impact significance thresholds, is presumed to be cumulatively significant in order to ensure the most conservative analysis. The Project would incrementally contribute to this presumably significant cumulative impact. However, the Project's maximum incremental contribution of 9.44 incidents per million population does not exceed the established SCAQMD threshold (10 incidents per million population) at which project-level TAC contributions would be determined cumulatively considerable. On this basis, the Project DPM emissions impacts are not considered cumulatively considerable. Please refer also to the discussion of cumulative air quality impacts presented at EIR Section 5.0, "Other CEQA Considerations."

Localized Air Quality Impact Analysis Summary

As substantiated by the preceding discussions, maximum Project construction-source and operational-source emissions would not exceed applicable SCAQMD LSTs at the nearest sensitive receptor. Nor would the Project create or result in localized CO hot spots. Further, although the Project site, City, and the Basin as a whole are characterized

by an existing cumulatively significant TAC-source cancer risk impact, this impact would exist even without the Project based on existing, ambient conditions. As substantiated herein, the Project's DPM emissions would not be a cumulatively considerable contribution to existing areawide TAC-source cancer risks. On this basis, the potential for the Project's localized emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Expose sensitive receptors to substantial pollutant concentrations.***

Impact Analysis:

Project-Source Pollutants

Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors. As concluded in the above discussion of Localized Air Quality Impacts, the sensitive receptors nearest the Project site would not be subject to emissions exceeding SCAQMD LSTs. Nor would the Project create or result in localized CO hot spots. The Project HRA, summarized herein, substantiates that the Project would not generate or result in localized concentrations of TACs that would create or result in potentially significant health risks.

Offsite Freeway-Source Pollutants

In 2005, the California Air Resources Board (ARB) promulgated an advisory recommendation to avoid setting sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. The ARB indicates that due to traffic-generated pollutants, there is an estimated increased cancer risk incidence of 300 to 1,700 per million within this domain. At some point however, the increased cancer risk incidence due to the effects of freeway/roadway

corridor pollutants become indistinguishable from the ambient air quality condition. In this regard, the effects of freeway/roadway-source pollutants that may impact the Project site are already acknowledged and accounted for within the ambient air quality discussions presented within this Section. More specifically, the MATES-III Study data for the Project site comprehensively reflects increased TAC-source cancer risks affecting the City and Project site, inclusive of increased cancer risks due to freeway/roadway pollutant sources. It is, however, recognized that the effects of freeway traffic pollutants on the Project site would likely be more acute and discernible in those areas nearer freeway/roadway corridors.

Planning Area 4 within the proposed Meredith Specific Plan Amendment Project (Meredith SPA, SPA, Project) proposes Urban Residential land uses that would be located approximately 1,000 feet northerly of the Interstate 10 (I-10) freeway. Separating and buffering these Urban Residential land uses from adverse air pollutant, noise, and light and glare effects of I-10 freeway traffic, the Meredith SPA appropriately proposes intervening commercial land uses which are less susceptible to the effects of freeway traffic. Substantial landscaping/screening elements separating the Project Urban Residential land uses from the I-10 Freeway are also proposed as elements of the Meredith SPA. Please refer also to land use planning, design/development, and landscape/screening discussions presented in the *Meredith International Centre Specific Plan Amendment* (EIR Appendix B).

The 2005 ARB guidance noted previously, information made available through the MATES-III Study, and configuration and design of the Project would suggest that further assessment of freeway-source pollutant impacts is not warranted. Notwithstanding, this Off-Site Freeway-Source Air Toxic and Criteria Pollutant Health Risk Assessment has been prepared for the Project and is intended to:

- Comply with and support CEQA Section 15003 (i) policies addressing adequacy, completeness, and a good-faith effort at full disclosure;

- Disaggregate potential freeway-source air pollutant health effects from other background conditions; and

- Identify means to reduce the specific effects of freeway-source pollutants at the Project site.

The Project Off-Site Freeway-Source Air Toxic and Criteria Pollutant Health Risk Assessment (included at EIR Appendix D) fully evaluates potential off-site freeway mobile source air toxic and criteria pollutant health risk impacts that may affect the residential component (Planning Area 4) of the proposed Meredith Specific Plan Amendment. Findings and conclusions of the Assessment are summarized below.

Potentially Significant Impacts

For carcinogenic exposures, the incremental increased risk at the maximum exposed residential receptor (MEIR) totaled 20 in one million, which would exceed the threshold of SCAQMD threshold condition of 10 in one million.[22] This would be considered a potentially significant impact attributable to freeway-source pollutants. Mitigation Measure 4.3.6, presented below, would reduce the freeway source carcinogenic health risks at the Project site to levels that are less-than-significant.

Level of Significance: Potentially Significant.

[22] This level of exposure is however consistent with, and is already recognized within the SCAQMD Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-III Study) data for the Project area. In this regard, the MATES-III Study indicates that irrespective of the Project, exposure to ambient toxic air contaminants (TACs) in total (inclusive of TACs generated by I-10 freeway traffic) would result in increased local carcinogenic exposures ranging from 1,096 in one million to 1,426 in one million. The MATES-III Study estimates the average ambient cumulative TAC-source cancer risk for the Basin as whole at 1,200 incidents per million population.

Mitigation Measure:

4.3.6 *Residential units within the Project site shall include the installation and maintenance of air filtration systems with efficiencies equal to or exceeding a Minimum Efficiency Reporting Value (MERV) 16 as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2.* [23]

Level of Significance After Mitigation: Less-than-Significant.

With the application of Mitigation Measure 4.3.6, freeway-source carcinogenic health risks at the Project site would total 7.14 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million, and would therefore be less-than-significant.

Less-Than-Significant Impacts

- For chronic noncarcinogenic effects, the SCAQMD hazard threshold index of 1.0 would not be exceeded, and a less-than-significant impact would occur.
- Maximum PM_{10} and $PM_{2.5}$ emissions concentrations attributable to freeway sources would not exceed applicable SCAQMD significance thresholds, and would therefore be less-than-significant.
- Maximum CO concentrations attributable to freeway sources, when added to the existing background concentration would not cause an exceedance of the CAAQS for CO concentrations, and would therefore be less-than-significant.
- Maximum NO_2 concentrations attributable to freeway sources when added to the existing background concentration would not cause an exceedance of the CAAQS for NO_2 concentrations, and would therefore be less-than-significant.

[23] The use of MERV filtration systems to reduce DPM and particulates has been successfully implemented by several lead agencies, including, but not limited to: City of Los Angeles, City of Claremont, City of Irvine, City of Glendale, City of Berkeley, City of Oakland, and the Los Angeles Unified School District (LAUSD). The average particle size efficiency (PSE) removal based on ASHRAE Standard 52.2 for MERV 16 is approximately 95% for 0.3 to 1.0 $\mu g/m^3$(DPM) and 95% for 1.0 to 10 $\mu g/m^3$(PM_{10} and $PM_{2.5}$).

- Short duration exposures to toxic and criteria pollutants, such as would occur for residents/patrons utilizing outdoor amenities, would be within acceptable limits and would therefore be less-than-significant.

Summary

Project-Source Impacts

The potential for Project-source air pollutants to cause or result in exposure of sensitive receptors to substantial pollutant concentrations is substantiated to be less-than-significant, and no mitigation is required.

Freeway-source Impacts

For carcinogenic exposures, the incremental increased cancer risk at the maximum exposed residential receptor (MEIR) totaled 20 in one million, which would exceed the threshold of SCAQMD threshold condition of 10 in one million. This would be a considered a potentially significant impact attributable to freeway-source pollutants. Mitigation Measure 4.3.5 would reduce the freeway source carcinogenic health risks at the Project site to levels that are less-than-significant. All other freeway-source pollutant effects are substantiated to be less-than-significant, and no mitigation is required.

Potential Impact: ***Create objectionable odors affecting a substantial number of people.***

Impact Analysis: The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming);
- Wastewater treatment plants;
- Food processing plants;
- Chemical plants;
- Composting operations;
- Refineries;
- Landfills;

- Dairies; and
- Fiberglass molding facilities.

The Project does not propose land uses or activities typically associated with emitting objectionable odors. The Project may, however, generate localized odors due to construction equipment exhaust; application of asphalt and architectural coatings during construction activities; and the temporary storage of typical solid waste (refuse). Standard construction materials use storage and disposal requirements would minimize odor impacts from construction. Moreover, any construction-source odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction.

With regard to Project operations, Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with City solid waste regulations. Further, any other odors that may be generated during Project operations would disperse rapidly and would likely be limited to the immediate vicinity of the odor source. The Project would also be required to comply with SCAQMD Rule 402, acting to minimize potential occurrences of public nuisance odors.

As supported by the preceding discussion, the potential for the Project to create objectionable odors affecting a substantial number of people is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal [national] or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.***

Impact Analysis: The Project area is designated as an extreme non-attainment area for ozone, a serious non-attainment area for PM_{10}, and a non-attainment area for $PM_{2.5}$. Germane to these regional non-attainment conditions, the Project-specific evaluation of emissions presented previously indicates that even after application of mitigation, the Project's construction-source VOC and NO_x emissions would exceed applicable SCAQMD regional significance thresholds. The fact that the Project construction-source emissions of the ozone precursors VOC and NO_x would exceed applicable SCAQMD thresholds indicates that the Project impacts in these regards are significant on an individual basis, and under SCAQMD significance criteria, would therefore also be cumulatively considerable. Project construction-source emissions of VOC and NO_x would therefore contribute to a cumulatively considerable net increase in the ozone precursors VOC and NO_x within the encompassing ozone non-attainment area. This is a potentially significant air quality impact. Additionally, NO_x is a precursor to PM_{10}/$PM_{2.5}$, and Project construction-source emissions of NO_x would therefore contribute to a cumulatively considerable net increase in PM_{10}/$PM_{2.5}$ levels within the encompassing PM_{10}/$PM_{2.5}$ nonattainment area.

Even after application mitigation, under buildout conditions, Project operational-source VOC, NO_x, PM_{10}, and $PM_{2.5}$ emissions would exceed applicable SCAQMD regional thresholds. The fact that the Project operational-source emissions of VOC, NO_x, PM_{10}, and $PM_{2.5}$ would exceed applicable SCAQMD thresholds indicates that the Project impacts in these regards are significant on an individual basis, and under SCAQMD significance criteria, would therefore also be cumulatively considerable. Project operational-source emissions of the ozone precursors VOC and NO_x; as well as PM_{10}, and $PM_{2.5}$ particulate emissions in exceedance of applicable SCAQMD regional thresholds would result in a cumulatively considerable net increase of in criteria

pollutants within the encompassing ozone and PM_{10}/$PM_{2.5}$ non-attainment areas. These are potentially significant air quality impacts. Please refer also to the discussion of cumulative air quality impacts presented at EIR Section 5.0, "Other CEQA Considerations."

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to Mitigation Measures 4.3.1 through 4.3.6.

Level of Significance After Mitigation: ***Significant and Unavoidable.*** Mitigation Measures 4.3.1 through 4.3.6 would reduce Project construction-source and operational-source emissions. However, construction-source VOC and NO_x emission exceedances; and operational-source VOC, NO_x, PM_{10}, and $PM_{2.5}$ emissions exceedances would persist. These emissions exceedances would be considered cumulatively considerable net increases in criteria pollutants for which the Project region is non-attainment under an applicable federal [national] or state ambient air quality standard. Please refer also to previous discussions regarding Project operational-source emissions.

4.4 GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

4.4 GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

Abstract

This Section identifies and addresses potential air greenhouse gas (GHG) emissions impacts that may result from construction and implementation of the Project. More specifically, the GHG emissions impacts analysis evaluates the potential for the Project to cause or result in the following impacts:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*

- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

On the basis of the analysis presented in the Project GHG Analysis as summarized herein,[1] the Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The Project's potential GHG emissions impacts are therefore determined to be less-than-significant.

[1] Supplemental analyses prepared employing assumptions and protocols presented in the South Coast Air Quality Management District (SCAQMD) Draft Warehouse Truck Trip Study (SCAQMD) December 2014 (Draft Warehouse Truck Trip Study) indicate that total GHG emissions generated by the Project may increase, however impacts would remain less-than-significant. Please refer also to Meredith International Centre Supplemental Assessment (Urban Crossroads) January 22, 2015, included at EIR Appendix D.

4.4.1 INTRODUCTION

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the Earth with respect to temperature, precipitation, and storms. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Most scientists believe that recent increases in greenhouse gases resulting from human activity and industrialization have accelerated and amplified GCC effects.

An individual development proposal, such as the Project considered herein, cannot generate enough greenhouse gas (GHG) emissions to effect a discernible change in global climate. However, the Project may contribute to the global climate change through its increment of greenhouse gases in combination with the cumulative increase in GHGs from all other sources, which when taken together constitute potential influences on global climate change. This Section summarizes the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to global climate change. Detailed analysis of the Project's potential GHG/GCC impacts is presented in *Meredith International Centre Specific Plan Amendment Greenhouse Gas Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015 (Project GHG Analysis, EIR Appendix E). Supplemental GHG /GCC modeling has also been performed utilizing assumptions and protocols presented in the South Coast Air Quality Management District (SCAQMD) *Draft Warehouse Truck Trip Study* (SCAQMD) December 2014 (*Draft Warehouse Truck Trip Study.)* Supplemental GHG/GCC impact analyses reflecting assumptions and protocols of the *Draft Warehouse Truck Trip Study* are included at Draft EIR Appendix D.

4.4.2 EXISTING CONDITIONS

4.4.2.1 Global Climate Change

Global Climate Change refers to the change in average meteorological conditions with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2 (Carbon Dioxide), N_2O (Nitrous Oxide), CH_4 (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration) in the atmosphere, which ranges from 10 years to more than 100 years. These

gases allow solar radiation into the atmosphere, but prevent heat from escaping, thus warming the atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. According to the CARB, the climate change that is currently in effect differs from previous climate changes in both rate and magnitude (CARB, 2004, *Technical Support document for Staff Proposal Regarding Reduction of Greenhouse Gas Emissions from Motor Vehicles*).

4.4.2.2 Greenhouse Gases

Gases that trap heat in the atmosphere are often referred to as greenhouse gases or GHGs. Greenhouse gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the average temperature would be approximately 61˚Fahrenheit (F) cooler than it is currently. The accumulation of these gases in the atmosphere is considered to be the cause for the observed increase in the Earth's temperature.

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor. In 2004, the state is estimated to have produced 492 million gross metric tons of carbon dioxide equivalent greenhouse gas emissions. For the purposes of this analysis, Project-related emissions of carbon dioxide, methane, and nitrous oxide were evaluated because these gases are the primary contributors to global climate change from development projects. Emissions from Project facilities and stationary sources as well as emissions generated by Project-related vehicular traffic were included in the evaluation of potential GHG emissions impacts.

Greenhouse gases exhibit varying global warming potentials (GWPs). GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is utilized as the baseline GWP reference gas, and thus has a GWP of 1. The atmospheric lifetime and GWP of greenhouse gases typically generated by urban development, and that would be generated by the Project, are summarized at Table 4.4-1.

Table 4.4-1
Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50 - 200	1
Methane	12 (+/-3)	21
Nitrous Oxide	120	310

Source: *Meredith International Centre Specific Plan Amendment Greenhouse Gas Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

The following discussions summarize and describe commonly occurring greenhouse gases, their sources, and general characteristics.

Water Vapor

Water vapor (H_20) is the most abundant, important, and variable greenhouse gas in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change.

As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. For example, increased atmospheric water vapor translates to increased cloud cover and increased reflection of incoming solar radiation (thus diminishing potential radiant heating of the Earth's surface).

The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include: evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.

Carbon Dioxide

Carbon dioxide (CO_2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.

Methane

Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs. No health effects are known to occur from exposure to methane.

Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of

methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage).

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction.

Chlorofluorocarbons

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface).

CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global warming potential. The HFCs with the greatest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Not until the PFCs reach the mesosphere, about 60 kilometers above Earth, do very high-energy ultraviolet rays from the sun destroy them. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The U.S. EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The U.S. EPA indicates that concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

4.4.2.3 Greenhouse Gases Emissions Inventories

Global

Worldwide anthropogenic (man-made) GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Man-made GHG emissions data for Annex I nations are available through 2011. Global GHG emissions are summarized at Table 4.4-2. As indicated, global emissions totaled approximately 25,285,543 gigagrams (Gg) Carbon Dioxide Equivalent (CO2e) for the Year 2011. The GHG emissions in more recent years may differ from the inventories presented in Table 4.4-2; however, the data is representative of currently available inventory data.

United States

As identified in Table 4.4-2, the United States, was the number two producer of GHG emissions in 2011. The primary greenhouse gas emitted by human activities in the United States was CO_2, representing approximately 83 percent of U.S. total greenhouse gas emissions. Carbon dioxide from fossil fuel combustion accounted for approximately 78 percent of U.S. GHG emissions.[2]

Table 4.4-2
Global GHG Emissions by
Major GHG Source Countries-2011

Source Countries	GHG Emissions (Gg CO2e)
China	8,715,307
United States	6,665,700
European Union (27 member countries)	4,550,212
Russian Federation	2,320,834
India	1,725,762
Japan	1,307,728
Total	**25,285,543**

Source: *Meredith International Centre Specific Plan Amendment Greenhouse Gas Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.

[2] Project GHG Analysis, p. 3.

State of California

CARB compiles GHG inventories for the State of California. CARB GHG inventory data indicates that in 2008 (the most recent inventory of record) California emitted 474 Million Metric Ton of Carbon Dioxide Equivalent ($MMTCO_2e$) including emissions resulting from imported electrical power in 2008.[3] Based on the CARB inventory data and GHG inventories compiled by the World Resources Institute, California's total statewide GHG emissions rank second in the United States (Texas is number one) with emissions of 417 $MMTCO_2e$ excluding emissions related to imported power.

4.4.2.4 Effects of Global Climate Change

Climate

The California Environmental Protection Agency (CalEPA) published a report titled "Scenarios of Climate Change in California: An Overview" (Climate Scenarios Report) in February 2006 (California Climate Change Center 2006). The Climate Scenarios Report is generally instructive about the potential effects of Global Climate Change within California.

The Climate Scenarios Report uses a range of emissions scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century: lower warming range (3.0-5.5°F); medium warming range (5.5-8.0°F); and higher warming range (8.0-10.5°F). The Climate Scenarios Report then presents an analysis of future climatic conditions in California under each warming range, that while uncertain, are descriptive of potential impacts of global climate change trends in California.

In addition, most recently on August 5, 2009, the State's Natural Resources Agency released a public review draft of its "California Climate Adaptation Strategy" report that details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation

[3] *Ibid.*

changes. This report responds to the Governor's Executive Order S-13-2008 that called on state agencies to develop California's strategy to identify and prepare for expected climate impacts.

According to the reports, substantial temperature increases arising from increased GHG emissions potentially could result in a variety of impacts to the people, economy, and environment of California associated with a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. Under the emissions scenarios of the Climate Scenarios Report, the impacts of global warming in California have the potential to include, but are not limited to, the following areas.

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range to 75 to 85 percent under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios Report indicates that large wildfires could become more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there may be years with marginal insufficient snow for skiing and snowboarding, as was evidenced for the period 2013–2014.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply they need. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency,

California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate O_3 pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

In addition, continued global climate change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued global climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including: precipitation, winds, temperature, terrain, and vegetation, future risks would likely not be uniform throughout the state. For example, wildfires in northern California could increase by up to 90 percent due to decreased precipitation.

Moreover, continued global climate change has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of global climate change.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Increased sea level elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

4.4.2.5 GHG Health Effects

Health effects of greenhouse gases are summarized below.

Water Vapor

There are no known direct health effects related to water vapor at this time. It should be noted, however, that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

Carbon Dioxide

According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of carbon dioxide can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of carbon dioxide in the earth's atmosphere are estimated to be approximately 370 ppm, while the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a

40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15 minute period (NIOSH 2005).

Methane

Methane is extremely reactive with oxidizers, halogens, and other halogen-containing compounds, may displace oxygen in an enclosed space and act as an asphyxiant (Occupational Safety and Health Administration (OSHA) 2003).

Nitrous Oxide

Nitrous Oxide is often referred to as laughing gas; it is a colorless greenhouse gas. The health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations, and in extreme cases of elevated concentrations nitrous oxide can also cause brain damage (OSHA 1999).

Chlorofluorocarbons

CFCs are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, in confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

Fluorinated Gases (HFCs, PFCs, SF_6)

High concentrations of fluorinated gases can also result in adverse health effects such as asphyxiation, dizziness, headache, cardiovascular disease, cardiac disorders, and in extreme cases, increased mortality (NIOSH 1989, 1997).

4.4.2.6 GCC Regulatory Setting

Western Regional Climate Action Initiative (WCI)

The Western Regional Climate Action Initiative (WCI) is a partnership among seven states, including California, and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The WCI will cap GHG emissions from the region's electricity, industrial, and transportation sectors with the goal

to reduce the heat trapping emissions that cause global warming to 15% below 2005 levels by 2020. When the WCI adopted this goal in 2007, it estimated that this would require 2007 levels to be reduced worldwide between 50% and 85% by 2050. California is working closely with the other states and provinces to design a regional GHG reduction program that includes a cap-and-trade approach.

EPA Actions and the Clean Air Act

Coinciding the 2009 meeting in Copenhagen, on December 7, 2009, the U.S. Environmental Protection Agency (EPA) issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of greenhouse gases. The Endangerment Finding notes that greenhouse gases threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the EPA has not promulgated regulations on GHG emissions, but it has already begun to develop them.

Previously, the EPA had not regulated greenhouse gases under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between greenhouse gases and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 (2007), however, the U.S. Supreme Court held that greenhouse gases are pollutants under the Clean Air Act and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate greenhouse gases because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of greenhouse gases with or without Congress.

Vehicle Standards

Other regulations have been adopted to address vehicle standards including United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) joint rulemaking for vehicle standards:

- On March 30, 2009, the NHTSA issued a final rule for model year 2011;

- On May 7, 2010, the USEPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal greenhouse gas and fuel economy standards for model year 2017–2025 light-duty vehicles;

- On August 9, 2011 USEPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal greenhouse gas and fuel economy standards for model year 2017–2025 light-duty vehicles. The NHTSA intends to set standards for model years 2022–2025 in a future rulemaking;

- In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the USEPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks, which applies to vehicles from model year 2014–2018.

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA, Act) was signed into law. Among other key measures, the Act would aid in the reduction of national GHG emissions, both mobile and non-mobile.

Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Guidelines on GHG

Draft guidance prepared by the Council on Environmental Quality (CEQ) addresses consideration and evaluation of greenhouse gases and climate change within NEPA analyses. The guidance recommends that proposed federal actions that are reasonably expected to directly emit 25,000 metric tons of CO_2e/year should prepare a quantitative and qualitative NEPA analysis of direct and indirect greenhouse gas emissions.

The draft guidance provides reporting tools and instructions on how to assess the effects of climate change. The draft guidance does not apply to land and resource management actions, nor does it propose to regulate greenhouse gases. Although CEQ has not yet issued

final guidance, various NEPA documents are beginning to incorporate the approach recommended in the draft guidance.

California Title 24 Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The Energy Commission's most recent, 2013 Building Energy Efficiency Standards, took effect on January 1, 2014. The *2013 Building Energy Efficiency Standards for Residential and Nonresidential Building* Abstract summarizes key attributes and anticipated environmental benefits of the 2013 Standards, as excerpted below:

> The 2013 Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations. The most significant efficiency improvements to the residential Standards are proposed for windows, envelope insulation and HVAC system testing. The most significant efficiency improvements to the nonresidential Standards are proposed for lighting controls, windows, unitary HVAC equipment and building commissioning. New efficiency requirements for process loads such as commercial refrigeration, data centers, kitchen exhaust systems and compressed air systems are included in the nonresidential Standards. The 2013 Standards include expanded criteria for acceptance testing of mechanical and lighting systems, as well as new requirements for code compliance data to be collected in a California Energy Commission-managed repository.

> The 2013 Standards also include updates to the energy efficiency divisions of the California Green Building Code Standards (Title 24, Part 11). A set of prerequisites has been established for both the residential and nonresidential Reach Standards, which include efficiency measures that should be installed in any building project striving to meet advanced levels of energy efficiency. The residential Reach Standards have also been updated to require additional energy efficiency or on-site renewable electricity generation to meet a specific threshold of expected electricity use. Both the residential and nonresidential Reach Standards include requirements for additions and alterations to existing buildings.
>
> Energy Commission staff estimates that the implementation of the 2013 Building Energy Efficiency Standards may reduce statewide annual electricity consumption by approximately 613 gigawatt-hours per year, electrical peak demand by 195 megawatts, and natural gas consumption by 10 million therms per year. The potential effect of these energy savings to air quality may be a net reduction in the emission of nitric oxide by approximately 59 tons per year, sulfur oxides by 2.4 tons per year, carbon monoxide by 41 tons per year and particulate matter less than 2.5 microns in diameter by 10 tons per year. Additionally, Energy Commission staff estimates that the implementation of the 2013 Standards may reduce statewide carbon dioxide equivalent emissions by 215 thousand metric tons per year (*2013 Building Energy Efficiency Standards for Residential and Nonresidential Building*, Abstract).

The 2013 Standards also include updates to the energy efficiency divisions of the California Green Building Code Standards, (CALGreen Code, Title 24, Part 11). The stated purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental

air quality" (2013 CALGreen Code, p. 1). The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). The CBSC has released the 2010 California Green Building Standards Code on its web site. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

California Assembly Bill No. 1493 (AB 1493)

California Assembly Bill 1493 requires CARB to develop and adopt the nation's first greenhouse gas emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in California; and stated that technological solutions to reduce greenhouse gas emissions would stimulate the California economy and provide jobs.

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961) and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. Subsequent lawsuits filed against CARB prevented enforcement of CCR 13 1900 and CCR 13 1961 as amended by AB 1493 and CCR 13 1961.1.

Litigation against CARB culminated in the USEPA and the U.S. Department of Transportation adoption of a federal program to reduce greenhouse gases and improve fuel economy from passenger vehicles in order to achieve greenhouse gas benefits equivalent to, or greater than, benefits that would be realized pursuant to AB 1493 regulations. Additionally, the State of California committed to (1) revise its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission standard by "pooling" California and specified State vehicle sales; (2) revise its standards for 2012–2016 model year vehicles so that compliance with USEPA-adopted GHG

standards would also comply with California's standards; and (3) revise its standards, as necessary, to allow manufacturers to use emissions data from the federal Corporate Average Fuel Economy (CAFE) program to demonstrate compliance with the AB 1493 regulations.

Executive Order S-3-05

Executive Order S-3-05 proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary also is required to submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

California Assembly Bill 32 (AB 32)

California Assembly Bill 32 (AB 32), the California Climate Solutions Act of 2006, requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. To date, this reduction is being accomplished through an enforceable phased statewide cap on GHG emissions. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 indicates further that regulations adopted in response to AB 1493 should address GHG emissions from vehicles. Assembly Bill 32 contingencies also include provisions stating that

if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons CO_2 equivalent ($MMTCO_2e$). Accordingly, 427 $MMTCO_2e$ was established as the emissions limit for 2020. In comparison, CARB's estimate for baseline GHG emissions was 473 $MMTCO_2e$ for 2000 and 532 $MMTCO_2e$ for 2010. "Business as usual" conditions (estimated GHG emissions levels absent CARB regulatory actions) for 2020 were projected to be 596 $MMTCO_2e$.

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plants, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94 percent of the point source CO_2 emissions in the State.

On December 11, 2008, CARB adopted a Scoping Plan (CARB Scoping Plan, Scoping Plan) to reduce GHG emissions to 1990 levels. The Scoping Plan's recommendations for reducing GHG emissions to 1990 levels by 2020 include emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, as well as Voluntary Early Actions and Reductions. In order to achieve 2020 greenhouse gas emissions reductions targets, the CARB Scoping Plan indicates that implementation of individual measures should have been initiated no later than January 1, 2012.

The Project Greenhouse Gas Analysis (EIR Appendix E) summarizes estimated year 2020 GHG emissions reductions from regulations and programs outlined in the Scoping Plan. While local government operations were not accounted for in achieving the 2020 emissions reduction, local land use changes are projected to achieve approximately 3 percent of the 2020 GHG emissions reduction goal. In recognition of the critical role local governments will play in successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of 2006 levels by 2020 to ensure that municipal and community-wide GHG emissions correlate with and support the state's reduction target. According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately two percent through land use planning, resulting in a potential GHG reduction of 2 $MMTCO_2e$ (or approximately 1.2 percent of the GHG reduction target).

California Senate Bill No. 1368

In 2006, the State Legislature adopted Senate Bill 1368 (SB 1368), which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a greenhouse gas emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Coal-fired plants cannot meet this standard because such plants emit roughly twice as much carbon as combined cycle natural gas power plants.

Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out of state producers that cannot satisfy the EPS standard required by SB 1368.

CEQA Guidelines

CEQA Guidelines § 15064.4(a) states "A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance based standards."

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See: *CEQA Guidelines* Section 15130(f)).

Section 15064.4(b) of the *CEQA Guidelines* provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

4.4.3 GCC Significance Thresholds and Performance Standards

CEQA Guidelines

The *CEQA Guidelines* do not identify a threshold of significance for greenhouse gas emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Rather, the *Guidelines* call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project" (*Guidelines* §15064.4 [a]).

The *Guidelines* encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence. The *Guidelines* also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. *CEQA Guidelines'* suggested Environmental Checklist GHG topical issues have been incorporated into the analytic discussions presented subsequently within this Section.

Executive Order S-01-07

Executive Order S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuel by at least ten percent by 2020. The Order also requires that a California-specific Low Carbon Fuel Standard be established for transportation fuels.

Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least twenty percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. Executive Order S-14-08 expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020.

Senate Bill 375

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a

sustainable communities strategy (SCS) or alternative planning strategy (APS) prescribing land use allocations in that MPO's regional transportation plan (RTP). The California Air Resources Board, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035.

GHG reduction targets will be updated every 8 years but can be updated every 4 years if advancements in emissions technologies would affect the target reduction strategies. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet their assigned GHG reduction targets, transportation projects will not be eligible for funding programmed after January 1, 2012.

Senate Bill 375 also extends the minimum time period for the regional housing needs allocation cycle from five years to eight years for local governments located within an MPO that meets certain requirements. City or county land use policies (including general plans) consistency with the regional transportation plan (and associated SCS or APS) is not required. However, new provisions of CEQA would incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

The Southern California Association of Governments (SCAG) is required by law to update the Southern California Regional Transportation Plan (RTP) every four years. On April 4, 2012, the Regional Council of the SCAG adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future*. The RTP/SCS incorporates land use and housing policies to meet the greenhouse gas emissions targets established by the CARB.

South Coast Air Quality Management District Recommendations

In April 2008, the South Coast Air Quality Management District (SCAQMD), in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents, convened a "GHG CEQA Significance Threshold Working Group." The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis

until CARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the Working Group with a significance threshold that could be applied to various types of projects—residential, non-residential, industrial, etc. However, the threshold is still under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects where it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) as a screening numerical threshold for stationary sources. More importantly it should be noted that when setting the 10,000 $MTCO_2e$ threshold, the SCAQMD did not consider mobile sources (vehicular travel); rather the threshold is based mainly on stationary source generators such as boilers, refineries, power plants, etc. Therefore, it would be misleading to apply this threshold, developed without consideration for mobile sources, to a Project where the majority of emissions are related to mobile sources. Moreover, by its terms, the threshold applies only to projects where the SCAQMD is the lead agency, and would therefore not be applicable here. There is no SCAQMD threshold that can be applied to this Project.

In September 2010, the Working Group released additional revisions which recommended a threshold of 3,500 $MTCO_2e$ for residential projects, 1,400 $MTCO_2e$ for commercial projects, and 3,000 $MTCO_2e$ for mixed use projects. Additionally the working group identified a project-level efficiency target of 4.8 $MTCO_2e$ per service population as a 2020 target and 3.0 $MTCO_2e$ per service population as a 2035 target. The recommended plan-level target for 2020 was 6.6 $MTCO_2e$ and the plan level target for 2035 was 4.1 $MTCO_2e$. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the Governing Board; thus, these proposed thresholds are not applicable to the proposed project. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable to boilers and process heaters, forestry, and manure management projects, none of which are germane to the Project considered herein.

To date, the SCAQMD and CARB have not established quantified GHG emissions significance thresholds for projects being evaluated under CEQA. For the purposes of this

analysis, the Project's GHG emissions have been compared with a "Business as Usual" (BAU) scenario to determine whether the development is likely to be consistent with the CARB Scoping Plan which was designed to implement AB 32 in California. The Scoping Plan indicates that statewide AB 32 compliance would be achieved provided there is a minimum 28.5 percent reduction in Business As Usual GHG emissions for the time frame 1990 to 2020.[4] Similarly, The Ontario Plan EIR indicates that AB 32 compliance would be achieved provided there is an approximately 30.0 percent reduction in Business As Usual GHG emissions for the time frame 1990 to 2020 (The Ontario Plan EIR, pp. 5.6-6, 5.6-7). Project GHG emissions levels reflecting CARB Scoping Plan and City GHG emissions reductions targets would be considered compliant with AB 32, and potential Project GHG emissions/Global Climate Change impacts would be considered less-than-significant.

City of Ontario

Policy Plan Goals and Policies

The Ontario Plan EIR identifies Goals, Policies and Mitigation Measures acting to reduce air pollutant emissions and air pollutant emissions impacts in general, and GHG emissions and GHG emissions impacts in specific. As summarized at Tables 4.4-3 and 4.4-4, the Project would be consistent with and would support applicable Policy Plan Goals and Policies; and would comply with and implement applicable Mitigation Measures identified in The Ontario Plan EIR.

[4] On February 10, 2014, CARB released a Draft Proposed First Update of the Scoping Plan. The draft recalculates 1990 GHG emissions using new global warming potentials identified in the IPCC Fourth Assessment Report released in 2007. Using those GWPs, the 427 $MTCO_2e$ 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 $MTCO_2e$. Based on the revised 1990 GHG emissions estimates and the revised 2020 emissions level projections, achieving the 1990 emissions level in 2020 would require a reduction of 78 $MTCO_2e$ (down from 509 $MTCO_2e$), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. Although CARB has released an update to the Scoping Plan and reduction targets from BAU, citation to the previous 28.5% reduction from BAU is appropriate since the modeling tools available are not able to easily disaggregate effects of renewable portfolio standards and Pavley requirements that are now included in the revised BAU scenario (Project GHG Analysis, p.19). Notwithstanding the preceding, this Analysis employs the City's more conservative "approximately 30.0 percent" GHG emissions reductions target in determining AB 32 compliance.

City of Ontario Community Climate Action Plan (CCAP)

On December 14, 2014, the City of Ontario adopted its Community Climate Action Plan (CCAP). As one element of the CCAP, the City of Ontario has established a year 2020 goal to reduce community GHG emissions to a level that is 30 percent below a Business As usual (BAU) condition. This reduction in community GHG emissions is consistent with statewide GHG emissions reductions targets identified under AB 32 and recommended in the AB 32 Scoping Plan. For new development projects which would generate 3,000 MT CO_2e or greater (such as the proposed Meredith SPA), the CCAP established a GHG emissions reduction performance standard of 25 percent below the project BAU scenario.

The CCAP notes further that once it is adopted, ". . . analysis of environmental impacts associated with greenhouse gas emissions must simply prove project compliance with the Community CAP, rather than produce the traditional analysis of all GHG emissions associated with the proposed project and project compliance with all relevant policies and regulations. This approach is allowed per CEQA Guidelines Section 15183.5, which specifically set forth the requirements for comprehensive greenhouse gas reduction plans and tiering of analysis for project CEQA compliance" (Ontario CCAP, p. ES-13).

This EIR provides both a traditional analysis of all GHG emissions associated with the proposed Meredith SPA Project, and also substantiates Project compliance with the CCAP.

Table 4.4-3
Policy Plan Goals and Policies Consistency Analysis

Goals/Policies		**Remarks**
Environmental Resources Element		
ER3 Energy		
Goal ER3: Reduction in energy demand in its relation to conservation, transportation, development, and generation.		
Policies		**Remarks**
ER3-1	*Conservation Strategy.* We promote conservation as the first strategy to be employed to meet applicable energy-saving standards.	***Consistent:*** Pursuant to the EIR Mitigation Measures, the Project Applicant shall submit energy usage calculations demonstrating that the increment of Project development for which building permits are being requested will achieve 5% efficiency beyond the incumbent California Building Code Title 24 requirements. Please refer also to Remarks at Policy ER 4-1. Based on the preceding, the Project is considered

Table 4.4-3
Policy Plan Goals and Policies Consistency Analysis

Goals/Policies		Remarks
		consistent with Policy ER3-1.
ER3-3	*Transportation Energy.* We promote the development that reduces the energy associated with getting people to and from buildings. Community facilities should be sited in areas accessible to public transportation.	***Consistent:*** The Project's immediate access to improved roadways and freeways would tend to reduce the length of vehicle trips and vehicle miles traveled (VMT), with correlating reductions in transportation energy demands. The Project's mixed-use land use concept collocates residential and business/commercial–retail uses, thereby acting to reduce vehicle miles traveled (VMT) locally and within the region; with corollary reductions in vehicle energy consumption and vehicular-source air pollutant emissions, including GHG emissions. Alignment of the potential Gold Line transit corridor as indicated in the Policy Plan (Policy Plan Mobility Element, Figure M-4, and Transit Plan) would parallel the Cucamonga Creek Channel, roughly bisecting the Specific Plan area. Gold Line transit corridor opportunities made available to the Project site would provide alternatives to use of personal vehicles for residents, employees, and patrons traveling to and from the Specific Plan Area, thereby reducing *Transportation Energy* demands, and VMT and vehicular-source GHG emissions. Pedestrian connections provided by the Project would encourage people to walk instead of driving, further reducing transportation energy demands. Based on the preceding, the Project is considered consistent with Policy ER3-3.
ER3-6	*Generation-Renewable Sources.* We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.	***Consistent:*** Industrial land uses proposed by the Project would provide at a minimum 1,600,000 kWh per year of electricity generation through implementation of on-site solar generation. On this basis, the Project is considered consistent with Policy ER3-6. Please refer also to Remarks at Policy ER 4-1.
ER4 Air Quality		
Goal ER4: Improved indoor and outdoor air quality and reduced locally generated pollutant emissions		
ER4-1	*Land Use.* We reduce GHG and other local pollutant emissions through compact, mixed use, transit-oriented development that improves the regional	***Consistent:*** The Project Economic/Fiscal Impact Analysis substantiates that employment opportunities created by the Project would likely increase the City's average employment/housing ratio from 2.30

Table 4.4-3
Policy Plan Goals and Policies Consistency Analysis

Goals/Policies		Remarks
	jobs/housing balance.	jobs/households currently, to approximately 2.36 jobs/households within the Project's estimated 20-year development time frame (Economic/Fiscal Impact Analysis, p. ES-4). The Project would therefore support local, county, sub-regional and regional goals furthering employment/housing balance. The Project's mixed-use land use concept collocates residential and business/commercial–retail uses, thereby acting to reduce vehicle miles traveled (VMT) locally and within the region; with corollary reductions in vehicle energy consumption and vehicular-source air pollutant emissions, including GHG emissions. The Project also accommodates a Class II Bikeway Corridor along Inland Empire Boulevard in accordance with the Policy Plan Mobility Element, and provides sidewalks and pathways adjacent to roadways to promote pedestrian activity. Alternative transportation modes provided by and facilitated through the Project also act to reduce VMT and vehicular-source GHG emissions. More specifically, alignment of the potential Gold Line transit corridor as indicated in the Policy Plan (Policy Plan Mobility Element, Figure M-4, and Transit Plan) would parallel the Cucamonga Creek Channel, roughly bisecting the Specific Plan area. Gold Line transit corridor opportunities made available to the Project site would provide alternatives to use of personal vehicles for residents, employees, and patrons traveling to and from the Specific Plan Area, thereby reducing VMT and vehicular-source GHG emissions. Industrial land uses proposed by the Project would incorporate solar panels providing electricity to industrial building office areas acting to reduce consumption of fossil fuels and related generation of GHG emissions. Additionally, all primary structures within the Specific Plan area would be designed to achieve or surpass Leadership in Energy and Environmental Design (LEED) Certification Minimum Program Requirements (MPRs). The plant palette for the Project incorporates water-efficient/drought tolerant species native to Southern California or naturalized to the arid Southern California

Table 4.4-3
Policy Plan Goals and Policies Consistency Analysis

Goals/Policies		Remarks
		climate; and use of turf would be minimized throughout the Specific Plan Area. In this manner, landscaping implemented by the Project would provide for efficient use of water resources. Reduced water consumption translates to reduced energy consumption with related reductions in GHG emissions. Further, "purple pipe" landscape irrigation systems would be implemented throughout the Specific Plan area, and only recycled/reclaimed water would be used for landscape irrigation or other non-potable purposes, thereby reducing demands on potable water resources. Based on the preceding, the Project is considered consistent with Policy ER4-1.
ER4-2	*Sensitive Land Uses:* We prohibit the future citing of sensitive land uses within the distances defined by the California Air Resources Board for specific source categories without sufficient mitigation.	***Consistent:*** As substantiated in the Project Air Quality Impact Analysis (AQIA), mitigated Project construction-source air pollutant emissions would not result in or cause CAAQS or NAAQS violations; and further, that unmitigated Project operational-source air pollutant emissions would not result in or cause CAAQS or NAAQS violations. The Project HRA substantiates the Project-source DPM emissions would not cause or result in potentially significant health hazards. The Project Freeway-Source HRA substantiates that effects of freeway-source pollutants at the Project's Urban Residential land uses would be less-than-significant as mitigated. Based on the preceding, the Project is considered consistent with Policy ER4-2.
ER4-3	*Greenhouse Gases (GHG) Emissions Reduction:* We will actively pursue the reduction of GHG emissions in accordance with regional, state, and federal regulations.	***Consistent:*** The Project GHG Analysis substantiates that Project GHG emissions would be reduced by approximately 32.81% when compared to the BAU scenario, and would therefore surpass the statewide GHG emissions reductions established under AB 32 and required The Ontario Plan EIR. On this basis, the Project is considered consistent with Policy ER4-3.
ER4-4	*Indoor Air Quality:* We will require all building material, including interior finishes, in new development and major renovations meet the air quality standards and regulations set forth by the South Coast Air Quality Management District.	***Consistent:*** Pursuant to the EIR Mitigation Measures, only "Zero-Volatile Organic Compounds" paints (no more than 150 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used. On this basis, the Project is considered consistent with Policy ER4-4.
ER4-5	*Mobile Sources in Interior Spaces:* We encourage the use of low or zero emissions interior mobile equipment	***Consistent:*** Pursuant to the Project Description, all on-site cargo handling equipment (CHE) would be powered by non-diesel fueled engines (e.g., electric or

Table 4.4-3
Policy Plan Goals and Policies Consistency Analysis

Goals/Policies		Remarks
	within commercial and industrial buildings.	natural gas). On this basis, the Project is considered consistent with Policy ER4-5.
ER4-6	*Transportation:* We promote mass transit and nonmotorized mobility options (walking, biking) to reduce air pollutant emissions.	***Consistent:*** Please refer to Remarks at ER3-3 and ER 4-1.
ER4-7	*Particulate Matter:* We support efforts to reduce particulate matter to meet state and federal clean air standards.	***Consistent:*** As substantiated in the Project AQIA, with the application of Mitigation Measures, Project construction-source particulate matter (PM_{10}/$PM_{2.5}$) emissions would meet state and federal clean air standards (CAAQS and NAAQS). Unmitigated Project operational-source PM_{10}/$PM_{2.5}$ emissions would meet applicable CAAQS and NAAQS. On this basis, the Project is considered consistent with Policy ER4-7.
ER4-9	*Tree Planting:* We support the protection of healthy trees within the City and the planting of new trees to increase carbon sequestration and help the regional/local air quality.	***Consistent***: As detailed in the Meredith SPA, Perimeter and interior streets would be landscaped with a combination of evergreen and deciduous trees (including flowering varieties), shrubs, and groundcovers in an aesthetically pleasing manner to establish the Project design theme and to complement existing surrounding development. Trees planted by the Project would also act to increase carbon sequestration and improve the regional/local air quality.

Sources: Goal/Policy statements from: City of Ontario Policy Plan; Remarks-Applied Planning, Inc.

Table 4.4-4
Compliance with The Ontario Plan EIR Mitigation Measures

Mitigation Measures		Remarks
5.3 Air Quality		
3-1	The City of Ontario Building Department shall require that all new construction projects incorporate feasible mitigation measures to reduce air quality emissions.	***Compliant:*** Pursuant to the EIR Mitigation Measures mitigation measures the Project's air quality impacts are reduced to the extent feasible. It is further noted that air pollutant emissions generated by the Project would be substantially reduced when compared to air pollutant emissions generated by the currently entitled 1981 Meredith International Centre Specific Plan; and/or development of the subject site anticipated and evaluated under The Ontario Plan EIR. Based on the preceding, the Project would implement and comply with The Ontario Plan EIR Mitigation Measure 3-1.
3-2	The City of Ontario shall evaluate new development proposals within the City	***Compliant:*** As discussed herein, the Project would provide, and is provided access to alternative modes of

Table 4.4-4
Compliance with The Ontario Plan EIR Mitigation Measures

Mitigation Measures		Remarks
	and require all developments to include access or linkages to alternative modes of transportation, such as transit, stops, bike paths, and/or pedestrian paths (e.g., sidewalks).	transportation, such as transit, stops, bike paths, and/or pedestrian paths. Please refer also to Table 4.4-3, Remarks at ER3-3, ER4-1, and ER4-6. Based on the preceding, the Project would implement and comply with The Ontario Plan EIR Mitigation Measure 3-2.
3-3	The City of Ontario shall evaluate new development proposals within the City for potential incompatibilities with regard to the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective* (April 2005). New development that is inconsistent with the recommended buffer distances shall only be approved if feasible mitigation measures such as high efficiency Minimum Efficiency Reporting Value filters have been incorporated into the project design to protect future sensitive receptors from harmful concentrations of air pollutants as a result of proximity to existing air pollution sources.	***Compliant:*** Urban Residential land uses proposed by the Project are located approximately 1,000 feet northerly of the I-10 Freeway, and therefore comply with ARB's Air Quality and Land Use Handbook recommendation to: "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day." Mitigation included in the EIR requires that residential units within the Project site be provided high efficiency filters**.** The Project Freeway-source HRA substantiates that mitigated freeway-source air pollutant emissions received at the Project Urban Residential land uses would be less-than-significant. Based on the preceding, the Project would implement and comply with The Ontario Plan EIR Mitigation Measure 3-3.
5.6 Global Climate Change		
6-1	The City of Ontario shall prepare a Climate Action Plan within 18 months after adopting The Ontario Plan. The goal of the Climate Action Plan shall be to reduce GHG emissions from all activities within the City boundaries to support the State's efforts under AB 32 and to mitigate the impact of climate change on the City, State, and world. Once completed, the City shall update The Ontario Plan and associated policies, as necessary, to be consistent with the Climate Action Plan and prepare a subsequent or supplemental Environmental Impact Report, if new significant impacts are identified.	***Compliant:*** On December 14, 2014, the City of Ontario adopted its Community Climate Action Plan (CCAP). As one element of the CCAP, the City of Ontario has established a year 2020 goal to reduce community GHG emissions to a level that is 30 percent below a Business As usual (BAU) condition. This reduction in community GHG emissions is consistent with statewide GHG emissions reductions targets identified under AB 32 and recommended in the AB 32 Scoping Plan. For new development projects which would generate 3,000 MT CO2e or greater (such as the proposed Meredith SPA), the CCAP established a GHG emissions reduction performance standard of 25 percent below the project BAU scenario. The Project GHG Analysis substantiates that Project GHG emissions would be reduced by approximately 32.81% when compared to the BAU scenario, and would therefore surpass the statewide GHG emissions reductions performance standards established under AB 32. Based on the preceding, the Project would implement and comply with The Ontario Plan EIR Mitigation Measure 6-1.

Table 4.4-4
Compliance with The Ontario Plan EIR Mitigation Measures

Mitigation Measures		Remarks
6-2	The Climate Action Plan shall include specific measures to achieve the GHG emissions reduction targets identified in Mitigation Measure 6-1. The Climate Action Plan shall quantify the approximate greenhouse gas emissions reductions of each measure and measures shall be enforceable.	***Compliant:*** Please refer to Remarks at 6-1.
6-3	The City of Ontario will amend the Municipal Code within 18 months after adopting The Ontario Plan, with provisions implementing the GHG emissions reduction concepts outlined in the *Mitigation Monitoring Requirements*.	***Compliant:*** The Project does not propose or require elements or operations that would obstruct with or otherwise interfere with City amendment of the Municipal Code implementing the GHG emissions reduction concepts outlined in The Ontario Plan EIR. Please refer also to Remarks at 6-1. Based on the preceding, the Project would implement and comply with The Ontario Plan EIR Mitigation Measure 6-3.
6-4	Measures listing in Mitigation Measure 6-2 and 6-3 shall be considered by the City while reviewing all new development, as appropriate, between the time of adoption of the Ontario Plan and adoption of the Climate Action Plan (CAP).	***Compliant:*** Please refer to Remarks at 6-1.
6-5	Pursuant to a goal of overall consistency with the Sustainable Communities Strategies, the City of Ontario shall evaluate new development for consistency with the development pattern set forth in the Sustainable Communities Strategies plan, upon adoption of the plan by the Southern California Association of Governments.	***Compliant:*** The Project incorporates and supports Southern California Association of Governments Regional Transportation Plan (RTP) Sustainable Communities Strategies (SCS) Goals and Policies. Please refer to EIR Section 4.1, Land Use, Table 4.1-6, and "Meredith International Centre Specific Plan Amendment Project Consistency with SCAG RTP/SCS Regional Goals." Based on the preceding, the Project would implement and comply with The Ontario Plan EIR Mitigation Measure 6-5.
6-6	The City of Ontario shall participate in the County of San Bernardino's Green Valley Initiative.	***Compliant:*** As substantiated within this Analysis and within the EIR in total, the Project would be compatible with and would support the Green Valley Initiative mission "to transform Riverside and San Bernardino counties into a region that integrates people and business with natural resources to create jobs, greater opportunity, and a higher quality of life." The Project does not propose or require elements or operations that would obstruct or otherwise interfere with City participation in the County of San Bernardino's Green Valley Initiative.

Sources: Mitigation Measures from: The Ontario Plan EIR; Remarks-Applied Planning, Inc.

IMPACT STATEMENTS

Potential Impact: ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.***

Impact Analysis:

California Emissions Estimator Model (CalEEMod) Employed to Estimate GHG Emissions

CEQA Guidelines 15064.4 (b) (1) states that a Lead Agency may employ a model or methodology of its choice to quantify greenhouse gas emissions associated with a project. The SCAQMD-approved California Emissions Estimator Model (CalEEMod, Model) is accepted by the Lead Agency for modeling of greenhouse gas (GHG) emissions, and was employed in the analysis of Project GHG emissions impacts. CalEEMod calculates air pollutant/GHG emissions from direct and indirect sources, and quantifies pollutant/GHG emissions reductions achieved from mitigation measures. The Model includes and evaluates GHG emissions from the following source categories: construction, area, energy, mobile, waste, water. Considerations applicable to each of these categories are addressed briefly in the following paragraphs.

Construction-Source GHG Emissions

Project construction activities would generate the GHG emissions of CO_2 and CH_4. Construction-source GHG emissions are quantified and amortized over the life of the Project. To this end, and consistent with SCAQMD-recommended methodology, greenhouse gas emissions generated by Project construction activities were totaled and then divided by 30, reflecting an assumed 30 year Project life. The resulting quotient was then summed with annual operational phase GHG emissions under the "Business As Usual" and Project scenarios presented below.

Operational-Source GHG Emissions

Operational activities associated with the proposed Project will generate CO_2, CH_4, and N_2O emissions due to area sources; building energy use; water supply, treatment and distribution (water use); solid waste management; and mobile-sources (vehicular) energy consumption.

Area Sources

Area Sources (generalized activities associated with landscape and building maintenance) would generate GHG emissions over the life of the Project.

On-site Equipment Operations

Industrial land uses proposed by the Project would employ various pieces of cargo handling equipment (CHE) in their daily operations. Cargo handling equipment or yard trucks are also commonly referred to as "yard goats," utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks typically have a horsepower (hp) range of approximately 175 hp to 200 hp. For the Project, assumed on-site operational equipment supporting the Project industrial land uses would include a total of twelve–200 hp yard tractors, operating at 4 hours a day for 260 days of the year. All on-site equipment would use non-diesel fuel.

Building Energy Use

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEmod default parameters were employed in estimating GHG emissions generated by building energy use.

Water Supply, Treatment and Distribution (Water Use)

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water is determined by the volume of water used, as well as the sources of the water. Unless otherwise noted, CalEEmod default parameters were employed in estimating GHG emissions generated by water supply, treatment and distribution activities and processes.

Solid Waste Management

Commercial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. Unless otherwise noted, CalEEmod default parameters were employed in estimating GHG emissions generated by solid waste management activities and processes.

Mobile-Source Emissions

GHG emissions would also be generated by Project-related mobile sources. These mobile-source emissions would result from daily operation of motor vehicles by patrons and employees. Project mobile-source emissions are dependent on overall daily vehicle trip generation. Trip characteristics available from the Project Traffic Impact Analysis (EIR Appendix C) were utilized in this analysis.

GHG Emission Reduction Targets

The CARB Scoping Plan BAU Scenario reflects development of the Project site absent design features, operational programs, mitigation measures, and state requirements established by AB 32 which would collectively act to reduce GHG emissions.

The CARB Scoping Plan considers statewide GHG emissions, and indicates that statewide AB 32 compliance would be achieved provided there is a minimum 28.5 percent reduction in statewide Business As Usual GHG emissions, when considering the time frame 1990 to 2020. Similarly, The Ontario Plan EIR indicates that City-wide AB 32 compliance would be achieved provided there is an approximately 30.0 percent reduction in Business As Usual GHG emissions for the time frame 1990 to 2020 (The Ontario Plan EIR, pp. 5.6-6, 5.6-7).

Under The Ontario CCAP, new developments projects (such as the proposed Meredith SPA) that would provide for a 25 percent reduction in GHG emissions when compared to BAU conditions, would be considered compliant with the CCAP GHG emissions reduction performance standards.

Project GHG emissions levels that would reflect CARB Scoping Plan GHG and City emissions reductions targets would be considered compliant with AB 32, and potential Project GHG emissions/Global Climate Change impacts would be considered less-than-significant.

Annual GHG emissions that would be generated by the Project under BAU Scenario assumptions, and that would result from the Project Scenario are summarized at Table 4.4-5. As indicated at Table 4.4-5, Project Scenario GHG emissions would be reduced by approximately 35,963.31 Metric Tons per Year CO_2e, or approximately 32.81 percent when compared to GHG emissions generated under the BAU scenario.

Table 4.4-5
GHG Emissions Summary
BAU Scenario vs. Project Scenario

Emission Source	**Annual Emissions (CO_2E-metric tons per year)**	
	BAU Scenario	**Project Scenario**
Construction-source emissions; annual, amortized over 30 years	900.20	900.20
Building Energy Consumption	14,417.36	9,644.01
Area Sources	207.41	207.41
On-site Equipment Operations	554.41	461.12
Mobile Sources	90,579.40	59,817.96
Solid Waste Management	2,047.01	2,047.01
Water Use	903.03	568.00
Totals	**109,608.83**	**73,645.72**
Project Scenario Reduction in BAU GHG Emissions	**(35,963.31 CO_2E-metric tons per year) (32.81 percent)[5]**	

Source: *Meredith International Centre Specific Plan Amendment Greenhouse Gas Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Note: CalEEMod quantified emissions may not total 100% due to rounding.

[5] Project vs. BAU Conditions if employing the *Draft Warehouse Truck Trip Study* protocols and assumptions would yield an approximate 30.76% reduction in GHG emissions; and would be compliant with AB 32 and the City CCAP.

GHG emissions reductions achieved under the Project Scenario would be realized through the Project design and operational programs as detailed in the EIR Project Description (EIR Section 3.0), compliance with state policies and requirements, and application of operational-source air quality Mitigation Measure 4.3.4 identified at EIR Section 4.3, "Air Quality." In this latter regard, Project GHG emissions impacts would be less-than-significant, and require no specific mitigation measures. Notwithstanding, Air Quality Mitigation Measure 4.3.4 would act to globally reduce Project operational-source air pollutant emissions, and in so doing would also reduce GHG emissions. GHG emissions reductions by source/measure are summarized at Table 4.4-6.

Table 4.4-6
GHG Emissions Reductions by Source and Reduction Measure
BAU Scenario vs. Project Scenario

GHG Emissions Source	GHG Emissions (CO_2e-Metric Tons per Year)				
	BAU GHG Emissions	**GHG Reduction resulting from *State Measures***	**GHG Reduction resulting from *Project Design, and EIR AQ Mitigation Measures***	**Total GHG Reduction**	**Net Project GHG Emissions Reduction vs. BAU Scenario**
Construction	900.20	0.00	0.00	0.00	900.20
Bldg. Energy Consumption	14,417.36	4,245.06 - Renewable Portfolio Standards - 2013 Title 24 Requirements	528.29 - Mitigation Measure 4.3.4 (Exceed Title 24 by 5%) - Project Design Feature (1,600,000 kWh/yr. from solar generation)	4,773.35	9,644.01
Area Sources	207.41	0.00	0.00	0.00	207.41
On-site Equipment Operations	554.41	93.29 - Natural turn-over of equipment/vehicles, and their replacement with newer vehicles subject to more stringent CA/EPA emissions standards	0.00	93.29	461.12

Table 4.4-6
GHG Emissions Reductions by Source and Reduction Measure
BAU Scenario vs. Project Scenario

GHG Emissions Source	GHG Emissions (CO_2e-Metric Tons per Year)				
	BAU GHG Emissions	**GHG Reduction resulting from *State Measures***	**GHG Reduction resulting from *Project Design, and EIR AQ Mitigation Measures***	**Total GHG Reduction**	**Net Project GHG Emissions Reduction vs. BAU Scenario**
Mobile Sources	90,579.40	22,275.03 - Pavley Fuel Efficiency Standards (AB1493) - Title 17 California Code of Regulations (Low Carbon Fuel Standard)	8,486.41 - Project Design Features (Increase Diversity)	30,761.44	59,817.96
Solid Waste Management	2,047.01	0.00	0.00	0.00	2,047.01
Water Use	903.03	175.58 *- Renewable Portfolio Standards*	159.45 -Project Design Feature (reduction of water use 20% indoor)	335.03	568.00
Totals	**109,608.83**	**26,788.96**	**9,174.15**	**35,963.11**	**73,645.72**

Source: *Meredith International Centre Specific Plan Amendment Greenhouse Gas Analysis, City of Ontario* (Urban Crossroads, Inc.) January 21, 2015.
Note: CalEEMod quantified emissions may not total 100% due to rounding.

Summary and Conclusions

Project is Consistent with and Supports AB 32 and CARB Scoping Plan

The analysis demonstrates that the Project is consistent with, or otherwise not in conflict with, recommended measures and actions in the CARB Scoping Plan. The Scoping Plan establishes strategies and measures that would achieve GHG reductions goals set forth in the Global Warming Solutions Act of 2006 (AB 32). More specifically, the CARB Scoping Plan calls for an approximately 28.5 percent reduction in GHG emissions when compared to BAU conditions. Similarly, The Ontario Plan EIR indicates that AB 32 compliance would

be achieved through an approximately 30.0 percent reduction in GHG emission when compared to a BAU Scenario.

As substantiated within this Section, the Project would realize an approximately 32.81 percent reduction in GHG emissions when compared to a BAU Scenario, and therefore would achieve CARB Scoping Plan and City GHG emissions reductions targets. The Project is therefore considered consistent with and would support AB 32 and the CARB Scoping Plan.

Project is Consistent with Applicable City of Ontario Policy Plan Goals/Policies

As substantiated at Table 4.4-3, "Policy Plan Goals and Policies Consistency Analysis," the Project would be consistent with and would support City of Ontario Policy Plan Goals/Policies acting to reduce air pollutant emissions and air pollutant emissions impacts generally, and GHG emissions and GHG emissions impacts specifically.

Project would Comply with and Implement Applicable TOP EIR Air Quality/GHG Emissions Mitigation Measures

As substantiated at Table 4.4-4, "Compliance With The Ontario Plan EIR Mitigation Measures," the Project would comply with, and would implement TOP EIR mitigation measures acting to reduce air pollutant emissions and air pollutant emissions impacts generally, and GHG emissions and GHG emissions impacts specifically.

As summarized herein, and presented in detail in the Project GHG Analysis, the Project would be consistent with and would support AB 32, the CARB Scoping Plan, and City of Ontario Policy Plan Air Quality/GHG Emissions Goals and Policies. Complemented by Project compliance with applicable Mitigation Measures incorporated in The Ontario Plan EIR acts to reduce the potential for the Project to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, to levels that are less-than-significant.

Project is Consistent with and Supports the City of Ontario Community Climate Action Plan (CCAP)

Under CCAP Performance Standard-1 (PS-1), new development projects (such as the proposed Meredith SPA) would be required to provide a minimum 25 percent reduction in GHG emissions when compared to a 2020 BAU scenario.[6] The analysis provided herein substantiates that Project GHG emissions would be reduced be approximately 32.81 percent when compared to a 2020 BAU scenario. The Project is therefore consistent with the City of Ontario Community Climate Action Plan.

Incremental Project GHG Emissions are Not Cumulatively Considerable

The Project would generate an estimated 73,645.72 metric tons CO_2e emissions when compared to existing conditions. In context, the City of Ontario 2008 GHG emissions as estimated under the CCAP totaled 2.5 million metric tons CO_2e.[7] Project GHG emissions would represent approximately 3 percent of the City's estimated 2008 GHG emissions total. As discussed in the CCAP:

> An individual project cannot generate enough GHG emissions to influence global climate change. The project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together may have a significant impact on global climate change . . . Because the City's CAP addresses GHG emissions reduction, is in concert with AB 32 and international efforts to address global climate change, and includes specific local requirements that

[6] "**Performance Standard for New Development:** The City's Performance Standard (PS) for New Development would provide a streamlined and flexible program for new residential and nonresidential projects to reduce their emissions. The PS would include performance standards for new private developments as part of the discretionary approval process under CEQA. Under the PS, new projects would be required to quantify project-generated GHG emissions and adopt feasible reduction measures to reduce project emissions to 25% below 2020 BAU project emissions. The PS does not require that project applicants implement a predetermined set of measures. Rather, project applicants are encouraged to choose the most appropriate measures for achieving the percent reduction goal, while taking into consideration cost, environmental or economic benefits, schedule, and other project requirements. The PS applies to all projects emitting more than 3,000 MT CO_2e per year, which is roughly equivalent to 90% of projects" (CCAP p. 3-2).

[7] "The City's GHG emissions in 2008 were approximately 2.5 million MT CO_2e" (Ontario CCAP, p. 2-5).

> will substantially lessen the cumulative problem, compliance with the CAP fulfills the description of mitigation found in *CEQA Guidelines* §15130(a)(3) and §15183.5. (CCAP, p. 2-5).

As substantiated herein, the proposed Meredith SPA Project would be consistent with the CCAP, would be in concert with AB 32 and international efforts to address global climate change, and would reflect specific local requirements that would substantially lessen cumulative GHG emissions impacts. The proposed Meredith SPA Project would therefore also fulfill the description of mitigation found in *CEQA Guidelines* §15130(a)(3) and §15183.5. The Project's incremental contribution to GHG emissions impacts would therefore not be cumulatively considerable.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.***

As substantiated in the preceding discussions, the Project is consistent with and supports AB 32 and the CARB Scoping Plan; is consistent with applicable City of Ontario Policy Plan Goals and Policies; and would comply with and implement applicable TOP EIR mitigation measures. At present, there are no other applicable plans, policies or regulations adopted for the purpose of reducing the Project's GHG emissions.

City/CARB AB 32 compliance would be achieved provided there was a minimum 30.0 percent reduction in statewide Business As Usual GHG emissions, when considering the time frame 1990 to 2020. Project GHG emissions levels that are consistent with the noted 30.0 percent GHG emissions reductions targets would be considered compliant with AB 32, and potential Project GHG emissions/Global Climate Change impacts would be considered less-than-significant.

As substantiated herein, Project GHG emissions would be reduced by approximately 32.81 percent when compared to a BAU scenario. This reduction in emissions compared to BAU

conditions supports the conclusion that Project is consistent with and supports AB 32 and the CARB Scoping Plan. Please refer also to the Project GHG Analysis (EIR Appendix E) Table 4-2: *Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction.*

Tables 4.4-3 and 4.4-4 presented previously in this Section substantiate that the Project would be consistent with applicable City of Ontario Policy Plan Goals and Policies; and that applicable TOP EIR Mitigation Measures would be implemented under the Project.

Based on the preceding, the Project would be consistent with and would support to applicable plans, policies and regulations adopted for the purpose of reducing the emissions of greenhouse gases. The potential for the Project to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.