ONTARIO INTERNATIONAL AIRPORT

SOUTH AIRPORT CARGO CENTER PROJECT

Draft Environmental Impact Report

SCH No. 2021100226

PREPARED FOR:

ONTARIO INTERNATIONAL AIRPORT

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1.0 EXECUTIVE SUMMARY

1.1 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

This document is a Draft Environmental Impact Report (EIR) with respect to the proposed South Airport Cargo Center Project (proposed Project) that has been prepared by the Ontario International Airport Authority (OIAA). The California Environmental Quality Act (CEQA) requires that projects subject to an approval action by a public agency of the State of California, and that are not otherwise exempt or excluded, undergo an environmental review process to identify and evaluate potential impacts. Section 15050 of the CEQA Guidelines states that environmental review shall be conducted by the Lead Agency, defined in CEQA Guidelines Section 15367 as the public agency with principal responsibility for approving a project. The proposed Project is subject to approval actions by the OIAA, which is therefore Lead Agency for CEQA purposes.

In accordance with CEQA Guidelines Section 15123, this section of the Draft EIR provides a brief description of the proposed Project; identifies significant effects and proposed mitigation measures or alternatives that would reduce or avoid those effects; and describes areas of controversy and issues to be resolved.

1.2 OVERVIEW OF THE PROPOSED PROJECT

1.2.1 Project Location

The Project site consists of approximately 97 acres located at Ontario International Airport (Airport) in the City of Ontario, San Bernardino County. Regional access to the Airport and the Project site is via Interstate 10 (I-10), one-mile to the north; State Route 60 (SR-60), approximately 1.25 mile to the south; and I-15, approximately 2.75 miles to the east.

The Project site includes portions of Assessor Parcel Numbers (APN) 11326106, 11326107, 11326108, 11327101, and 11327102, located in the southern half of the Airport, immediately west of the Cucamonga Channel and north of Mission Boulevard. Most of the Project site is located north of East Avion Street with the remainder located between East Avion Street and Mission Boulevard west of South Hellman Avenue.

1.2.2 Project Objectives

Section 15124(b) of the CEQA Guidelines states that "the statement of objectives should include the underlying purpose of the project." The underlying purpose of the proposed Project is to develop and operate an air cargo facility at the Airport to meet increased regional air cargo

volumes and Project proponent facility requirements. The objectives of the OIAA for the proposed Project include:

A. Allow the Project proponent to accommodate current and projected air cargo volume growth.
B. Integrate the Project proponent's airside, landside, and sorting facilities in a location with access to major surface transportation corridors to improve operational efficiency.
C. Redevelop underutilized Airport property.
D. Maximize revenue generation from Airport property.
E. Provide employment opportunities for residents of the City of Ontario and the Inland Empire.

1.2.3 Project Characteristics

The proposed Project is an aeronautical development and use that is within the Airport boundaries and is consistent with the Ontario International Airport Layout Plan. The proposed Project would replace existing, underutilized airport related buildings and site improvements with an air cargo center. The proposed Project would include demolition of the existing buildings, site improvements, and the development of a new air cargo center in two phases, as described further below.

The proposed air cargo center includes an Air Cargo Sort Building, truckyard, parking facilities, two aviation support buildings (ground service equipment [GSE] and aircraft line maintenance buildings), and aircraft apron improvements. The Air Cargo Sort Building, proposed north of East Avion Street, would contain a sorting facility and office spaces. The aircraft parking apron would surround the building to the west, north, and east. A ground-level visitor parking lot and truckyard are proposed on the south side of the cargo building, with access from East Avion Street. A parking structure for employees is proposed south of East Avion Street with a pedestrian bridge connecting the parking structure to the office building. The proposed Project would be implemented in two phases. Phase 1 would take place on the easternmost 62 acres of the Project site and Phase 2 would occur on the remaining western 35 acres.

Table 1.1: Summary of Main Project Components (Acres), summarizes the components of the proposed Project for each of the two phases. Phase 1 construction would include the demolition of existing structures and site improvements in the Phase 1 area, as well as site preparation and construction of all proposed improvements on the eastern 62 acres of the Project site, including

the initial phase of the Air Cargo Sort Building, aircraft apron improvements, and parking structure, as shown in **Figure 3.3**. Phase 2 would occur on the western 35 acres of the Project site and include the demolition of structures and site improvements in the Phase 2 area, site preparation, and construction of the remaining improvements, including the expansion of the Air Cargo Sort Building and aircraft apron improvements.

TABLE 1.1
SUMMARY OF MAIN PROJECT COMPONENTS (ACRES)

	Phase 1	Phase 2	Total
Buildings	8	3	11
Concrete Paved Areas	40	25	65
Asphalt Paved Areas	6	5	11
Disturbed/Undeveloped Areas	8	2	10
Total	62	35	97

Landscaping would be proposed along the northern and southern sides of E. Avion Street. Landscaping would include Desert Museum Palo Verde trees with complementary shrub and groundcover species. Some existing Canary Island Pine trees would be retained and incorporated into the landscape areas. See **Section 3.0: Project Description** of this EIR.

1.3 SUMMARY OF ALTERNATIVES

Section 15126.6(a) of the CEQA Guidelines requires an EIR to "describe the range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the proposed Project and evaluate the comparative merits of the alternatives."

1.3.1 Alternative 1 – No Project/No Development Alternative

Section 15126.6(e) of the CEQA Guidelines states: "the No Project/No Build Alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, for purposes of this analysis, Alternative 1, the No Project/No Development Alternative (Alternative 1), assumes the proposed Project is not built and the existing airport-related buildings located on the Project site, which includes hangars, ancillary structures, related parking facilities, and site improvements would remain. Existing leases and non-OIAA tenant operations would continue to operate on the Project site and no relocation of these existing uses would occur.

1.3.2 Alternative 2 – Reduced Project Size Alternative

This alternative considers reducing the size of the proposed Project to reduce the significant and unavoidable transportation (VMT), operational air quality, and greenhouse gas emission (GHG) impacts identified for the Project as proposed. The proposed Project would result in an increase in the number of annual aviation operations at the Airport. In 2029, with completion of Phase 2, the proposed Project would include up to 33 daily departures and arrivals (66 total aircraft operations) with up to 17 daytime (7:00 AM–6:59 PM) departures and 20 daytime arrivals, and 3 evening (7:00 PM–9:59 PM) departures. In addition, the proposed Project would accommodate 3 evening arrivals, 13 nighttime (10:00 PM–6:59 AM) departures, and 10 nighttime arrivals. Truck operations would occur daily, primarily coinciding with the arrival and departure times of the scheduled flights. At proposed Project buildout, the proposed facility would operate with 1,315 employees.

Alternative 2 considers construction and operation of only Phase 1 of the proposed Project. This would include the demolition of existing structures and site improvements in the Phase 1 area, site preparation, and construction of all proposed improvements on the eastern 60 acres of the Project site, including the Air Cargo Sort Building (610,175 square feet on six (6) acres), aircraft apron improvements and GSE support (47 acres), truckyard and visitor parking (five (5) acres), and an employee parking garage (four (4) acres), as shown in **Figure 3.3**.

Aircraft operations would include up to 22 daily arrivals and departures, with a maximum of 44 total daily aircraft operations. In 2025, it is anticipated that aircraft operations would occur seven days per week, with up to 8 daytime (7:00 AM–6:59 PM) departures and 9 daytime arrivals, 1 evening (7:00 PM–9:59 PM) departure and 3 evening arrivals, and 13 nighttime (10:00 PM–6:59 AM) departures and 10 nighttime arrivals.

Construction of Alternative 2 would start in the third quarter of 2023 and be completed by the third quarter of 2025, when the proposed air cargo flight operations at the Airport would begin. Construction would include the demolition of existing structures and site improvements in the Phase 1 area, site preparation and grading, and construction of all proposed improvements under Phase I.

1.3.3 Alternative 3 – Different Location on Airport Alternative

Under this alternative, the proposed Project would be constructed and operate on a site located on the northwest edge of the Airport. This site provides a contiguous land area of approximately 90 acres in size. The site would provide direct airfield access to support the international and domestic cargo aircrafts for the proposed Project. The location of Alternative 3 would provide the airfield infrastructure to support the operational needs of the proposed Project, including

access to two runways, one at least 12,000 feet in length and one no less than 10,000 feet in length, with at least one runway with CAT III approach capability to accommodate air cargo aircraft fleet mix. This location at the Airport also has connections via the surrounding street network to the I-10, SR-60, and I-15 Freeways.

1.3.4 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify an environmentally superior alternative among the alternatives evaluated. If the "no project" alternative is the environmentally superior alternative, the EIR must identify another environmentally superior alternative among the remaining alternatives.

The "No Project" Alternative (Alternative 1) would avoid all significant impacts identified for the proposed Project. The No Project Alternative would not, however, achieve any of the objectives of the proposed Project.

Of the other alternatives considered, the Environmentally Superior Alternative is the Reduced Project Size Alternative (Alternative 2) because this alternative would substantially lessen the unavoidable significant air quality and greenhouse gas impacts, and incrementally reduce the VMT impacts identified for the proposed Project. While reduced, these impacts would remain significant after implementation of all feasible mitigation. Development of only Phase 1 of the proposed Project would also not meet the objectives of the proposed Project to accommodate current and projected air cargo volume growth, and would only partially meet the objectives of redeveloping and maximizing revenue for the OIAA from underutilized Airport property.

1.4 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Based on preliminary review discussed in the Notice of Preparation (NOP; see **Appendix 1.0**), the OIAA determined that preparation of an EIR was required to further evaluate potentially significant impacts related to: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology, Noise, Public Services (Fire and Police), Transportation, Tribal Cultural Resources, and Utilities/Service Systems. Impacts related to Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Parks/Recreation, Public Services (Schools and Other Public Facilities), and Wildfire were determined to be less than significant and are not evaluated further in this Draft EIR. **Table 1-2: Summary of Findings** presents a summary of the findings of this EIR.

1.5 AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines[1] require that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public, and present issues to be resolved by the lead agency. Concerns regarding potential air quality impacts have been addressed in **Section 5.2: Air Quality**, potential greenhouse gas emissions have been addressed in Section **5.7: Greenhouse Gas Emissions**, aircraft operation noise have been addressed in Section **5.10: Noise**; and Section **5.12 Transportation.** Project Design Features and Mitigation Measures have been identified to reduce impacts related to air quality, greenhouse gas emissions, and transportation; however, significant and unavoidable Project-specific and cumulatively considerable construction- and operation-related impacts to air quality, greenhouse gas emissions, and transportation were identified. Project Design Features and Mitigation Measures would reduce air quality emissions, greenhouse gas emissions, and transportation impacts to the greatest extent feasible. But, based on the analysis conducted within this Draft EIR document, no feasible mitigation is available to reduce these impacts to a level of insignificance. All other related potential impacts resulting from the proposed Project have been addressed and reduced to levels of less than significance throughout this Draft EIR.

1.6 PROPOSED MITIGATION MEASURES

Table 1-2: Summary of Findings provides the mitigation measures for the proposed Project that have been identified to reduce potentially significant impacts to the maximum extent feasible. In addition, the proposed Project includes Project Design Features to proactively address the potential effects of the construction and operation of the proposed Project.

1.7 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL EFFECTS

As required by the State CEQA Guidelines Section 15126.2(b), this section identifies the significant environmental effects that cannot be avoided if the proposed Project is implemented. The State CEQA Guidelines require that an EIR "Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications, and the

1 California Public Resources Code, tit. 14, sec. 15123.

reasons why the project is being proposed, notwithstanding their effect, should be described."[2] Based on the analysis conducted within this Draft EIR document, operation of the proposed facility would result in significant air quality, greenhouse gas emission, and transportation impacts that cannot be mitigated to less than significant. As discussed below, no feasible mitigation is available to reduce impacts to a level of insignificance.

Air Quality

As discussed in **Section 5.2: Air Quality**, estimated emissions from operation of Phase 1 and Phase 2 of the proposed Project would exceed South Coast Air Quality Management District (SCAQMD) significance thresholds for CO, VOC, NOx (Phases 1 and 2), and SO2 (Phase 2 only), primarily due to aircraft emissions, followed by employee vehicles, delivery trucks, and emergency generators. The proposed Project would incorporate Project Design Features **PDF AQ-3** through **PDF AQ-8** and Mitigation Measures **MM AQ-4** through **MM AQ-7** as well as mitigation measures **TRANS-1** through **TRANS-5** in **Section 5.12: Transportation,** of this Draft EIR to reduce operational air quality emissions to the greatest extent feasible. Neither the SCAQMD nor OIAA have the authority to regulate aircraft operations or emissions from aircraft engines and the majority of the emissions estimated for operation of the proposed Project are from aircraft operations. The 2022 AQMP identifies actions that can be taken by other agencies with regulatory jurisdiction to address these sources of emissions, including the adoption of more stringent criteria pollutant standards for aircraft engines and use of cleaner aviation fuels. It is anticipated that these types of future technology improvements will reduce the aviation emissions associated with the proposed Project over time. As the proposed Project is an air cargo facility serving the region, the operational and economic viability of the proposed Project relies on these aviation operations. For these reasons, there are no additional feasible mitigation measures that would reduce operational emissions to below significance thresholds and operational air quality emissions would remain significant after implementation of all feasible mitigation.

Greenhouse Gas Emissions

As discussed in **Section 5.7: Greenhouse Gas Emissions**, the proposed Project would generate approximately 128,057 $MTCO_2e$ of GHG emissions per year at full build-out. The majority (i.e., over 75 percent) of the GHG emissions associated with future operation of the proposed Project are related to aircraft sources (i.e., aircraft, auxiliary power unit [APU], and ground service

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2 California Code of Regulations, tit. 14, div. 6, ch. 3, *California Environmental Quality Act Guidelines*, sec. 15126.2(b).

equipment [GSE]). Project Design Features **PDF AQ-3** through **PDF AQ-5, PDF AQ-7, PDF AQ-8,** Mitigation Measures **MM AQ-4** through **MM AQ-7,** and mitigation measures **TRANS-1** through **TRANS-5** in **Section 5.12: Transportation,** of this Draft EIR would serve to reduce GHG emissions. Additionally, the proposed Project includes Project Design Features **PDF GHG-1** and **PDF GHG-2** to reduce GHG emissions to the greatest extent feasible. As discussed above, neither the SCAQMD nor OIAA have the authority to regulate aircraft operations or emissions from aircraft engines and the majority of the emissions estimated for operation of the proposed Project are from aircraft operations. As with the operational air quality emissions associated with the proposed Project, while it is anticipated future technology improvements are anticipated to reduce Project GHG emissions over time, there are no additional feasible mitigation measures available at this time that would reduce GHG emissions to below significance thresholds and for this reason, the proposed Project's GHG emissions would remain significant after implementation of all feasible mitigation.

Transportation

As discussed in **Section 5.12: Transportation** in this EIR, the truck, employee and other trips generated by the proposed Project would result in the Project Total VMT per service population (employees for this proposed Project) being 22 percent above the City's VMT significance threshold of 29.76 VMT per service population. Approximately 70 percent of the proposed Project VMT would be generated by employee, guest and delivery trips, with the other 30 percent generated by trucks associated with the movement of cargo from the proposed facility throughout the region. To mitigate the significant VMT impact, Project total VMT per service population would need to be reduced by 22 percent. It is not feasible to reduce the portion (30 percent) of Project VMT generated by trucks transporting cargo, as the proposed Project is an air cargo facility serving a large region, and the operational and economic viability of the proposed Project relies on trucks picking up and delivering cargo. To mitigate the VMT impact of the proposed Project focusing solely on truck trips, the truck VMT would need to be reduced by 75 percent. In addition, to mitigate the VMT impact of the proposed Project focusing solely on passenger vehicles, the proposed Project's passenger car VMT would need to be reduced by 33 percent. VMT generated by employees, guests, and deliveries, considered alone, is already under the City's VMT significance threshold of 29.76 VMT per service population. As discussed in **Section 5.12: Transportation** of this EIR, implementation of all feasible mitigation measures **(MM TRANS-1** through **MM TRANS-5)** for employee trips is estimated to reduce the proposed Project's employee VMT by a maximum of 5.10 percent, which is the maximum extent feasible but falls short of the 33 percent reduction required to mitigate the VMT impact of the proposed Project to less than significant. There are no additional feasible mitigation measures available at

this time that would reduce operational VMT to below significance thresholds and for this reason, VMT would remain significant after implementation of all feasible mitigation.

Conclusion

Significant, unavoidable impacts related to air quality, GHG, and transportation have been identified. No feasible mitigation is available to reduce these impacts to less than significant levels. All other significant impacts of the proposed Project would be reduced to a less than significant level with the implementation of mitigation measures identified in this Draft EIR.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	Aesthetics	
Threshold AES-1: Would the Project have a substantial adverse effect on a scenic vista? **Less Than Significant Impact.** Views of the Santa Ana Mountains and Chino Hills to the east and south would not be affected with implementation of the proposed Project. During construction of Phase 1 and Phase 2 of the proposed Project, equipment would be staged on-site, which would have a minimal impact on scenic views from East Mission Boulevard looking north during proposed Project development. Development within this area of the Airport would not substantially alter the scenic views provided along Mission Boulevard of the San Gabriel Mountains backdrop because the peaks rise to 7,000 feet above mean sea level (amsl). For these reasons, the development of the proposed Project would not have a substantial adverse effect on a scenic vista. Therefore, impacts would be less than significant, and no mitigation is required.	No mitigation measures are necessary.	Less than significant.
Threshold AES-2: Would the Project Substantially damage scenic resources, including, but not limited to,	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
trees, rock outcroppings, and historic buildings within a state scenic highway? **No Impact.** The Project site is not located in the vicinity of a State Scenic Highway. Due to the distance and intervening land uses, no portion of the Project site or surrounding area is viewable from the officially designated R-91 or the eligible portion of the SR-142, which are approximately 16 miles southwest and 9.5 miles southwest of the Project site, respectively. Additionally, the Project site does not contain any scenic resources, such as rock outcroppings or trees, or historic buildings that would be damaged by the proposed Project. As such, the Project would not result in impacts related to the substantial damage of scenic resources within a State Scenic Highway. Therefore, impacts would be less than significant, and no mitigation is required.		
Threshold AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Less Than Significant Impact. The Project site is designated "Airport" in the Ontario Plan zoned "ONT" – Ontario Airport zone. Use of the Project site is subject to regulatory oversight by OIAA and the FAA through the approved Ontario International Airport Layout Plan (ALP) and Airport Land Use Compatibility Plan (ALUCP). The proposed Project would be consistent with applicable policies in The Ontario Plan to the Airport and regulations in the ALUCP. Therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality, and impacts would be less than significant.		
Threshold AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? **Less Than Significant Impact**. Construction activities would occur during daylight hours to the extent feasible. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes only and would occur only for the duration required for the temporary construction process. The proposed Project would not introduce a substantial source of light which would affect day or	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
nighttime views in the area. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes only and would occur only for the duration required for the temporary construction process. Existing lighting systems in operation during the construction period would be maintained. Outdoor lights would be designed and constructed to reflect light away from East Avion Street and adjacent properties. Additionally, lighting would be installed such that light would not shine directly at or cause reflections on the Airport's taxiways or runways. All new lighting would comply with applicable regulations of the 2019 State Building Energy Efficiency Standards (Title 24). Glare associated with the proposed Project design would be minimal and site efforts would be taken to reduce as much glare as possible. Impacts would be less than significant.		
	Air Quality	
Threshold AQ-1: Conflict with or obstruct implementation of the applicable air quality plan? **Less Than Significant Impact.** During construction, the proposed Project would comply with CARB's requirements to minimize short-term emissions from on-	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
road and off-road diesel equipment, including limiting heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time, and with SCAQMD's regulations, such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, the proposed Project would use vehicles from vendors that comply with fleet rules to reduce on-road truck emissions under CARB's Truck and Bus regulation. Compliance with these measures and requirements would be consistent with and meet or exceed the 2022 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Additionally, the proposed Project would comply with the measures included in the Airport's AQIP such using Tier 4 equipment. The proposed Project would result in short-term employment growth and would not conflict with employment or housing projections within the AQMP. Impacts related to construction would be less than significant. Operation of the proposed Project would be consistent with the measures in the Airport's AQIP as it would include all-electric GSE. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts		

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
and SCAG modeling estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. The proposed Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections. Additionally, the proposed Project would no conflict with air quality polices within the City's general plan. Impacts related to operation would be less than significant.		
Threshold AQ-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard? **Potentially Significant Impact.** Air quality emissions would be generated during construction from mobile, area, stationary, fugitive dust sources. Construction emissions during Phase 1 and Phase 2 would not exceed any regional SCAQMD thresholds.	**PDF AQ-1:** The Applicant shall use equipment that meets the USEPA's Tier 4 emissions standards for offroad diesel-powered construction equipment with 50 horsepower (hp) or greater, for all phases of construction activity. To ensure that Tier 4 or the cleanest construction equipment available would be used during the Project's construction, the OIAA shall confirm that the Applicant includes this requirement in applicable bid documents, purchase orders, and contracts. Additionally, the OIAA shall confirm that the Applicant also requires periodic reporting and provision of	Significant and unavoidable.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Operational sources of airport-related air pollutant emissions include aircraft, APU, GSE, stationary sources such as emergency generators, and motor vehicles (employee and deliveries), as well as area sources (consumer products and landscaping), and energy usage (natural gas and electrical). The proposed Project's operational emissions during Phase 1 and Phase 2 would exceed regional SCAQMD significance thresholds for CO, VOC, and NO_x, primarily due to aircraft emissions, followed by employee vehicles, delivery trucks, and emergency generators. Impacts would be potentially significant. The proposed Project would incorporate Project Design Features PDF AQ-3 through PDF AQ-8 and Mitigation Measures MM AQ-4 through MM AQ-7 as well as MM TRANS-1 through MM TRANS-5 to reduce operational air quality emissions to the greatest extent feasible. . Neither the SCAQMD or OIAA have the authority to regulate aircraft operations or emissions from aircraft engines and the majority of the emissions estimated for operation of the Project are from aircraft operations. The 2022 AQMP identifies actions that can be taken by the CARB to address these sources of emissions, including the adoption of more stringent criteria pollutant standards for aircraft engines and use of cleaner aviation fuels. It is anticipated that	written construction documents by construction contractor(s) and conducts regular inspections to the maximum extent feasible to ensure and enforce compliance. **PDF AQ-2:** The Applicant shall conduct concrete/asphalt demolition on-site to reuse concrete/asphalt generated during construction. During Phase 1, demolition would involve removal of approximately 2,047,320 square feet of asphalt/concrete, which would be recycled within the project site and not require offsite haul truck trips (i.e., avoiding 2,616 haul truck trips). During Phase 2, demolition would involve removal of approximately 1,045,440 square feet of asphalt/concrete, which would be recycled within the project site and not require offsite haul truck trips (i.e., avoiding 910 haul truck trips). **PDF AQ-3:** The Ground Support Equipment (GSE), including (but not limited to) aircraft tugs, baggage tugs, belt loaders, cargo loaders, forklifts, and ground power units, ramp support carts/vans, servicing aircrafts shall be electric by Phase 2. **PDF AQ-4:** A portion of the proposed Project's aircraft fleet shall include electric cargo aircraft. (See Table 3.4 in Section 3.0: Project Description).	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
these types of future technology improvements will reduce the aviation emissions associated with the Project over time. As the proposed Project is an air cargo facility serving the region, the operational and economic viability of the proposed Project relies on these aviation operations. For these reasons, there are no additional feasible mitigation measures that would reduce operational emissions to below significance thresholds and operational air quality emissions would remain significant after implementation of all feasible mitigation.	**PDF AQ-5:** All new aircraft parking positions shall be equipped with ground power and pre-conditioned air, therefore reducing the need to operate auxiliary power units. **PDF AQ-6:** The Applicant shall conduct maintenance and/or testing on each of the seven standby generators on separate days to limit daily emissions from maintenance/testing activities. **PDF AQ-7:** The Air Cargo Sort Building shall meet Leadership in Energy and Environmental Design (LEED) certification standards, shall include enhanced building automation systems, and shall utilize advanced low energy HVAC systems. **PDF AQ-8:** The visitor parking lot shall include 29 parking stalls, 6 of which shall have access to electric charging points. The employee parking structure shall include 932 parking stalls, 300 of which shall have access to electric charging points. **MM AQ-1:** The Applicant shall require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export with a gross vehicle weight rating of at least 14,001 pounds), that meet CARB's 2010	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	engine emissions standards or newer, cleaner trucks. The OIAA shall confirm that the Applicant includes this requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards and make the records available for inspection. **MM AQ-2:** The Applicant shall require that construction equipment such as concrete/industrial saws, pumps, aerial lifts, light stands, air compressors, and forklifts be electric or alternative-fueled (i.e., non-diesel), where feasible. Pole power shall be utilized at the earliest feasible point in time and shall be used to the maximum extent feasible in lieu of generators. **MM AQ-3:** The Applicant shall support and encourage ridesharing and transit incentives for the construction crew by providing crews with the resources needed to organize rideshares, such as bulletin boards or email announcements. The Applicant shall also partially subsidize transit fares or passes for the construction crew members who can feasibly use transit. The Applicant shall set a goal to achieve ten percent total construction worker participation in ridesharing programs and transit use.	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	MM AQ-4: The Applicant shall require, in addition to the GSE noted within PDF AQ-3, all other on-site cargo-handling equipment, such as yard trucks, holsters, yard goats, pallet jacks, and similar equipment, to be electric, with the necessary electrical charging stations provided. **MM AQ-5:** The Applicant shall require, where feasible, the use of zero-emission Project-related delivery trucks as part of business operations beginning in 2025 (within at least 25 percent of the Project fleet). **MM AQ-6:** The Applicant shall include in the design requirements for the Project that a cool roof be installed at the parking structure to reduce energy use and urban heat island effects. This requirement shall not apply if solar panels are installed on the parking structure. **MM AQ-7:** The Applicant shall encourage the use of single engine taxi operations for Project aircraft. **MM TRANS-1** through **TRANS-5.**	
Threshold AQ-3: Expose sensitive receptors to substantial pollutant concentrations? **Less Than Significant Impact.** An air dispersion analysis was conducted to determine the ambient concentrations at nearby receptors which would result	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
from project construction and operation. Air pollution concentrations during construction and operation of Phase 1 and Phase 2 would be below the significant thresholds for NO_2, PM_{10}, $PM_{2.5}$, SO_2, and CO_2. As such, impacts would be less than significant. Localized CO concentration levels were forecasted at the proposed Project's three most potentially impacted intersections using the CALINE-4 dispersion model developed by Caltrans, peak-hour traffic volumes, and conservative meteorological assumptions. Project-generated traffic volumes are forecasted to have a negligible effect on the projected 1-hour and 8-hour CO concentrations at each of the three intersection locations analyzed. As such, impacts would be less than significant. An HRA was conducted for the proposed Project to address the potential for human health impacts associated with construction and operation of the proposed Project. The cancer risk for offsite worker receptors due to construction activities would be below the SCAQMD threshold of 10 per one million persons. Additionally, the chronic health impact due to construction activities at all off-site worker receptors would be below the Project-level threshold of 1. The		

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
cancer risk for residence, off-site worker receptor (such as office buildings, retail centers, hotels, hospitals), on-site worker terminal receptor, and on-site non-terminal worker receptor due to operational activities of the proposed Project would be below the SCAQMD threshold of 10 per one million persons. Finally, the acute and chronic health impact due to operational activities at all sensitive receptors would be below the project-level threshold of 1. As such, impacts would be less than significant.		
Threshold AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? **Less Than Significant Impact.** The proposed Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts. The construction odor emissions would be temporary, short-	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. As such, impacts would be less than significant.		
Biological Resources		
Threshold BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? **Less Than Significant with Mitigation Incorporated.** The Project site is not located within federally designated Critical Habitat. Based on habitat requirements for the identified special-status plant species, the Project site does not have the potential to support any of the special-status plant species known to	**MM BIO-1. Burrowing Owl.** All disturbed areas of the Project site, that were determined to have a low potential to provide suitable habitat for burrowing owls, which primarily includes the existing track infield grassy areas of the Project site, require a preconstruction focused surveys to be conducted; the first survey shall be conducted within 14 days and the second take avoidance survey shall be conducted 24 hours prior to ground disturbance to determine presence of burrowing owls. These surveys shall conform to the survey protocol established by the CDFW Staff Report on Burrowing Owl Mitigation (CDFW	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
occur within the vicinity of the site. Additionally, the plant species found in the proposed Project area do not provide suitable long-term roosting or maternity habitat. Of the 57 special-status wildlife species have been recorded as observed in the Guasti and Ontario quadrangles, none of the species were observed during the field survey. The Project site could support the Cooper's Hawk, California horned lark, and California gull, which are CDFW Watch List Species. Additionally, the Project site could support the burrowing owl, which is a California Species of Special Concern and has been documented approximately 900 feet east of the Project site. To avoid potential impacts, **Mitigation Measure BIO-1** would require pre-construction surveys to determine the presence of burrowing owls to ensure that any burrowing owls potentially within this area are protected in accordance with CDFW recommendations. Implementation of **Mitigation Measure BIO-2** would require pre-construction Nesting Bird Surveys and would reduce potential impacts to migratory and nesting birds.	2012) and will be conducted by a qualified biologist across all suitable breeding, wintering, and foraging habitat within the Project and appropriate buffer. Copies of the survey results shall be submitted to CDFW and OIAA. • If no burrowing owls are detected, no further mitigation is necessary. • If burrowing owls are detected during focused surveys and/or take avoidance surveys, CDFW will be immediately informed of its location and status. The project will avoid all impacts to burrowing owls onsite. If this is not feasible, a Burrowing Owl Protection Plan will be prepared by a qualified biologist, which must be approved by CDFW prior to initiating the project. The Burrowing Owl Protection Plan will include conserving all nesting, occupied, and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows, and burrowing owls impacted are maintained and/or replaced. Further coordination with CDFW will occur to mitigate for the loss of habitat through the acquisition, conservation, and management of in-kind habitat. Lands conserved will include 1) sufficiently large acreage with fossorial mammals present; 2) permanent protection through a	

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SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	conservation easement for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use; 3) development and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls; and 4) funding for the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment (CDFW, 2012). **MM BIO-2. Nesting Birds.** Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31, for migratory passerine birds and January 15 to August 31 for raptors. In order to ensure compliance with the Migratory Bird Treaty Act and to avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist must be retained to conduct pre-construction Nesting Bird Surveys (NBS) prior to Project-related disturbance to nestable vegetation to identify any active nests. The NBS shall be performed no more than three days prior to the commencement of construction activities. The survey(s) will occur at the appropriate time of day/night, during	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	appropriate weather conditions. Surveys will encompass all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration will take into consideration the acreage of the proposed Project impacts; density, and complexity of the habitat; number of survey participants; survey techniques employed; and will be sufficient to ensure the data collected is complete and accurate. Pre-construction surveys will focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior (i.e., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors). The results of the NBS shall be documented by the qualified biologist. If construction is inactive for more than seven days, an additional survey shall be conducted. If no active nests are found, no further action will be required. If a nest is suspected, but not confirmed, the qualified biologist will establish a disturbance-free buffer until additional surveys can be completed, or until the location can be inferred based on observations. The qualified biologist will not risk failure of the nest to determine the exact location or status and will make every effort to limit the nest to potential predation	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	as a result of the survey/monitoring efforts (i.e., limit number of surveyors, limit time spent at/near the nest, scan the site for potential nest predators before approaching, immediately depart nest area if indicators of stress or agitation are displayed). If a nest is observed, but thought to be inactive, the qualified biologist will monitor the nest for 1 hour (4 hours for raptors during the nonbreeding season) prior to approaching the nest to determine status. The qualified biologist will use their best professional judgement regarding the monitoring period and whether approaching the nest is appropriate. If an active nest is found, the biologist will set appropriate no-work buffers (typically 300 feet for passerine and non-special-status species, and 500 feet for hawks and special-status species) around the nest, which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity, and duration of disturbance – typically 300 feet of a migratory bird and 500 feet for raptors. Once the buffer is established, the qualified biologist will document baseline behavior, stage of reproduction, and existing site conditions, including vertical and horizontal distances from proposed work areas, visual or acoustic barriers, and existing level of disturbance. Following documentation of baseline	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	conditions, the qualified biologist may choose to make adjustments to the buffer based on site characteristics, stage of reproduction, and types of Project activities proposed at/near that location. The qualified biologist will monitor the nest at the onset of Project activities, and at the onset of any changes in Project activities (i.e., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the qualified biologist determines that Project activities may be causing an adverse reaction, the qualified biologist will adjust the buffer accordingly. The qualified biologist will be onsite daily to monitor all existing nests, the efficacy of established buffers, and to document any new nesting occurrences. The qualified biologist will document the status of all existing nests, including the stage of reproduction and the expected fledge date. If a nest is suspected to have been abandoned or failed, the qualified biologist will monitor the nest for a minimum of 1 hour (4 hours for raptors), uninterrupted, during favorable field conditions. If no activity is observed during that time, the qualified biologist may approach the nest to assess the status. Permittee, under the direction of the qualified biologist, may also take steps to discourage nesting on the Project site, including moving equipment and materials	

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
	daily, covering material with tarps or fabric, and securing all open pipes and construction materials. The qualified biologist will ensure that none of the materials used pose an entanglement risk to birds or other species. The buffer shall remain until the young have fledged the nest and the nest is confirmed to no longer be active, or as determined by the qualified biologist. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.	
Threshold BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? **No Impact.** There are no blue-line streams within the Project site. The Project site is developed with airport and cargo operations and does not support any identifiable drainage courses, inundated areas, wetland features, hydric soils, or hydrogeomorphic features such	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
as perennial creeks. There are no riparian corridors, creeks, or natural areas existing within or connecting the Project site to natural, undeveloped areas. The Cucamonga Channel adjacent to the eastern boundary of the Project site is identified as a riverine resource. However, the Cucamonga Channel is an open concrete box culvert and does not support riparian habitat or other sensitive natural plant communities		
Threshold BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? **Less Than Significant Impact.** No inundated areas, wetland features, or wetland plant species that would be considered wetlands as defined by Section 404 of the Clean Water Act occur within the proposed Project footprint. As the proposed Project would utilize the existing drainage outlet points and implement BMPs to release stormwater at a controlled rate into the Cucamonga Channel, the proposed Project would not significantly impact the Cucamonga Channel. Should a new outlet into the Cucamonga Channel be needed for	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
the proposed Project, the Cucamonga Channel is an open concrete box culvert and does not support riparian habitat, vegetation, other sensitive natural plant communities, or protected wetland. For this reason, the proposed Project, utilizing the existing outlet points or a new outlet into the Cucamonga Channel, would not have a substantial adverse effect on state or federally protected wetlands.		
Threshold BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? **Less Than Significant Impact.** According to the San Bernardino Countywide Plan, the Project site is not within a wildlife corridor or linkage. Additionally, according to the Ontario General Plan EIR, no regional wildlife movement corridors have been identified in the City. The Project site is developed with airport-related improvements and does not contain any wildlife corridors or linkages. Project implementation would be confined to developed areas on the site, which is away from regional wildlife corridors and linkages, such as the	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Santa Ana River. Project implementation would not directly impact existing wildlife movement opportunities. The segment of the Cucamonga Channel, adjacent to the Project site is an open concrete box culvert surrounded by airport operations. It does not support plant communities suitable for use as a wildlife corridor nor connect two comparatively undisturbed habitat fragments.		
Threshold BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? **Less Than Significant Impact.** The proposed Project's design would comply with the ONT Wildlife Hazard Management Plan, the ONT Rules and Regulations, and Federal Aviation Administration (FAA) Policy. The landscape trees for the proposed Project would be Desert Museum Palo Verde, approved by OIAA in consultation with the USDA Wildlife Biologist. These trees would not cause more wildlife to occupy the Project site. Should birds or other wildlife be observed to be a hazard to flight operations, ONT Airside Operations staff shall report to FAA ONT Air Traffic Control Tower. Additionally, the proposed Project	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
would require the removal of vegetation, including trees. As such, Project implementation would comply with all requirements specified in the City of Ontario Parkway Tree Regulations. If required, the proposed Project would maintain any parkway trees adjacent to the Project site to preserve a neat appearance and non-obstructed use of the realigned East Avion Street.		
Threshold BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat **conservation** plan? **No Impact.** The Project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or **other** approved local, regional, or state Habitat Conservation Plan.	No mitigation measures are necessary.	Less than significant.
Cultural Resources		
Threshold CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? **Less Than Significant Impact.** The 1980s-era private jet center is not of sufficient age to be eligible for listing in the National Historic Preservation Act (NRHP), California	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Register of Historical Resources (CRHR), or as local Ontario Landmarks/Historic Districts, based on the records search, research, field survey, and applicable cultural resource codes and regulations. the Ontario ANG hangar and the GE maintenance facility are not eligible for either the NRHP or CRHR. The Ontario ANG hangar is not eligible for listing as an Ontario Historic Landmark. The GE maintenance facility is not eligible for listing as an Ontario Historic District. As such, they are not historical resources as defined by CEQA and the Project would not directly or indirectly impact any historical resources on the Project site and surrounding area. Therefore, impacts to historical resources during construction and operation of the proposed Project would be less than significant.		
Threshold CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? **Less Than Significant with Mitigation Incorporated.** The Archaeological Resource Assessment, which includes a record search and background research, communication with the Native American Heritage Commission (NAHC), and a reconnaissance pedestrian survey, indicate that subsurface soil has been	**MM CUL-1. Archaeological Monitoring of All Ground-Disturbing Activities During Construction of Phase 1 and Phase 2.** a) Prior to the issuance of grading permits by the City of Ontario for Phase 1 and Phase 2 of the proposed Project, the OIAA and/or its construction contractor must retain a qualified professional archeologist meeting the Secretary of Interior's PQS for Archaeology (as defined in the Code of Federal	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
extensively disturbed. This is additionally evidenced by the built nature of the Project site with pavement, multiple buildings, structures, and landscape, as well as installation of related underground utilities. Archival research indicates the proposed Project area was used for agricultural purposes prior to the construction of the Airport and Cucamonga Channel. Geological mapping indicates artificial fill covers the Project site; however, no indication was seen in the historic aerial imagery of either the emplacement of fill or its potential depth. Additionally, the surface may have been used prehistorically. Ground disturbing activities for the proposed Project could extend to a depth of up to 20 feet below the existing ground surface, therefore, there is a moderate potential for buried objects in the native soil under the Project site. Implementation of **Mitigation Measure CUL-1** during construction activities requires archaeological monitoring during grading or other ground disturbing activities and, if objects are encountered, that work in the immediate area be halted and the resources evaluated.	Regulations, 36 CFR Part 61). The qualified archaeologist will be retained to conduct monitoring of rough grading activities conducted during both Project phases. The qualified archaeologist shall have the authority to redirect earthmoving activities in the event that suspected cultural resources are unearthed during construction activities. b) The qualified archaeologist shall prepare a Cultural Resources Monitoring and Treatment Plan that will describe processes for archaeological monitoring and for handling incidental discovery of objects, features, and cultural resources for all ground-disturbing construction and preconstruction activities. c) Prior to the issuance of a grading permit, all construction workers involved with grading and trenching operations shall receive training by the qualified archaeologist to recognize unique archaeological resources, including tribal cultural resources, should such resources be unearthed during ground-disturbing construction activities. The training of all construction workers involved with grading and trenching operations shall explain the importance and legal basis for the protection of significant archaeological resources. It will include a brief review of the cultural sensitivity of the construction area and the surrounding area; what resources could potentially be identified during earthmoving activities; the	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel involved with grading and trenching operations that begin work following the initial training session must take the training prior to beginning work; the qualified archaeologist shall be available to provide the training on an as needed basis. **d)** In the event subsurface artifacts or features are encountered during ground-disturbing activities, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations within a 100-foot radius of the discovery and see identification and evaluation and evaluation of the suspected resource by the qualified archaeologist for listing in the NRHP and CRHR. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note. e) After the qualified archaeologist makes his/her initial assessment of the nature of the find. The archaeologist shall pursue either protection in place or recovery, salvage, and treatment of the deposits. Recovery, salvage, and treatment protocols shall be developed in accordance with applicable provisions of Public	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with OIAA or with a recognized scientific or educational repository, including the SCCIC. Preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources, consistent with CEQA Guidelines Section 15126.4(b)(3)(C).	
Threshold CUL-3: Disturb any human remains, including those interred outside of formal cemeteries? **Less Than Significant Impact.** The Project site is not a dedicated graveyard or cemetery. Additionally, according to the NAHC Sacred Lands Inventory search, the Project site is not cataloged as a Native American sacred or cultural place of special religious or social significance, which would include graves and cemeteries. Based on the developed condition of the Project site and its historic use as farmland, it is very unlikely that human remains would be discovered at the Project site. In the event human remains were discovered during construction ground disturbance activities, the proposed Project would be required to comply with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5, which provide	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
guidance on the discovery of human remains and its treatment or disposition, with appropriate dignity.		
Energy		
Threshold ENE-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? **Less Than Significant Impact.** During construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control, and on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. An on-site asphalt/concrete recycling operation is proposed on the south side of East Avion Street on a partially paved and flat parcel that is flanked by East Mission Boulevard (and railroad tracks) to the south and industrial abandoned (industrial) uses on either side (which is within the project site). The recycling operations would reduce the total vehicle miles traveled needed for asphalt/concrete delivery trucks. Moreover, PDF AQ-1 requires the use of Tier 4 off-road equipment during construction which is more fuel efficient than lower tiered equipment. Due to	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
the temporary nature of the construction process, and the fact that the extent of energy consumption is inherent to construction projects of this size and nature, the proposed Project would not result in inefficient or unnecessary consumption of energy resources during construction. The proposed Project incorporates sustainable project design features and technology in both design and operation. The Air Cargo Sort Building would meet LEED certification standards, would be all-electric (no natural gas usage). A 1.5-Megawatt Solar PV Panel system would be installed on the rooftop of the Air Cargo Sort Building and the parking structure. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes (see **Table 3.4** in **Section 3.0: Project Description**), for which charging stations would be provided in the southeast corner of the Project site. A new substation proposed by SCE for the proposed Project would be		

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
located to the west of the parking structure. As such, the proposed Project would not result in inefficient or unnecessary consumption of energy resources during operation.		
Threshold ENE-2: Conflict with or obstruct a State or local plan for renewable energy or energy efficiency? **Less Than Significant Impact. T**he proposed Project incorporates sustainable project design features and technology in both design and operation. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts and SCAG modeling estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. The proposed Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections. Additionally, the proposed Project would not conflict with the energy policies within the City's general plan. As such, the proposed Project would not conflict with or	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant.		
	Geology and Soils	
Threshold GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:		
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		
Less Than Significant Impact. As indicated in the Geotechnical Study (see **Appendix 5.6-1**), active or potentially active faults are not known to exist on or trend toward the Project site. There are several active faults surrounding the Project site to the north, east, south, and west, within the Upper Santa Ana River Valley. The Project site is not located within a designated Alquist - Priolo Earthquake Hazard Zone. The proposed Project would adhere to the appropriate engineering design measures as required by the latest	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Standard Specifications for Public Works Construction (Greenbook) and California Building Code (CBC).		
ii. Strong seismic ground shaking? **Less Than Significant Impact with Mitigation Incorporated.** The Project site sits in the Upper Santa Ana River Valley, a highly seismically active area within Southern California. Active or potentially active faults are not known to exist on or trend toward the Project site. There are several active faults surrounding the Project site to the north, east, south, and west. For these reasons, there is a potential for ground shaking due to an earthquake. Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.** These recommendations will be incorporated into proposed Project plans and specifications and implemented during construction of the proposed Project. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook and CBC.	**MM GEO-5. Geotechnical Investigation Recommendations.** The proposed Project shall implement and incorporate the recommendations in the Geotechnical Investigation, Section 5.0 Conclusion and Recommendations (see pages 7 through 24 of Appendix 5.6-1 of this EIR). Prior to contract bidding, site grading and foundation plans shall be reviewed and approved by Cotton, Shires and Associates, Inc. or a certified Geologist, for consistency with the Geotechnical Investigation recommendations.	Less than significant.
iii. Seismic-related ground failure, including liquefaction and lateral spreading?	**MM GEO-5. Geotechnical Investigation Recommendations.**	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Less Than Significant with Mitigation Incorporated. Potential for settlement, foundation, and pavement bearing conditions could occur with the construction of the proposed Project. Therefore, impacts related to strong seismic ground shaking could be potentially significant. Recommendations identified in the proposed Project's Geotechnical Study (see **Appendix 5.6-1**) will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5**. As indicated in the Geotechnical Study (see **Appendix 5.6-1**) the Project site is not located within a Liquefaction Hazard Zone as mapped by the State of California. According to the Ontario Plan Safety Element, the Project site is not located in an area that would be susceptible to liquefaction. The saturation of subsurface soils above the existing groundwater table could occur due to stormwater infiltration. Due to the primarily loose to medium dense nature and high percolation rates of the sandy alluvial soils adjacent to and below the Project site, the potential for localized liquefaction to occur above the groundwater table is low. Static groundwater levels below the Project site are not anticipated to rise within 50 feet of the ground surface. As such, groundwater is not anticipated to rise to a level that would adversely affect the Project site,	The proposed Project shall implement and incorporate the recommendations in the Geotechnical Investigation, Section 5.0 Conclusion and Recommendations (see pages 7 through 24 of Appendix 5.6-1 of this EIR). Prior to contract bidding, site grading and foundation plans shall be reviewed and approved by Cotton, Shires and Associates, Inc. or a certified Geologist, for consistency with the Geotechnical Investigation recommendations.	

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Impact	Mitigation Measures	Significance after Mitigation
and the potential for liquefaction to occur on the Project site is very low. As indicated in the Geotechnical Study (see **Appendix 5.6-1**), the estimation of lateral movements resulting from seismic events is uncertain. There is a potential for ground lurching due to an earthquake. Based on empirical procedures presented by Bartlett and Youd regarding deep groundwater and relatively level site grade, the potential for large lateral movements caused by post - seismic residual shear strength reduction is considered to be very low. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook and CBC.		
iv. Landslides **Less Than Significant Impact.** There is a potential for ground lurching due to an earthquake. Based on the California Department of Conservation Landslide Inventory, the Project site is not located in an area that is susceptible to landslides. As such, the potential for landslides at the Project site is very low.	No mitigation measures are necessary.	Less than significant.
Threshold GEO-2: Result in substantial soil erosion or the loss of topsoil?	**MM GEO-5. Geotechnical Investigation Recommendations.**	Less than significant.

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Impact	Mitigation Measures	Significance after Mitigation
Less Than Significant with Mitigation Incorporated. During construction, prior to commencing grading operations, soil materials containing debris, organics, pavement, or other unsuitable materials would be stripped. Demolition would include removal of old foundations, pavements, slabs, abandoned utilities, and soils disturbed during the demolition process. There is potential for intermittent areas of exposed graded soil on the Project site to be subject to wind-related erosion. The proposed Project would obtain coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). A Storm Water Pollution Prevention Plan (SWPPP) would be developed and implemented prior to the construction, and a Standard Urban Storm Water Mitigation Plan (SUSMP) to be implemented to reduce the level of pollutants in stormwater and urban runoff. During operations, the proposed Project could result in a limited degree of soil erosion from vegetated areas. Nonerosive drainage features such as infiltration basins and associated infrastructure, and the maintenance of these structures would be conducted over the long-term operations of the proposed Project. Per CEQA and the San Bernardino County Technical Guidance Document for Water Quality Management Plans (WQMP), a level of	The proposed Project shall implement and incorporate the recommendations in the Geotechnical Investigation, Section 5.0 Conclusion and Recommendations (see pages 7 through 24 of Appendix 5.6-1 of this EIR). Prior to contract bidding, site grading and foundation plans shall be reviewed and approved by Cotton, Shires and Associates, Inc. or a certified Geologist, for consistency with the Geotechnical Investigation recommendations.	

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Impact	Mitigation Measures	Significance after Mitigation
low impact design (LID) must be incorporated into all new development projects by implementing Best Management Practices (BMPs). Surface runoff would be directed away from foundations or on-grade improvements. The proposed Project would comply with all applicable City grading permit regulations, plans, and inspections to reduce sedimentation and erosion. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook and CBC. The potential for adverse impacts as a result of the proposed development from erosion is considered to be low provided with the incorporation of **Mitigation Measure GEO-5**.		
Threshold GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? **Less Than Significant with Mitigation Incorporated.** Existing soils within the Project site are artificial fill and alluvial subsurface materials that are primarily coarse-grained with varying amounts of silt and low levels of clay. Prior to commencing grading operations,	**MM GEO-5. Geotechnical Investigation Recommendations.** The proposed Project shall implement and incorporate the recommendations in the Geotechnical Investigation, Section 5.0 Conclusion and Recommendations (see pages 7 through 24 of Appendix 5.6-1 of this EIR). Prior to contract bidding, site grading and foundation plans shall be reviewed and approved by Cotton, Shires and Associates,	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
unsuitable soil materials would be stripped. Demolition would activities include removal of soils disturbed during the demolition process. The California Department of Conservation Landslide Inventory indicates that the Project site is not located in an area that is susceptible to landslides. The Geotechnical Study (see **Appendix 5.6-1**) indicates the estimation of lateral movements resulting from seismic events is uncertain. There is a potential for ground lurching due to an earthquake. Deep groundwater, and relatively level site grade, the potential for large lateral movements caused by post-seismic residual shear strength reduction is considered to be very low. The risk of subsidence due to water extraction is also low. The Geotechnical Study indicated the Project site is not located within a Liquefaction Hazard Zone as mapped by the State of California. The Ontario Plan Safety Element identifies that the Project site is not located in an area that would be susceptible to liquefaction. The potential for liquefaction to occur on the Project site is very low. Potential for settlement and foundation and pavement bearing conditions could occur with the construction of the proposed Project. Through compliance with the City's construction requirements, implementation of BMPs, compliance with applicable City grading permit	Inc. or a certified Geologist, for consistency with the Geotechnical Investigation recommendations.	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
regulations, and requirements of the statewide general construction stormwater permit, construction activities would not result in a collapse. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook and CBC. Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.**		
Threshold GEO-4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? **Less Than Significant with Mitigation Incorporated.** As discussed in the Geotechnical Study (see **Appendix 5.6-1)** the existing soils within the Project site are artificial fill and alluvial subsurface materials that are primarily coarse-grained with varying amounts of silt and low levels of clay. The potential for soil expansiveness is considered very low due to existing soil conditions. However, water infiltration can cause or exacerbated expansive soil movement. Consolidation testing performed on near surface sandy soils similar to those encountered within the percolation test holes generally	**MM GEO-5. Geotechnical Investigation Recommendations.** The proposed Project shall implement and incorporate the recommendations in the Geotechnical Investigation, Section 5.0 Conclusion and Recommendations (see pages 7 through 24 of Appendix 5.6-1 of this EIR). Prior to contract bidding, site grading and foundation plans shall be reviewed and approved by Cotton, Shires and Associates, Inc. or a certified Geologist, for consistency with the Geotechnical Investigation recommendations.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
showed less than 0.5 percent collapse upon inundation with water, and at a higher overburden stress than should be experienced by the basin soils. Existing concrete and asphalt demolished at the site may be pulverized and re-used as general compacted fill. The recycled material used as general compacted fill will meet all grading and compaction requirements. Potential for settlement and foundation and pavement bearing conditions could occur with the construction of the proposed Project. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook and CBC. Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.**		
Threshold GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? **No Impact.** The proposed Project will connect to the City's sewer system and will not require the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed Project will have no	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
construction or operational impacts with respect to site soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.		
Threshold GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Less Than Significant with Mitigation Incorporated.** As indicated in the Paleontological Resource Assessment (see **Appendix 5.6-2**), the Project site contains artificial fill (Qaf) of the late Holocene epoch, which was deposited on Young alluvial-fan deposits (Qyf_1 and Qyf_3) of the Pleistocene epoch. Due to the artificial nature and origin off-site of this fill, the Qaf has no paleontological sensitivity. Holocene units typically are considered to have a low paleontological sensitivity. As Holocene units transition with greater depth, they encounter Pleistocene deposits, which have higher sensitivity for findings and the potential to produce the remains of a diverse land animals. The proposed Project would require ground disturbance of 20 feet bgs, related to utilities trenching, although most of the ground disturbance would be less than 7 feet bgs. Deeper excavations, beyond nine (9) feet bgs, at the Project site may extend down into older Pleistocene sediments. To	**MM GEO-1. Paleontological Resources Mitigation and Monitoring Plan (PRMMP).** A professional paleontologist shall be retained to monitor earth-disturbing construction activities. Prior to the commencement of ground-disturbing activities, the qualified paleontologist, meeting the Society of Vertebrate Paleontology (SVP) Standards, must prepare a Paleontological Resources Mitigation and Monitoring Plan (PRMMP) for the proposed Project. The PRMMP shall describe the monitoring required during excavations that extend into Pleistocene sediment, at approximately 9 feet bgs, and the location of areas deemed to have a high paleontological resource potential. The results of the geotechnical investigation conducted for the proposed Project shall be consulted to determine the approximate depth of Pleistocene sediment in the Project site. Paleontological monitoring shall entail the visual inspection of excavated and graded areas and trench sidewalls. If the qualified Paleontologist determines full-time monitoring is no longer warranted, based on the geologic conditions at	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
reduce potential impacts, monitoring by a qualified paleontological monitor to identify and effectively salvage any recovered resources would be conducted during ground disturbing activities (**Mitigation Measure GEO-1 through GEO-4**).	depth, he or she may recommend that monitoring be reduced or cease entirely. **MM GEO-2. Workers Environmental Awareness Program (WEAP).** Prior to the start of the proposed Project ground-disturbing activities, all field personnel shall receive a worker's environmental awareness training on paleontological resources. The training must provide a description of the laws and ordinances protecting fossil resources, the types of fossil resources that may be encountered in the proposed Project area, the role of the paleontological monitor, outline steps to follow in the event that a fossil discovery is made and provide contact information for the qualified Paleontologist. The training must be developed by the qualified Paleontologist and can be delivered concurrent with other training. **MM GEO-3. Fossil Discoveries.** In the event that a paleontological resource is discovered, the Paleontological monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and, if appropriate, collected. If the resource is determined to be	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	of scientific significance, the Paleontologist shall complete the following: 1. **Salvage of Fossils.** If fossils are discovered, all work in the immediate vicinity shall be halted to allow the paleontological monitor, and/or Project-qualified Paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially significant, the Project-qualified Paleontologist shall recover them following standard field procedures for collecting paleontological as outlined in the PRMMP prepared for the project. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils, such as complete skeletons or large mammal fossils, require more extensive excavation and longer salvage periods. In this case the Paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. 2. **Fossil Preparation and Curation.** The PRMMP must identify a museum that has agreed to accept fossils that may be discovered during project-related excavations. Upon completion of fieldwork, all significant fossils collected must be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	materials and stabilizing or repairing specimens. During preparation and inventory, the fossils specimens must be identified to the lowest taxonomic level practical prior to curation at an accredited museum. The fossil specimens must be delivered to the accredited museum or repository no later than 90 days after all fieldwork is completed. The cost of curation shall be assessed by the repository and shall be the responsibility of the client. **MM GEO-4. Final Paleontological Mitigation Report.** Upon completion of ground disturbing activity, and curation of fossils if necessary, the qualified Paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.	
	Greenhouse Gas Emissions	
Threshold GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	**PDF AQ-3:** The Ground Support Equipment (GSE), including (but not limited to) aircraft tugs, baggage tugs, belt loaders, cargo loaders, forklifts, and ground power	Significant and unavoidable.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Potentially Significant Impact. The estimated construction GHG emissions for the proposed Project are 7,248 $MTCO_2e$. The 30-year amortized construction related GHG emissions would be approximately 242 metric tons of $MTCO_2e$ per year. With implementation of the proposed Project, operational annual GHG emissions would be 79,798 $MTCO_2e$ annually for Phase 1 and 128,057 $MTCO_2e$ annually for Phase 2 when compared to Baseline emissions. The net increase in GHG emissions during Phase 1 and Phase 2 operation over baseline conditions is considered to be a significant impact on the environment. As such, impacts would be potentially significant. Project Design Features **PDF AQ-3** through **PDF AQ-5** and Mitigation Measures **MM AQ-1** through **MM AQ-7** as well as **MM TRANS-1** through **MM TRANS-5** would serve to reduce GHG emissions. Additionally, the proposed Project includes Project Design Features **PDF GHG-1** and PDF **GHG-2** to reduce GHG emissions to the greatest extent feasible. Neither the SCAQMD or OIAA have the authority to regulate aircraft operations or emissions from aircraft engines and the majority of the emissions estimated for operation of the Project are from aircraft operations. As with the operational air quality emissions associated with the Project, while it is anticipated future technology	units, ramp support carts/vans, servicing aircrafts shall be electric by Phase 2. **PDF AQ-4:** A portion of the proposed Project's aircraft fleet shall include electric cargo aircraft. (See Table 3.4 in Section 3.0: Project Description). **PDF AQ-5:** All new aircraft parking positions shall be equipped with ground power and pre-conditioned air, therefore reducing the need to operate auxiliary power units. **MM AQ-1:** The Applicant shall require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export with a gross vehicle weight rating of at least 14,001 pounds), that meet CARB's 2010 engine emissions standards or newer, cleaner trucks. The OIAA shall confirm that the Applicant includes this requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards and make the records available for inspection. **MM AQ-2:** The Applicant shall require that construction equipment such as concrete/industrial saws, pumps, aerial	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
improvements are anticipated to reduce Project GHG emissions over time, there are no additional feasible mitigation measures available at this time that would reduce GHG emissions to below significance thresholds and for this reason, operational GHG emissions would remain significant after implementation of all feasible mitigation.	lifts, light stands, air compressors, and forklifts be electric or alternative-fueled (i.e., non-diesel), where feasible. Pole power shall be utilized at the earliest feasible point in time and shall be used to the maximum extent feasible in lieu of generators. **MM AQ-3:** The Applicant shall support and encourage ridesharing and transit incentives for the construction crew by providing crews with the resources needed to organize rideshares, such as bulletin boards or email announcements. The Applicant shall also partially subsidize transit fares or passes for the construction crew members who can feasibly use transit. The Applicant shall set a goal to achieve ten percent total construction worker participation in ridesharing programs and transit use. **MM AQ-4:** The Applicant shall require, in addition to the GSE noted within PDF AQ-3, all other on-site cargo-handling equipment, such as yard trucks, holsters, yard goats, pallet jacks, and similar equipment, to be electric, with the necessary electrical charging stations provided. **MM AQ-5:** The Applicant shall require, where feasible, the use of zero-emission Project-related delivery trucks as part of business operations beginning in 2025 (within at least 25 percent of the Project fleet).	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	MM AQ-6: The Applicant shall include in the design requirements for the Project that a cool roof be installed at the parking structure to reduce energy use and urban heat island effects. This requirement shall not apply if solar panels are installed on the parking structure. **MM AQ-7:** The Applicant shall encourage the use of single engine taxi operations for Project aircraft. **PDF GHG-1:** The Air Cargo Sort Building shall be all-electric (no natural gas usage). **PDF GHG-2:** The proposed Project shall include a 1.5-Megawatt Solar PV Panel System on the rooftop of the Air Cargo Sort Building and Parking Structure. **MM TRANS-1** through **TRANS-5.**	
Threshold GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Potentially Significant Impact.** Implementation of the proposed Project would have no conflicts with many of the plans, policies, and regulations that have been adopted for the purpose of reducing GHG emissions. However, the proposed Project may conflict with some plans, policies, and regulations, including Executive	No feasible mitigation measures.	Significant and unavoidable.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Orders S-3-05, B-30-15, and B-55-18; and the 2017 Climate Change Scoping Plan due to its incremental contribution of additional GHG emissions to the atmosphere. As such, impacts would be potentially significant. While it is anticipated future technology improvements are anticipated to reduce Project GHG emissions over time, there are no additional feasible mitigation measures available at this time that would reduce GHG emissions to below significance thresholds and for this reason, operational GHG emissions would remain significant after implementation of all feasible mitigation.		
Hazards and Hazardous Materials		
Threshold HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? **Less Than Significant Impact.** The use, storage, transport, and disposal of construction and operation-related hazardous materials would be required to conform to existing laws and regulations. Furthermore, strict adherence to all emergency response plan requirements set forth by San Bernardino County Fire Protection District (SBCFPD) and the Ontario Fire	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Department would be required through the duration of the proposed Project construction phase. Project operation would involve ground transport of fuels and other materials related to air cargo transport. These fuel trucks would be in compliance with the fueling operations and fuel spills rules set forth in the Ontario International Airport Rules and Regulations to minimize the risk of fuel release. Therefore, implementation of the proposed Project would result in less than significant impacts related to the routine transport, use, or disposal of hazardous materials; no mitigation is required.		
Threshold HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? **Less Than Significant With Mitigation Incorporated.** No evidence of RECs in connection with the Project site were observed in the Phase I ESA, with the exception of those identified in **Table 5.8-1: RECs Identified**. **Mitigation Measure HAZ-1** includes development, approval, and implementation of a Soil Management Plan (SMP) to reduce the potential for accidental exposure to hazardous materials that may be present in soil that may be disturbed by construction of the proposed Project to a less than significant impact. Based	**MM HAZ-1. Soil Management Plan** A Soil Management Plan (SMP) containing soil criteria and soil management and construction risk management protocols to be implemented during proposed Project development shall be prepared prior to disturbance of soils on the site by construction activities and implemented during construction to address any soil containing or suspected to contain PFAs on the proposed Project site and any previously undetected contamination encountered during construction. Special attention shall be made to soils disturbed in the Guardian Jet Center, southern hangar and structure previously housing fire prevention equipment due to the known presence of PFAs in these areas. Additional	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
on the results of the additional investigations conducted for the Phase II ESA, **Mitigation Measure HAZ-2** includes installation of a vapor intrusion mitigation system (VIM system) under Phase II of the proposed Air Cargo Sort Building to prevent potential vapor intrusion from the subsurface. Installation of the VIM would reduce the potential for this exposure to a less than significant impact. With implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, impacts would be less than significant.	soil sampling shall be conducted as necessary to delineate the extent of PFAs contamination to enable segregation and proper disposal of any contaminated soil during construction. **MM HAZ-2. Vapor Intrusion Mitigation System** A vapor intrusion mitigation system (VIM system) shall be installed under Phase II of the proposed Air Cargo Building to address the potential for vapor intrusion from the subsurface. Alternatively, a soil vapor extraction remediation system could be utilized to reduce trichloroethene (TCE) and chloroform vapor concentrations through removal of volatile organic compounds (VOCs) in Phase II development area.	
Threshold HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? **Less Than Significant Impact.** There are no schools located within 0.25 miles of the Project site. The nearest school to the Project site is Bon View Elementary School located approximately two (2) miles southwest. The proposed Project would not pose a significant risk of hazardous emissions or significant handling of hazardous materials or substances within one-quarter	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
mile of an existing or proposed school. Therefore, impacts would be less than significant.		
Threshold HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Less Than Significant Impact.** The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would also not be affected or impacted by contamination identified in the general vicinity of the proposed Project site. For these reasons, the proposed Project would not create a significant hazard to the public or the environment. Impacts would be less than significant.	No mitigation measures are necessary.	Less than significant.
Threshold HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? **Less Than Significant With Mitigation Incorporated.** The proposed Project is located within the Ontario Airport Land Use Compatibility Plan (ALUCP). All	**MM NOI-1**	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
construction and operation of the proposed Project would comply with applicable aviation-related regulations and safeguards. However, the noise impact from aircraft operations is a potentially significant impact. Implementation of **Mitigation Measure NOI-1** would require a residential sound insulation program (RSIP) for housing units within the future 65-69 dBA which have not been provided with an opportunity to install sound attenuation. With implementation of **Mitigation Measure NOI-1** impacts related to aircraft noise would be reduced to less than significant levels. Therefore, implementation of the proposed Project would result in less than significant impacts with mitigation incorporated related to a safety hazard or excessive noise for people residing or working in the proposed Project area.		
Threshold HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **Less Than Significant Impact.** The proposed Project is not located along interstates within the City that would serve as major emergency response and evacuation	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
routes. During construction and long-term operation of the proposed Project, adequate emergency access for emergency vehicles would be maintained along public streets that abut the Project site. The proposed Project would not, therefore, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.		
Threshold HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? **No Impact.** The Project site is in a Local Responsibility Area and classified by CAL FIRE as non-VHFHSZ (non-very high fire hazard severity zone).[3] The site and surrounding areas are flat and developed with urban uses that would not contribute to the uncontrolled spread of wildfire or exacerbate potential wildfire risks, including downslope flooding and landslides caused by runoff, slope instability, or drainage changes from wildfire. Furthermore, as further discussed above, the	No mitigation measures are necessary.	Less than significant.

3 CAL Fire - Office of the State Fire Marshal. "Fire Hazards Severity Zones." https://egis.fire.ca.gov/FHSZ/. Accessed July 2022.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
proposed Project would not impair adopted emergency response and evaluation plans. Therefore, the proposed Project would not result in, or be subject to, significant effects related to wildfire risk. No impact would occur.		
Hydrology		
Threshold HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? **Less Than Significant Impact.** The proposed stormwater treatment system for the proposed Project would target and reduce pollutants of concern in runoff from the proposed Project site in compliance with the San Bernardino County MS4 permit requirements. Submittal and implementation of the PWQMP, SWPPP, and the erosion control plan prior to the construction phase of the proposed Project would address the potential for construction of the Project to affect water quality. The proposed Project would comply with all applicable regional and local water quality standards and waste discharge requirements as stated above in the Regulatory Setting, including the MS4 permit and NPDES permit. Compliance with the regulatory requirements and conditions of the San Bernardino	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
County MS4 Permit as well as the Construction General Permit, including incorporation of operational BMPs to target pollutants of concern, would ensure that water quality impacts, degradation of water quality, increased pollutant discharge, alteration of receiving water quality, or impacts on surface water quality to marine, fresh, or wetland waters during Project operation would be less than significant.		
Threshold HYD-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin? **Less Than Significant Impact.** A Water Supply Assessment (WSA) was prepared for the Project site to determine if the water demand during operation of the proposed Project would be sufficiently accommodated by the existing system within the City.[4] The WSA concluded that the City would have sufficient water supplies available during normal, single dry, and multiple dry years through the year 2045 to meet all	No mitigation measures are necessary.	Less than significant.

4 Meridian Consultants. *Water Supply Assessment* (WSA). June 2022 (see **Appendix 5.9-3**).

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
projected water demands associated with its existing and future customers, including the proposed Project. Additionally, there are no existing wells on the Project site and construction and operation of the proposed Project would not include groundwater extraction. For these reasons, the proposed Project will not impede sustainable groundwater management of the Chino Basin and Project impacts related to a decrease in groundwater supplies or interference with groundwater recharge would be less than significant.		
Threshold HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:		
i. result in substantial erosion or siltation on- or off-site? **Less Than Significant Impact.** As discussed above, the Construction General Permit requires preparation of a SWPPP. The SWPPP would detail erosion control and sediment control BMPs to be implemented during construction to minimize erosion and retain sediment on site. With compliance with the regulatory requirements and conditions of the Construction General Permit, and	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
with implementation of the construction BMPs, construction impacts related to on-site, off-site, or downstream erosion or siltation would be less than significant. Furthermore, the collection, treatment, and controlled release of stormwater runoff in the proposed Project's planned underground water treatment facility to the drainage channels would ensure that runoff from the site does not remove significant amounts of sediment into the drainage channels and result in substantial erosion or siltation on the site. Impacts would be less than significant.		
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Less Than Significant Impact.** With the implementation of specified BMPs and detention features, the proposed Project would not substantially increase the rate or amount of surface runoff in a manner that would result in on- or off-site flooding. Also, the site design LID features and on-site detention facilities would ensure that stormwater runoff does not exceed the capacity of the City's storm drain system, which includes the Airport. As the runoff from the Project site would be collected by existing and the new Avion Street drainage facilities, the proposed Project would not result in or contribute to flooding. For these reasons, impacts to	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
related to increase in runoff resulting in flooding would be less than significant.		
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Less Than Significant Impact.** Project construction would comply with the requirements of the Construction General Permit and would include the preparation and implementation of a SWPPP and applicable BMPs. The incorporation of the proposed operational BMPs as stated in the PWQMP would allow the proposed Project to comply with San Bernardino County drainage requirements. Furthermore, on-site stormwater detention facilities including underground storage would be included in the proposed Project to reduce the amount of additional runoff into existing drainage facilities. Operational impacts related to creation or contribution of runoff water that would exceed the capacity of existing, or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, would be less than significant.	No mitigation measures are necessary.	Less than significant.
iv. Impede or redirect flood flows?	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Less Than Significant Impact. The entire Project site would potentially be subject to inundation by 100-year storm floodwaters at depths of one foot or less. The proposed Project would be required to address these potential flood hazards as stated in Ontario Municipal Code Section 8-13.501: Standards of construction.[5] Additionally, the proposed Project would include an underground stormwater detention and infiltration which would discharge stormwater at a controlled rate not greater than 24 cfs for the main portion of the Project site and 9 cfs for the portion of the Project site for the proposed parking garage (for the 100-year storm) into a new East Avion Street drainage system that will be completed prior to the opening of the proposed Project and into Cucamonga Channel. Based on these design conditions, the proposed Project impacts related to impeding or redirecting flood flows would be less than significant.		

5 City of Ontario. Ontario Municipal Code. Article 5. Section 8-13.501.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Threshold HYD-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation? **Less Than Significant** Impact**.** There are no open bodies of water in the vicinity of the Project site and the proposed Project is therefore not located within an inundation zone of a seiche. The Project site is located approximately 36 miles east of the Pacific Ocean and is not located within a tsunami inundation zone, according to the California Department of Water Resources.[6] The proposed Project would also keep the storage of potentially hazardous materials on-site to a minimum, which would reduce the potential for hazardous materials to be released into surface water during flooding (see **Section 5.8: Hazards and Hazardous Materials**). With implementation of existing regulations to reduce flood hazards, risk of release of pollutants due to Project inundation would be less than significant.	No mitigation measures are necessary.	Less than significant.

6 California Department of Water Resources. "California Dam Breach Inundation Maps." https://fmds.water.ca.gov/maps/damim/. Accessed December 2021.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Threshold HYD-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? **Less Than Significant Impact.** Adherence to the regulatory requirements and conditions of the State General Construction Permit, implementation of the SWPPP, and adherence to the City's Erosion and Sediment Control Plan requirements, would ensure that surface and groundwater quality are not adversely impacted during construction. In addition, implementation of the LID and BMP measures at the site, including catch basins, underground detention, and sediment filtration chambers, would ensure that water quality would not be impacted during the operation of the proposed Project. As a result, site development would not obstruct or conflict with the implementation of the Santa Ana River Basin Water Quality Control Plan. The Project would not obstruct or conflict with the OBMP, applicable water quality control plans, or applicable sustainable groundwater management plans Therefore, impacts would be less than significant.	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	Noise	
Threshold N-1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **Less Than Significant Impact.** Construction noise levels would not exceed the significance threshold at the nearby sensitive receptors. Additionally, roadway noise levels would not create a readily perceptible increase of 5 dBA or greater at locations where ambient noise levels are less than 60 dBA; a barely perceptible increase of 3 dBA or greater at locations where ambient noise levels range from 60 to 65 dBA; and community noise level impact increase of 1.5 dBA or greater at locations where ambient noise levels already exceed 65 dBA.	No mitigation measures are necessary.	Less than significant.
Threshold N-2: Generation of excessive groundborne vibration or groundborne noise levels? **Less Than Significant Impact.** The forecasted vibration levels due to on-site construction activities would not exceed the strictest building damage significance threshold of 0.12 PPV ips for all Project-identified sensitive receptors due to distance, changes in	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
elevations, and intervening structures. Based on FTA published vibration data, the anticipated ground vibration environment in the Project vicinity would be below the perceptible levels. As such, impacts related to building damage from operational groundborne vibration would be less than significant.		
Threshold N-3: Located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels. **Less Than Significant With Mitigation Incorporated.** Unmitigated residences along avigation easements would be exposed to aircraft noise that would be considered significant under the proposed Project and No Action Alternative. Because unmitigated residences would be exposed to aircraft noise that would be considered significant, the Baseline Condition and Proposed Project condition would result in a potentially significant impact. Implementation of **Mitigation Measure NOI-1** would define a residential noise program for housing units affected by aviation noise	**MM NOI-1. Residential Sound Insulation Program (RSIP).** Non-compatible residential land uses within the 65+ decibel (dB) contour with habitable areas inside the home with average noise levels of 45 dB or greater with all windows closed would be eligible for the RSIP. The goal of the Program is to reduce the interior noise level within affected homes by at least five (5) decibels (dB). The results may vary depending upon the existing structural characteristics of the home. In order to achieve this goal, modifications may include the retrofit of exterior doors and windows, installation of a ventilation system, and other miscellaneous treatments. The RISP would include the following: A noise audit will be conducted for each home in the RISP to measure the noise reduction properties of a residence in its existing condition to confirm that average interior	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
generated by the Project would reduce impacts related to aircraft noise to less than significant levels.	aircraft sound levels are greater than a Community Noise Equivalent Level (CNEL) of 45 decibels (dB), and to provide an indication of the potential effectiveness of noise reducing treatments. The goal of the RISP is to reduce the average interior CNEL of habitable rooms by a minimum of 5 dB (i.e., a clearly detectable reduction), and reduce the average interior CNEL of habitable rooms to below 45 dB. Sound levels will be measured using aircraft as the noise source or simulation methods (loudspeaker(s)). Property owners will be required to sign an avigation easement, guaranteeing the right of flight over a residence, as a requirement to participate in the RISP. Upon completion, current owners will be required to disclose the residence was included in the RISP and is subject to an avigation easement. If housing units do not meet the local building codes required to qualify for sound insulation, a homeowner shall be given the option to sell the property. The residence may be resold to a new owner. The housing unit may or may not be sound insulated and/or upgraded prior to resale but will be subject to an avigation easement.	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	Public Services	
Threshold PUB-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:		
i. Fire Protection?		
Less Than Significant Impact. The existing Ontario Fire Department (OFD) facilities, Station 10, meet current and future needs for fire protection services, including the needs of the proposed Project. Due to Station 10's proximity to the Project site, a potential response to the Project site would be less than three minutes. The existing fire protection equipment and services offered at Station 10 are sufficient to accommodate the proposed Project. Demolition and construction activities would comply with all applicable California Fire Code requirements. During operation, the primary need for fire services at the Project site would relate to fires and potential incidents involving hazardous materials by	No mitigation measures required.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
aircraft ground operations, aircraft fueling, the storage of cleaning and maintenance materials, and the handling of cargo within the facility. The proposed structures would be built to current fire codes and standards, and would have fire extinguishers, wet and dry sprinkler systems, pre-action sprinkler systems, fire alarm systems, fire pumps, backflow devices, and clean agent waterless fire suppression systems pursuant to the California Fire Code, CBC, City of Ontario Fire Code, OIAA, and other applicable regulations regarding fire safety.		
i. Police Protection? **Less Than Significant Impact.** The Ontario Police Department (OPD) currently patrols the Project site for suspicious persons and trespassing. The Airport Operations Bureau (AOB) would respond to calls for service requiring a police response. The response time to the Project site would vary by type of call and location of OPD officers. Emergency calls would have officers at the site within in one to ten minutes. Non-emergency calls are immediately responded to if there are available officers. During construction, the entire construction area would be fenced off. No access would be allowed into the airfield and other secured Airport areas from the	No mitigation measures required.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
construction site, and access in and out would be limited to one to two access points that would be gated and secured by a security guard. Once constructed, the property would be fully secured, with limited access into the Air Cargo Sort Building. The Air Cargo Sort Building would also include areas for facility security, administered by TSA, FAA, and OIAA. Fencing would be installed along the perimeter of the property in accordance with airport standards. The entire Project site, including the interior and exterior of the cargo building and parking garage on the south side of East Avion Street would be installed with security cameras, alarm systems, and adequate lighting for operations during the day and nighttime security. Construction of Phase 2 of the proposed Project would require the relocation of the AOB K-9 Substation, currently located in the OIAA administrative offices on East Avion Street, to a vacant hangar on the north side of the Airport prior to the start of Phase 2. The relocation of the K9 substation would not impact response times, which would remain between 1 and 10 minutes. The relocation to the vacant hangar would not result in a substantial adverse physical impact.		

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	Transportation	
Threshold TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? **Less Than Significant Impact. Roadway:** Truck trips during construction would comply with truck route requirements identified within the Ontario Plan. Construction of the proposed Project would not conflict with any program, plan, ordinance, or policy related to roadway facilities. Improvements are not needed at any study locations for Phase 1 Project conditions to maintain consistency with applicable performance standards. As such, the proposed Project would not conflict with any standard related to roadway facilities or services under Phase 1 Opening Year (2025) Conditions with the implementation of recommended roadway improvements. Roadway facilities improvements to Intersection 1, Euclid Ave/SR-83 at Mission Boulevard, would occur as part of the proposed Project to be completed by Phase 2 Opening Year (2029). The improvements would optimize signal timing, improving intersection operations to better than pre-project conditions, consistent with the Ontario Plan and CMP	No mitigation measures required.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
requirements related to LOS. Additionally, Cumulative Year (2040) roadway improvements, as part of the proposed Project, include intersection realignments and widening. Intersection 1, Euclid Avenue/SR-83 at Mission Boulevard, Intersection 5, Grove Avenue at Mission Boulevard, and Intersection 26, Airport Drive at Haven Avenue, would include lane configurations that would improve intersection operations to acceptable conditions. Storage capacities for all SR-60, I-10, and I-15 off ramps in the Study Area do not exceed the storage capacity defined by Caltrans (see **Appendix 5.12-1)**. As such, the proposed Project would not conflict with any program, plan, ordinance, or policy related to roadway facilities or services. **Transit:** Construction of the proposed Project may result in temporary effects on adjacent streets, including effects from any temporary lane closures needed. Transit facilities would not substantially change during construction of the proposed Project. Construction of the proposed Project would not conflict with a conflict program, plan, ordinance, or policy related to transit facilities. The proposed Project would not substantially change or eliminate bus facilities or transit routes, nor		

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
would it conflict with a policy or program related to transit access. **Bicycle:** Bicycle facilities are not proposed and would not change as part of the proposed Project. Temporary construction impacts to bicycle facilities may occur during construction as a result of potential lane closures for roadway improvements. Construction of the proposed Project would not conflict with any program, plan, ordinance, or policy related to bicycle facilities. The proposed Project does not include any changes to proposed or existing bicycle facilities. The proposed Project would not conflict with any existing or planned bicycle facilities. The proposed Project is consistent with the adopted plans regarding bicycle facilities and is not expected to decrease the performance or safety of these facilities. **Pedestrian:** Pedestrian facilities would have temporary construction impacts during construction as a result of potential sidewalk closures for roadway improvements. Construction of the proposed Project would not conflict with any program, plan, ordinance, or policy related to pedestrian facilities. There are no proposed pedestrian facilities on Avion Street or Avion Drive outside the proposed Project area. The proposed Project would not		

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
conflict with any existing or planned pedestrian and bicycle facilities. The proposed Project is consistent with the adopted plans regarding pedestrian facilities and is not expected to decrease the performance or safety of these facilities.		
Threshold TRA-2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? **Potentially Significant Impact.** The Total VMT per service population of the Project site is compared to the Ontario Plan Buildout Conditions VMT per service population to determine if it exceeds the City's impact threshold for VMT under for Phase 1 Opening Year (2025), Phase 2 Opening Year (2029), and under Cumulative Year (2040) conditions. Trip generation estimates were multiplied by average trip lengths to estimate average daily VMT. Phase 1 Opening Year (2025) anticipates 2,777 new Project trips and a VMT of 45,411. Phase 2 Opening Year (2029) anticipates 2,824 new Project trips and a VMT of 50,163. The Cumulative Conditions (2040) anticipated 2,824 new Project trips and 50,465 new proposed Project VMT	**MM TRANS-1. Voluntary Commute Reduction Program.** The proposed Project shall implement Voluntary Commute Trip Reduction (CTR) programs that discourage single-occupancy vehicle trips and encourage alternative modes of transportation, such as carpooling, taking transit, walking, and biking. Voluntary CTR programs shall include the following elements to apply the VMT reductions reported in literature: • Employer-provided services, infrastructure, and/or incentives for commuting to work using alternative modes (e.g., walking, biking, carpooling/vanpooling, or taking transit). • Provide information, coordination, and marketing for employee rideshare services, provide onsite infrastructure to support carpools/vanpools, and provide incentives (e.g., free transit passes, monthly bonus for carpooling 3 or more times a week, etc.).	Significant and Unavoidable.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
would increase Citywide VMT on a daily level in the City. The truck VMT is anticipated to be slightly higher compared to more urbanized airports, given the frequency of trips between these airports and other locations. The proposed Project would cause total daily VMT within the City to be higher than the no project alternative under cumulative conditions, based on the qualitative assessment. The proposed Project Total VMT per service population is 23 percent above the City's VMT significance threshold. The majority of the proposed Project VMT would be generated by trucks, as the proposed Project is a logistics facility. When these truck trips are considered as part of the total project VMT, the impact of the proposed Project is significant in relation to the City's VMT threshold. **Mitigation Measures TRANS-1 through TRANS-5** would be implemented to reduce proposed Project VMT to the maximum extent feasible, with maximum effectiveness of 5.10% reduction on total or commute VMT. Implementation of these mitigation measures is not anticipated to reduce the VMT impact of the proposed Project to a less-than significant level.	Employer costs may include recurring costs for carpool/vanpool subsidies, capital and maintenance costs for the alternative transportation infrastructure (e.g., showers and lockers), and labor costs for staff to manage the program. **MM TRANS-2. Provide Ridesharing Program.** A ridesharing program shall be implemented for employees of the site. The following elements designed to support the Project's ridesharing program: • Provide vanpool parking with designated passenger loading/unloading area near employee entrance. • Create a Carpool Incentive Program. – Provide a minimum of ten (10) carpool parking spaces provided closer to the employee entrance than standard parking spaces. – Provide access to a carpool database (Metro rideshare) and/or an on-site matching program for employees. – Provide a monthly incentive for employees that carpool a minimum of three (3) days per week (e.g., $50 gas card or a $50 green commuter bonus).	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
	In addition, a staff person would be designated to for provide rideshare information to employees and monitoring the effectiveness of the program. It is assumed all employees are eligible and that additional carpool spaces could be designated if warranted by demand. **MM TRANS-3. Implement Subsidized or Discounted Transit Program.** Subsidized, discounted, or free Omnitrans, Metrolink or Amtrak transit passes shall be provided to employees to encourage use of transit routes/stops located less than a mile from the Project. It is assumed free transit passes are available to all employees. Based on the given shift times of the Project, shifts that start or end at 11:00 PM shall have limited available options as most routes do not provide service that late. This shall limit approximately half the employees from the ability to rely on transit. **MM TRANS-4. Bicycle Facilities.** On-site bicycle parking and end-of-trip facilities shall be provided for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers.	

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Impact	Mitigation Measures	Significance after Mitigation
	A bike share program (standard or electric bikes) for employees shall supplement bicycle facilities. **MM TRANS-5. Employer-Sponsored Vanpool Program.** An employer-sponsored vanpool service shall be implemented and be fully funded by the tenant as follows: • Provide a minimum of one (1) and up to three (3) vanpool vehicles and associated parking with designated passenger loading/unloading area near employee entrance. • Pay for the lease of a minimum of one (1) van and up to three (3) vans for the purpose of employee vanpooling. .3 • A ten percent voluntary participation rate is assumed to be the high end of the range for this project.	
Threshold TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? **Less Than Significant Impact.** The proposed Project includes the realignment of and widening of arterial roadways and intersections. The existing roadway network consists of industrial-scaled, block-defining	No mitigation measures required.	Less than significant.

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Impact	Mitigation Measures	Significance after Mitigation
thoroughfares that enable goods movements to and from the Project site and functions well for pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. The proposed roadway network identifies access points on the surrounding streets at appropriate locations that would not create any hazards. This includes new driveways to access the proposed Project along East Avion Street. All roadway and driveway improvements would comply with federal, State, and local design and safety standards. All driveway access points are perpendicular to the public right-of-way and adequately spaced from existing signalized intersections. No pedestrian or bicycle facilities are proposed for East Avion Street. All sidewalk and crosswalk improvements as a result of roadway improvements would comply with federal, State, and local design and safety standards. Further, the proposed air cargo facility uses are consistent with surrounding uses. Phase 2 Opening Year (2029) would include roadway improvements to Improvements to Intersection 1, Euclid Avenue/SR-83 at Mission Boulevard. Additionally, Cumulative Year (2040) roadway improvements, as part of the proposed Project, include		

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
intersection realignments and widening. Intersection 1, Euclid Avenue/SR-83 at Mission Boulevard, Intersection 5, Grove Avenue at Mission Boulevard, and Intersection 26, Airport Drive at Haven Avenue, would include lane configurations that would improve intersection operations to acceptable conditions. Accordingly, the Proposed Project would not create or substantially increase safety hazards due to a design feature or incompatible use. The proposed Project does not increase hazards due to a geometric design feature.		
Threshold TRA-4: Result in inadequate emergency access? **Less Than Significant Impact.** No hazards would be associated with construction of the proposed Project. All proposed Project-related construction traffic would be required to comply with a temporary traffic control plan that meets the applicable requirements of the California Manual on Uniform Traffic Control Devices. The proposed Project would maintain adequate emergency access during construction. Primary access to the proposed Project area is proposed from East Avion Street. The proposed Project would provide emergency access on East Avion Street to major arterials Archibald Avenue, Jurupa Street, and Vineyard Avenue. The	No mitigation measures required.	Less than significant.

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Impact	Mitigation Measures		Significance after Mitigation
location and design of these access points would be adequate for emergency access. The proposed roadway network improvements would not result in inadequate emergency access to the site and would not impede existing emergency access to the existing surrounding uses.			
Tribal Cultural Resources			
Threshold TRI-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:			
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	MM CUL-1	Archaeological Monitoring of All Ground-Disturbing Activities During Construction of Phase 1 and Phase 2.	Less than significant.
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section	MM TCR-1	Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. **Less Than Significant with Mitigation Incorporated.** Based on literature review, no tribal cultural resources as defined by PRC Section 5020.1(k) have been identified on the Project site. Observations made during the field survey did not identify any tribal cultural resources. No consultation from the 18 individuals representing 12 Native American tribal groups was requested and no tribes identified any TCRs on site. Therefore, no tribal cultural resources were identified on the Project site. Ground disturbing activities could extend to a depth of 20 feet below ground surface, and as such, it is possible that objects and features associated with the prehistoric occupation of local tribes in the proposed Project area are buried in the native soils, underlying the artificial fill at the Project site. **Mitigation Measure CUL-1** would require an archaeological monitor observe all ground disturbing activities associated with the proposed Project. **Mitigation Measure TCR-1** further requires the archaeological monitor to consult local Native American	a) The project applicant/lead agency shall retain a Native American Monitor from or approved by the appropriate Native American Tribe(s). The monitor shall be retained prior to the commencement of any ground-disturbing activity for the subject project at all project locations (i.e., both onsite and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. b) A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. c) The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the	

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
tribes to determine the tribal cultural significance of the object and its treatment, if required. **Mitigation Measure TCR-2** and **TCR-3** require coordination and procedures with the appropriate Native American Tribe(s) should Native American human remains be discovered or recognized on the Project site. Implementation of **Mitigation Measures CUL-1 and TCR-1** through **TCR-3** would reduce potentially significant impacts to tribal cultural resources determined by criteria provided PRC 5024.1(c) to less than significant.	Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the proposed Project applicant/lead agency upon written request to the appropriate Native American Tribe(s). d) On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the appropriate Native American Tribe(s) from a designated point of contact for the proposed Project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the appropriate Native American Tribe(s) to the proposed Project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the Project site possesses the potential to impact Native American Tribe TCRs.	

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
	e) Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American monitor and/or Native American archaeologist. The appropriate Native American Tribe(s) will recover and retain all discovered TCRs in the form and/or manner the Native American Tribe(s) deem appropriate, in the Tribe's sole discretion, and for any purpose the Native American Tribe(s) deem appropriate, including for educational, cultural and/or historic purposes. **MM TCR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects.** a) Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. b) If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any	

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Impact	Mitigation Measures	Significance after Mitigation
	discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed. c) Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). d) Construction activities may resume in other parts of the Project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the appropriate Native American Tribe(s) determine in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the appropriate Native American Tribe(s) and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f)). e) Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods, if feasible. Any historic	

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
	archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. f) Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance. **MM TCR-3 Procedures for Burials and Funerary Remains.** a) The appropriate Native American Tribe(s) burial policy shall be implemented. b) If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. c) The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or	

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
	later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials. d) In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. e) In the event preservation in place is not possible despite good faith efforts by the proposed Project applicant/developer and/or landowner, before ground-disturbing activities may resume on the Project site, the landowner shall arrange a designated site location within the footprint of the proposed Project for the respectful reburial of the human remains and/or ceremonial objects. f) Each occurrence of human remains and associated funerary objects will be stored using opaque cloth	

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
	bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. g) The proposed Project's qualified archaeologist will work closely with the appropriate Native American Tribe(s) to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the appropriate Native American Tribe(s), documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the appropriate Native American Tribe(s). If any data recovery is performed, once complete, a final report shall be submitted to the appropriate Native American Tribe(s) and the NAHC.	
Utilities		
Threshold U-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power,	No mitigation measures are necessary.	Less than significant.

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Impact	Mitigation Measures	Significance after Mitigation
natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **Less Than Significant Impact.** Short-term construction activities would require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. During operation, the Air Cargo Sort Building would be connected to the existing 16-inch water main along East Avion Street. Water would be supplied to the Air Cargo Sort Building, parking garage, and aircraft apron, for consumption as well as fire suppression. The projected water demand for the Project site in the 2020 UWMP is sufficient to account for the water needed for the Project. The proposed Project would not require the construction of new or expanded water conveyance, treatment, or collection facilities. The impacts on water facilities during construction and operation would be less than significant, and no mitigation is required. Additionally, based on the available sewer line and wastewater treatment capacity, the proposed Project would not require the construction of new or expanded water conveyance, treatment, or collection facilities, and impacts would be less than significant. the Project would		

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
implement LID features and stormwater effluent from the Project site during construction and operation, which would be stored and discharged at a controlled rate (not greater than 24 cfs for the main portion of the Project site and 9 cfs for the portion of the Project site for the proposed parking garage), the proposed Project would not require the construction of new or expanded water conveyance, treatment, or collection facilities and impacts would be less than significant. Phase 1 of the proposed Project would require approximately 8.5 MW of power. Phase 2 of the proposed Project which would require approximately 2.85 MW of power at buildout. An additional 10 percent of other miscellaneous loads is needed for the proposed Project. At full development, the proposed Project would require approximately 12.4 MW of power. A new substation is being planned by SCE, as a part of the proposed Project, to meet the need for additional power for the proposed Project. This 135-foot by 160-foot proposed substation will be located on previously disturbed areas within the Project site. The Air Cargo Sort Building would not utilize natural gas. Therefore, the proposed Project would not require the construction of new or expanded natural gas facilities and impacts would be less than significant. Construction and operation of the proposed Project would not		

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
necessitate the construction of off-site telecommunication facilities that would have the potential to cause significant environmental impacts. The proposed Project would not require the construction of new or expanded telecommunications facilities and impacts would be less than significant..		
Threshold U-2: Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. **Less Than Significant Impact.** Based on the information provided in the 2020 UWMP and Project-specific water demand, the OMUC's projected water supplies will be sufficient to satisfy the demands of the proposed Project, in addition to existing and planned future uses under normal, dry, and multiple dry water years. Impacts would be less than significant.	No mitigation measures are necessary.	Less than significant.
Threshold U-3: 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 Impact.** The proposed Project would constitute approximately 0.28 percent of the total	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
daily wastewater capacity for Regional Plant 1. Considering this facility is already operating below its maximum capacity, the proposed Project would not cause significant effect on the processing capacity. Therefore, the proposed Project would not require the construction of new wastewater treatment facilities or expansion of facilities, the construction of which could cause significant environmental effects and impacts would be less than significant.		
Threshold U-4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **Less Than Significant Impact.** Phase 1 demolition would generate approximately 192,484 square feet of building debris and 2,047,320 square feet of concrete and asphalt paving. Phase 2 demolition would generate approximately 432,295 square feet of building debris and approximately 1,045,440 square feet of concrete and asphalt paving. The building debris would need to be removed and disposed of off-site. The concrete and asphalt paving debris would be recycled for use on the	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
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Impact	Mitigation Measures	Significance after Mitigation
site. It is expected that all pavement found suitable for recycling and reuse would be recycled on-site. Demolition and disposal of demolition debris would be conducted in accordance with applicable laws and regulations, including Ontario Municipal Code Section 6-3.602, Construction & Demolition Recycling Plans, and the 2019 California Green Building Standards Code with regard to the diversion of recyclable material away from landfills, as well as South Coast Air Quality Management District Rule 403 regarding the generation of fugitive dust at construction sites. The proposed Project will also meet the City's current and future recycling goals during operation and meet the City's waste management ordinance to divert at least 65 percent of potential waste disposal. As such, the proposed Project would not create a significant impact on solid waste generation.		
Threshold U-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste. **Less Than Significant Impact.** The proposed Project would be consistent with the applicable regulations associated with solid waste. The proposed Project would also comply with AB 939, AB 341, AB 1826, SB 1383, and City waste diversion goals as presented in the	No mitigation measures are necessary.	Less than significant.

TABLE 1-2
SUMMARY OF FINDINGS

Impact	Mitigation Measures	Significance after Mitigation
Ontario Municipal Code, as applicable. Since the proposed Project would comply with federal, State, and local statutes and regulations related to solid waste, impacts would be less than significant.		

2.0 INTRODUCTION

2.1 LEGAL AUTHORITY

The California Environmental Quality Act (CEQA) requires State and local agencies to consider the environmental consequences of projects over which they have discretionary approval authority prior to taking approval action on such projects. This document is the draft environmental impact report (Draft EIR) for the proposed Ontario International Airport South Airport Cargo Center Project (Project). It has been prepared in accordance with requirements of:

- California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, §§ 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (CEQA Guidelines), as amended (California Code of Regulations, §§ 15000 et seq.)

The Draft EIR is an informational document designed to provide decision makers, public agencies, and the public with analysis of the potential environmental effects of the proposed Project. As required by CEQA and the CEQA Guidelines, this Draft EIR identifies significant environmental impacts and ways to reduce or avoid potentially significant impacts through the incorporation of mitigation measures into the Project or adoption of alternatives to the Project as proposed. The Draft EIR discusses growth-inducing impacts, effects not found to be significant, and significant cumulative impacts that could result from implementation of the Project and past, present, and reasonably foreseeable future projects.

The lead agency is "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment" (CEQA Guidelines § 21067). The Ontario International Airport Authority (OIAA) is the public agency with primary responsibility for implementing the proposed Project, which is a proposed aeronautical development and use within the airfield of the Ontario International Airport (Airport). Accordingly, OIAA is the Lead Agency for the Project.

Serving as Lead Agency and before taking action for the proposed Project, OIAA has the obligation to: (1) ensure this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects OIAA's independent judgment; (4) ensure that all significant effects on the environment are avoided or mitigated to the fullest extent feasible; and, (5) make written findings for each significant environmental effect stating whether the impact can be feasibly avoided or mitigated to less than significant, or reasons why mitigation measures or

project alternatives identified in Draft EIR are infeasible, and citing the specific benefits of the proposed project that outweigh its unavoidable adverse effects (State CEQA Guidelines §§ 15090 through 15093).

2.2 ENVIRONMENTAL REVIEW PROCESS

The CEQA Guidelines define a process for environmental review that includes a series of steps that must be completed prior to any action taken by the Lead Agency on a project.

2.2.1 Notice of Preparation

After conducting preliminary environmental review, the OIAA identified the potential for the Project to result in significant impacts and determined that preparation of an EIR was required. Pursuant to CEQA Guidelines §§ 15060(d) and 15063(a), an Initial Study was not prepared and the OIAA issued a Notice of Preparation (NOP) of an EIR for the Project (**Appendix 1.0**). The purpose of the NOP was to solicit comments from public agencies with expertise in subjects evaluated in this Draft EIR. The NOP was circulated to public agencies for a 30-day public review period, commencing October 15, 2021, and ending November 15, 2021.

The NOP explained why no potentially significant impacts were identified during preliminary review for the seven environmental topics identified in **Table 2-1: Environmental Topics Eliminated from Evaluation in the Draft EIR** and, for this reason, these topics are not further analyzed in this Draft EIR.

TABLE 2-1
ENVIRONMENTAL TOPICS ELIMINATED FROM EVALUATION IN THE DRAFT EIR

• Agriculture and Forestry Resources • Land Use and Planning • Mineral Resources • Population and Housing	• Parks / Recreation • Public Services (Schools and Other Public Facilities) • Wildfire

The NOP identified that based on preliminary review of the Project, the topics identified further in **Table 2-2: Environmental Topics Identified in the NOP for Further Evaluation** would be evaluated in the EIR.

TABLE 2-2 ENVIRONMENTAL TOPICS IDENTIFIED IN THE NOP FOR FURTHER EVALUATION	
• Aesthetics • Air Quality • Biological Resources • Cultural Resources • Energy • Geology / Soils • Greenhouse Gas Emissions	• Hazards / Hazardous Materials • Hydrology / Water Quality • Noise • Public Services (Fire and Police) • Transportation • Tribal Cultural Resources • Utilities / Service Systems

Letters received by OIAA in response to the NOP are provided in **Appendix 1.0** and summarized in **Table 2-3: Agency Responses to NOP**, which also references the Draft EIR section(s) in which issues raised in the comment letters are addressed.

TABLE 2-3
AGENCY RESPONSES TO NOP

Commenting Agency	Comment Summary	Environmental Topic Addressed In:
City of Chino	• City recommends preparation of an Environmental Impact Statement, including a noise study per 14 CFR Part 150. • The EIR must evaluate long and short-term and cumulative impacts, and focus on noise, air quality, traffic, and safety. • Use FAA standard Aviation Environmental Design Tool to evaluate the project and alternatives. • Prepare a sleep interference assessment to determine the degree of awakenings and other effects upon residential communities from revisions of air traffic patterns. The sleep interference study must assess revision of air traffic patterns for arrivals and departures to limit low-flying aircraft that currently awaken neighbors near the airport. • Develop criteria for noise mitigation, such as a sound insulation program. • Develop criteria for noise mitigation of residences, schools, and healthcare facilities, such as a sound	• Section 4, Environmental Setting • Section 5.2, Air Quality • Section 5.10, Noise • Section 5.12, Transportation

TABLE 2-3
AGENCY RESPONSES TO NOP

Commenting Agency	Comment Summary	Environmental Topic Addressed In:
	insulation program, like that already affected for homes near Ontario International Airport. • Prepare a noise study to determine noise impacts from the Project's car and heavy truck traffic. • Study traffic effects on surrounding communities from increased surface traffic, for automobiles and heavy truck transport to and from the proposed cargo facilities • Analyze the specific effects on climate change, due to emissions of CO2 and methane from aircraft taxiing, takeoffs and landings, surface vehicular traffic, and fuel storage must be quantified. • Prepare a crash hazard potential study to determine the potential for aircraft crashes in the surrounding communities and the possible effects on insurance rates for homeowners. • Evaluate and assess mitigation measures for all environmental effects.	
City of Ontario	• The City of Ontario provided a Historic Context Statement prepared in 2017 for Ontario Airport by the City for review and consideration during preparation of the EIR.	• Section 5.4, Cultural Resources
Native American Heritage Commission (NAHC)	• NAHC recommends preparation of an EIR if there is a substantial adverse change to a historical resource. • AB 52 requires evaluation of the significance of tribal cultural resources. SB 18 applies to projects requiring amendments to a general plan or specific plan. Both bills have tribal consultation requirements. • The Project would be subject to section 106 of the National Historic Preservation Act of 1966, if NEPA applies. • Consult with California Native American Tribes traditionally and culturally affiliated with the geographic area of the project early to avoid	• Section 5.13, Tribal Cultural Resources

TABLE 2-3
AGENCY RESPONSES TO NOP

Commenting Agency	Comment Summary	Environmental Topic Addressed In:
	inadvertent discoveries of Native American human remains and tribal cultural resources. • Comment letter summarizes AB 52 and SB 18 processes. • Comment includes NAHC's recommendation for conducting cultural resources assessments. • Contact the appropriate regional California Historical Research Information System Center for an archaeological records search. • If an archaeological inventory survey is required, a professional report is required. • Contact the NAHC for a Sacred Lands File Search and a Native American Tribal Consultation List. • Include in the Mitigation Monitoring and Reporting Program provisions for identification and evaluation of inadvertently discovered resources, monitoring by a certified archaeologist and culturally affiliated Native American of areas identified with archaeological sensitivity, and treatment and disposition of discovered Native American human remains and associated grave goods.	
San Bernardino County Public Works	• The Project is adjacent to the San Bernardino County Flood Control District (SBCFCD) right-of-way. • Project impacts to SBCFCD right-of-way will require a permit from SBCFCD. • Permits and impacts should be addressed in the EIR. • The Project must comply with the most current MS4 permit and Construction General Permit. Compliance measures should be addressed in the EIR section for Hydrology/Water Quality. Potential impacts and proposed mitigation should be disclosed in the Draft EIR.	• Section 5.9, Hydrology and Water Quality

TABLE 2-3
AGENCY RESPONSES TO NOP

Commenting Agency	Comment Summary	Environmental Topic Addressed In:
	• Include San Bernardino County Public Works on the circulation list for all project notices, public reviews, or public hearings.	
South Coast Air Quality Management District (SCAQMD)	• Submit to SCAQMD electronic copies of EIR, appendices, and technical documents related to the air quality, health risk, and greenhouse gas analyses, including emissions calculation spreadsheets, and air quality modeling and health risk assessment input and output files. • Use SCAQMD CEQA Air Quality Handbook and website as guidance. Use the CalEEMod land use emissions software to conduct analysis. • Quantify criteria pollutant emissions and compare to SCAQMD's CEQA regional pollutant emissions significance thresholds and localized significance thresholds. • Lead Agency should identify any potential adverse air quality impacts that could occur in all project phases (construction, demolition, and operation) and all air pollutant sources of the project, including indirect sources. • Combine emissions from the overlapping of construction and operational activities and compare to SCAQMD's regional air quality CEQA operational thresholds. • Perform a mobile source health risk assessment if the project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles. • If the project involves stationary equipment, such as emergency generator and fire pump, the project will require a SCAQMD permit and SCAQMD should be identified as a Responsible Agency in the EIR.	• Section 5.2, Air Quality

TABLE 2-3
AGENCY RESPONSES TO NOP

Commenting Agency	Comment Summary	Environmental Topic Addressed In:
	• CEQA requires identification of all feasible mitigation measures. Impacts caused by mitigation must be analyzed.	
Southern California Association of Governments (SCAG)	• SCAG is responsible for assisting lead agencies attain Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and policies. • Environmental documentation should be emailed to IGR@scag.ca.gov. • SCAG provides informational resources to facilitate consistency with the adopted 2020-2045 RTP/SCS or Connect SoCal. Lead Agencies have sole discretion in determining a project's consistency with Connect SoCal. • The comment provides ten goals of Connect SoCal and suggests side-by-side comparison of whether the Project is consistent. • Chapter 3 of Connect SoCal includes multiple strategies to support implementation of the SCS; they are provided as guidance. • Connect SoCal includes information of demographics and growth forecasts for the SCAG Region. SCAG does not have authority to implement Connect SoCal, as it is adopted at the jurisdictional level. The letter provides growth forecasts for the SCAG region and San Bernardino County forecasts. • The Final Program Environmental Impact Report (Final PEIR) for Connect SoCal may be used for guidance. The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation for the project.	• Section 4, Environmental Setting

2.2.2 Scoping Meeting

The Project meets the definition in § 15206(b)(2)(E) of the CEQA Guidelines of a project of Statewide, regional, or areawide significance. Accordingly, pursuant to State CEQA Guidelines § 15082(c)(1), the OIAA conducted a scoping meeting for the Project to solicit comments on the scope and content of the Draft EIR. The scoping meeting was held on Wednesday, November 10, 2021, at 2:00 P.M. (Pacific Time) at the Ontario International Airport Authority Board Room (1923 E. Avion Street, Room 100, Ontario).

The meeting provided an overview of the EIR process for the proposed Project. Comments were accepted after the meeting and are summarized in **Table 2-4: Summary of Scoping Meeting Comments**, below. The presentation and sign-in sheet are included in **Appendix 1.0**.

TABLE 2-4
SUMMARY OF SCOPING MEETING COMMENTS

Topic Area	Comments
Application of CEQA vs. NEPA	• A question was asked about whether both CEQA and/or NEPA apply to the Project. • A question was asked about how to track progress of NEPA process.
Aviation Forecasts	• A question was asked about how long FAA consultation on aviation forecasts takes. • A question was asked about how to keep up to date with FAA consultation activity.
Noise	• Concern was expressed about aviation activity and forecasts as it relates to noise complaints from local community about hours of operations and procedures regarding aircraft operations. • Questions were asked about actions and activities taken under CEQA and/or NEPA regarding noise. • A comment asked for mitigation measures to minimize aviation noise.
Project Phasing	• A question was asked about why the proposed Project is to be completed in multiple phases.
Cargo Movements	• A question concerned where and how cargo movements take place. • A question concerned parking positions for planes on the edge of the apron.
Administrative Building Replacement	• A question was asked about relocation of the OIAA administrative building, as implementation of the Project will require the current facility to be demolished.

TABLE 2-4
SUMMARY OF SCOPING MEETING COMMENTS

Topic Area	Comments
Additional Development Projects	• A question concerned the redevelopment occurring to the west of the proposed Project's parking structure.

2.2.3 Consultation with Responsible Agencies

In accordance with Public Resources Code § 21153, the OIAA consulted two responsible agencies as part of the EIR scoping process. OIAA met with the City of Ontario on October 27, 2021, and the South Coast AQMD on November 4, 2021. At each meeting, a brief presentation of the proposed Project was provided and issues germane to the responsible agencies' purview were discussed to ensure that this Draft EIR adequately addresses agency concerns and that the analysis conducted is consistent with their recommended approach and methodologies.

The OIAA notified Native American Tribes of the proposed Project. The tribes listed on the Native American Heritage Commission's response to the Notice of Preparation were contacted via email.

2.2.4 Draft EIR

This Draft EIR examines the environmental impacts of the Project and evaluates the changes in the environment that would result from all phases of the proposed Project, including construction and operation. The contents of this Draft EIR complies with CEQA Guidelines, Article 9. Contents of the Environmental Impacts §§ 15120 to 15132. The contents of this Draft EIR are discussed below in Section 2.3. The Draft EIR is being circulated for a public review period of 45 days.

2.2.5 Final EIR

Upon completion of the public review period of the Draft EIR, a Final EIR will be prepared. The Final EIR will include responses to comments submitted on the Draft EIR and any necessary corrections or additions to the Draft EIR. The Final EIR will be made available to agencies and the public prior to OIAA's determination on the Project. Once the Final EIR is complete, the OIAA will consider certification of the Final EIR, including adoption of Findings for any significant impacts identified in the EIR, as well as a mitigation monitoring and reporting program, and file a Notice of Determination, which is the final step in the environmental review process if the project is approved.

2.3 ORGANIZATION OF THE DRAFT EIR

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

1.0: Executive Summary. This section provides a summary description of the Project, a summary of environmental impacts and mitigation measures, and identifies the level of significance after implementation of the mitigation measure(s), characterized as no impact, less than significant, or significant and unavoidable.

2.0: Introduction. This section provides an overview of the purpose and use of the EIR, environmental review processes that has been and will be conducted for the proposed Project, scope, and organization of the Draft EIR, and organization of this document.

3.0: Project Description. This section presents a detailed description of the proposed Project and project location, objectives, and characteristics. This section also lists Project-related discretionary actions.

4.0: Environmental Setting. This section summarizes the context within which the proposed Project would occur.

5.0: Environmental Impact Analysis. This section presents the existing conditions, a summary of the existing statutes, ordinances and regulations that apply to the environmental impact area being discussed; the methodology for assessment and analysis of the Project's direct and indirect environmental impacts on the environment, including potential cumulative impacts that could result from the Project; any applicable Project design features; plans, policies, and programs that could reduce potential impacts; and the feasible mitigation measures that would reduce or eliminate the significant adverse impacts identified.

6.0: Alternatives to the Proposed Project. This section describes and analyzes a reasonable range of alternatives to the Project. The CEQA-mandated No Project Alternative is included along with alternatives that would reduce one or more significant effects of the proposed Project. As required by the CEQA Guidelines, the environmentally superior alternative is identified.

7.0: Effects Found Not to be Significant. This section summarizes the topics that were determined not to be significant during the scoping process.

8.0: Other CEQA Considerations. This section discusses significant unavoidable impacts that would result from the Project and the reasons why the Project is being proposed notwithstanding the significant unavoidable impacts. An analysis of the significant irreversible changes in the

environment and potential secondary effects that would result from the Project is also presented here. This section also analyzes potential growth-inducing impacts of the Project and potential secondary effects caused by the implementation of the mitigation measures for the Project.

9.0: References. This section lists the principal documents, reports, maps, and other information sources referenced in this Draft EIR.

10.0: List of Preparers. This section lists authors of the Draft EIR and OIAA staff that assisted with the preparation and review of this document. This section also lists other people that were contacted for information that is included in this Draft EIR.

Appendices to this Draft EIR include the NOP, agency responses, as well as technical reports and data used and referenced in the Draft EIR.

2.4 INCORPORATION BY REFERENCE

CEQA Guidelines § 15150 allows for the incorporation "by reference all or portions of another document…[and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this Draft EIR. Where this Draft EIR incorporates a document by reference, the document is identified in the body of the Draft EIR, citing the appropriate section(s) of the incorporated document, and describing the relationship between the incorporated part of the referenced document and this Draft EIR.

The proposed Project is an aeronautical development and use within the airfield of the Airport and within the jurisdiction of the OIAA. The Project is also within the geographical limits of the City of Ontario and is addressed by the Ontario Plan Final EIR (State Clearinghouse Number 2008101140), certified by the Ontario City Council on January 27, 2010. The Ontario Plan Final EIR contains information relevant to the Project. Accordingly, the Ontario Plan Final EIR is herein incorporated by reference in accordance with CEQA Guidelines § 15150. The documents are available at https://countywideplan.com and the County of San Bernardino, Planning Department, 385 North Arrowhead Avenue, First Floor, San Bernardino, CA 92415.

3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

Consistent with CEQA Guidelines Section 15124, this section of the EIR provides the following information for the proposed Ontario Airport South Airport Cargo Center Project (Project):

- Project location and boundaries,
- Statement of objectives sought by the proposed Project,
- General description of the Project's technical, economic, and environmental characteristics, and
- Intended uses of this EIR.

"Project," as defined by CEQA Guidelines Section 15378(a), means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and includes various government-related activities, such as the issuance of a lease, permit, license, certificate, or other entitlement.

3.2 PROJECT LOCATION

The proposed Project site consists of approximately 97 acres located at Ontario International Airport (Airport) in the City of Ontario, San Bernardino County, as shown in **Figure 3.1: Regional Location**. Regional access to the Airport and the proposed Project site is via Interstate 10 (I-10), one-mile to the north; State Route 60 (SR-60), approximately 1.25 mile to the south; and Interstate 15 (I-15) approximately 2.75 miles to the east.

The proposed Project site includes portions of Assessor Parcel Numbers (APN) 11326106, 11326107, 11326108, 11327101, and 11327102, located in the southern half of the Airport, immediately west of the Cucamonga Channel and north of Mission Boulevard, as shown in **Figure 3.2: Project Site Location**. Most of the proposed Project site is located north of East Avion Street with the remainder located between East Avion Street and Mission Boulevard west of South Hellman Avenue.

3.3 PROJECT OBJECTIVES

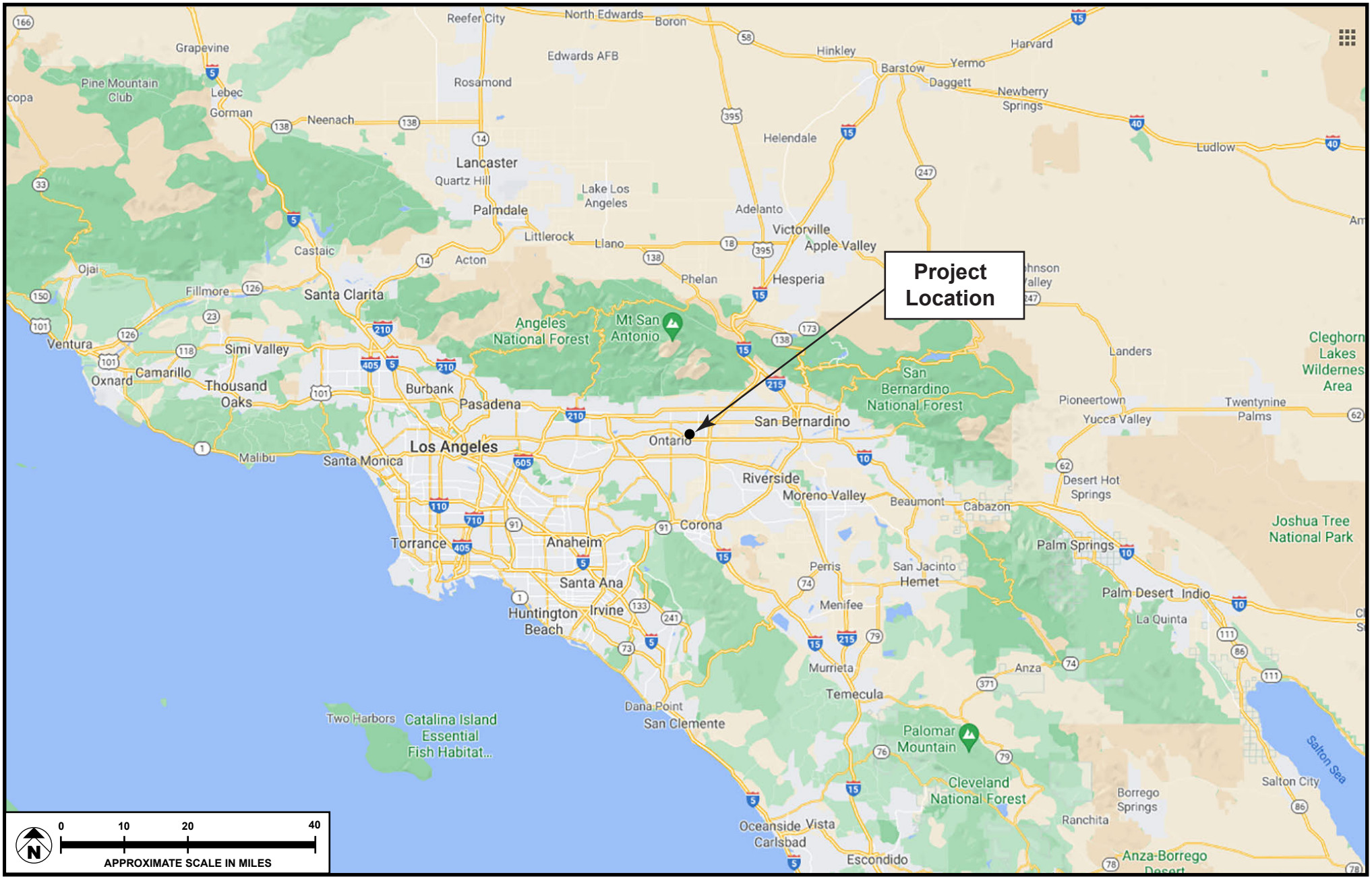
The purpose of the proposed Project is to develop and operate an air cargo facility at the Airport to meet increased regional air cargo volumes and Project proponent facility requirements. The objectives of the Ontario International Airport Authority (OIAA) for the proposed Project include:

A. Allow the Project proponent to accommodate current and projected air cargo volumes.
B. Integrate the Project proponent's airside, landside, and sorting facilities in a location with access to major surface transportation corridors to improve operational efficiency.
C. Redevelop underutilized Airport property.
D. Maximize revenue generation from Airport property.
E. Provide employment opportunities for residents of the City of Ontario and the Inland Empire.

3.4 PROJECT CHARACTERISTICS

The proposed Project is an aeronautical development and use that is within the Airport boundaries and is consistent with the Ontario International Airport Layout Plan. The proposed Project would replace existing, underutilized airport-related buildings and site improvements with an air cargo center. The Project would include demolition of the existing buildings and improvements on the site, and the development of a new air cargo center in two phases, as described further below.

The proposed air cargo center, illustrated in **Figure 3.3: Site Plan**, includes a cargo sorting building (Air Cargo Sort Building), truckyard, parking facilities, two aviation support buildings (ground service equipment [GSE] and aircraft line maintenance buildings), and aircraft apron improvements. The Air Cargo Sort Building, proposed north of East Avion Street, would contain a sorting facility and office spaces. The aircraft parking apron would surround the building to the west, north, and east. A ground-level visitor parking lot and truckyard are proposed on the south side of the cargo building, with access from East Avion Street. A parking structure for employees is proposed south of East Avion Street, with a pedestrian bridge connecting the parking structure to the office building. A new substation proposed by SCE for the proposed Project would be located to the west of the parking structure. Fire lanes would be located around the substation and parking structure. The proposed Project would be implemented in two phases. Phase 1 would take place on the easternmost 62 acres of the Project site, and Phase 2 would occur on the remaining western 35 acres.



SOURCE: Google Earth - 2022

FIGURE **3.1**

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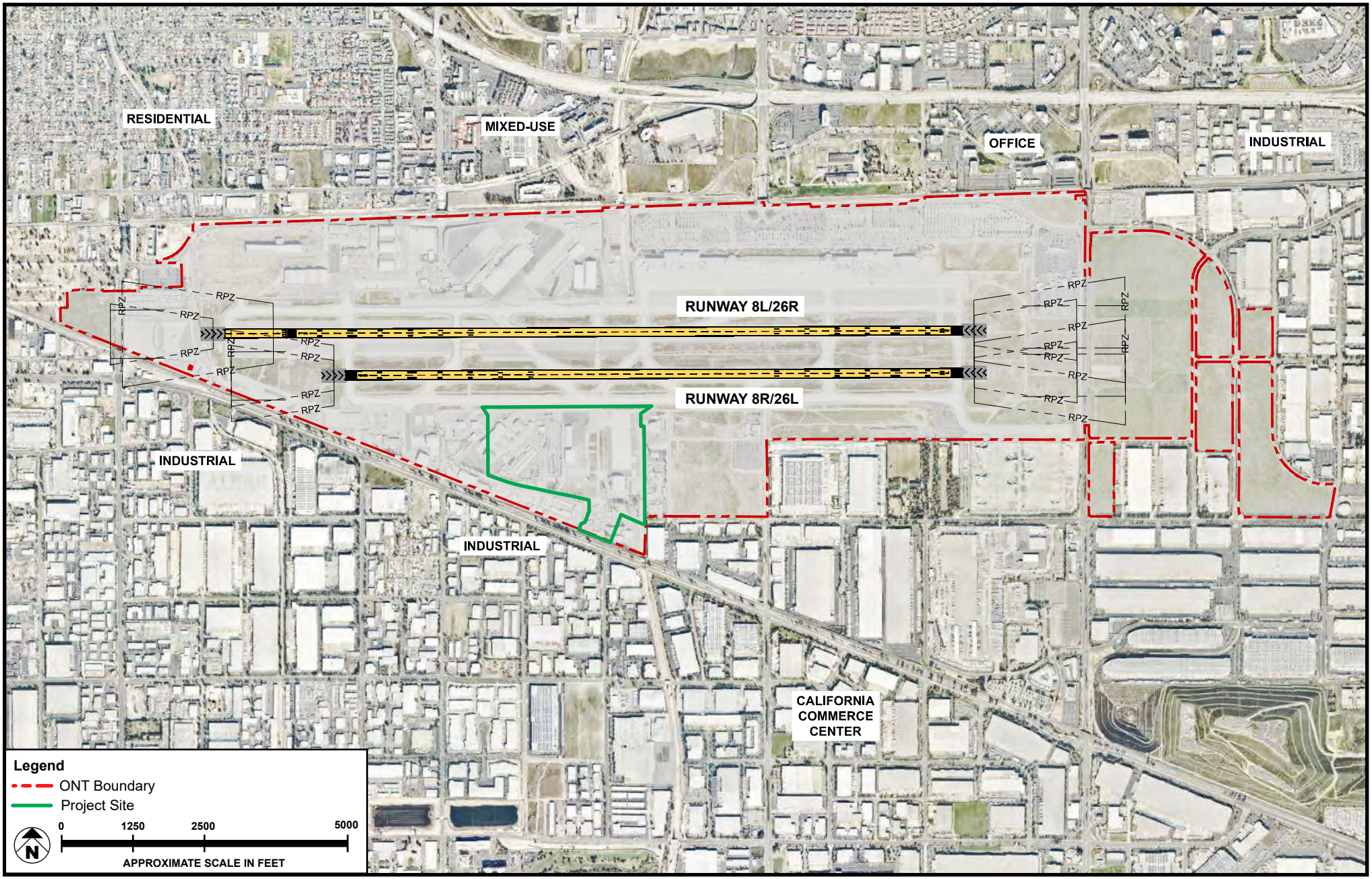
Regional Location

332-001-21



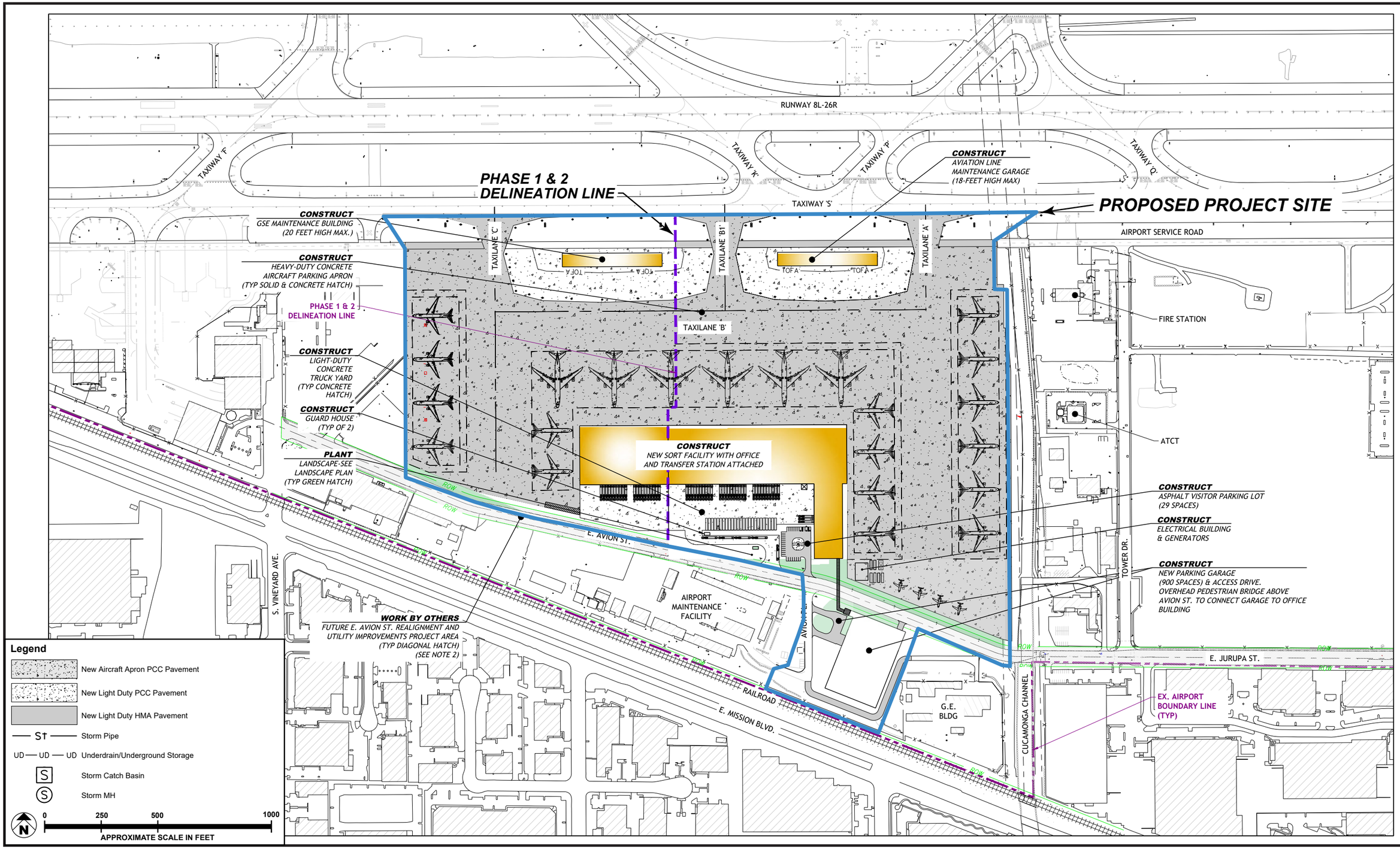
SOURCE: Google Earth - 2022

FIGURE **3.2**

Meridian Consultants

Project Site Location

332-001-21



SOURCE: CHA October 2022

FIGURE **3.3**

Meridian Consultants

Site Plan

332-001-21

Table 3.1: Summary of Main Project Components (Acres), summarizes the components of the proposed Project for each of the two phases. Phase 1 construction would include the demolition of existing structures and site improvements in the Phase 1 area, site preparation, and construction of all proposed improvements on the eastern 62 acres of the Project site, including the initial phase of the Air Cargo Sort Building, aircraft apron improvements, and employee parking structure, as shown in **Figure 3.3**. Phase 2 would occur on the western 35 acres of the Project site and include the demolition of structures and site improvements in the Phase 2 area, site preparation, and construction of the remaining improvements, including the expansion of the Air Cargo Sort Building and aircraft apron improvements.

TABLE 3.1
SUMMARY OF MAIN PROJECT COMPONENTS (ACRES)

	Phase 1	Phase 2	Total
Buildings	8	3	11
Concrete Paved Areas	40	25	65
Asphalt Paved Areas	6	5	11
Disturbed/Undeveloped Areas	8	2	10
Total	**62**	**35**	**97**

Figure 3.4: Landscape Plan, shows the landscaping proposed along the northern and southern sides of East Avion Street. Landscaping would include Desert Museum Palo Verde trees with complementary shrub and groundcover species. Some existing Canary Island Pine trees would be retained and incorporated into the landscape areas.

3.4.1 Air Cargo Sort Building

The 857,762-square-foot Air Cargo Sort Building would include a sorting facility and office space. The building would be approximately 80 feet tall and include three levels: ground floor, second floor, and mezzanine. As shown in **Figure 3.3**, the building would be L-shaped. Cargo sorting activities would occur in the longer east-west portion of the building, with most of the office space located in the eastern wing of the building**. Table 3.2: Air Cargo Sorting Building (square feet)**, summarizes the use and area of each floor of the building by phase.

As shown in **Figure 3.5: Air Cargo Sort Building Ground Floor**, the ground floor will include an entrance foyer, 19,000 square feet of office space, and 349,360 square feet of area for cargo sorting. Service gates for cargo access to the apron would be provided on the north side of the

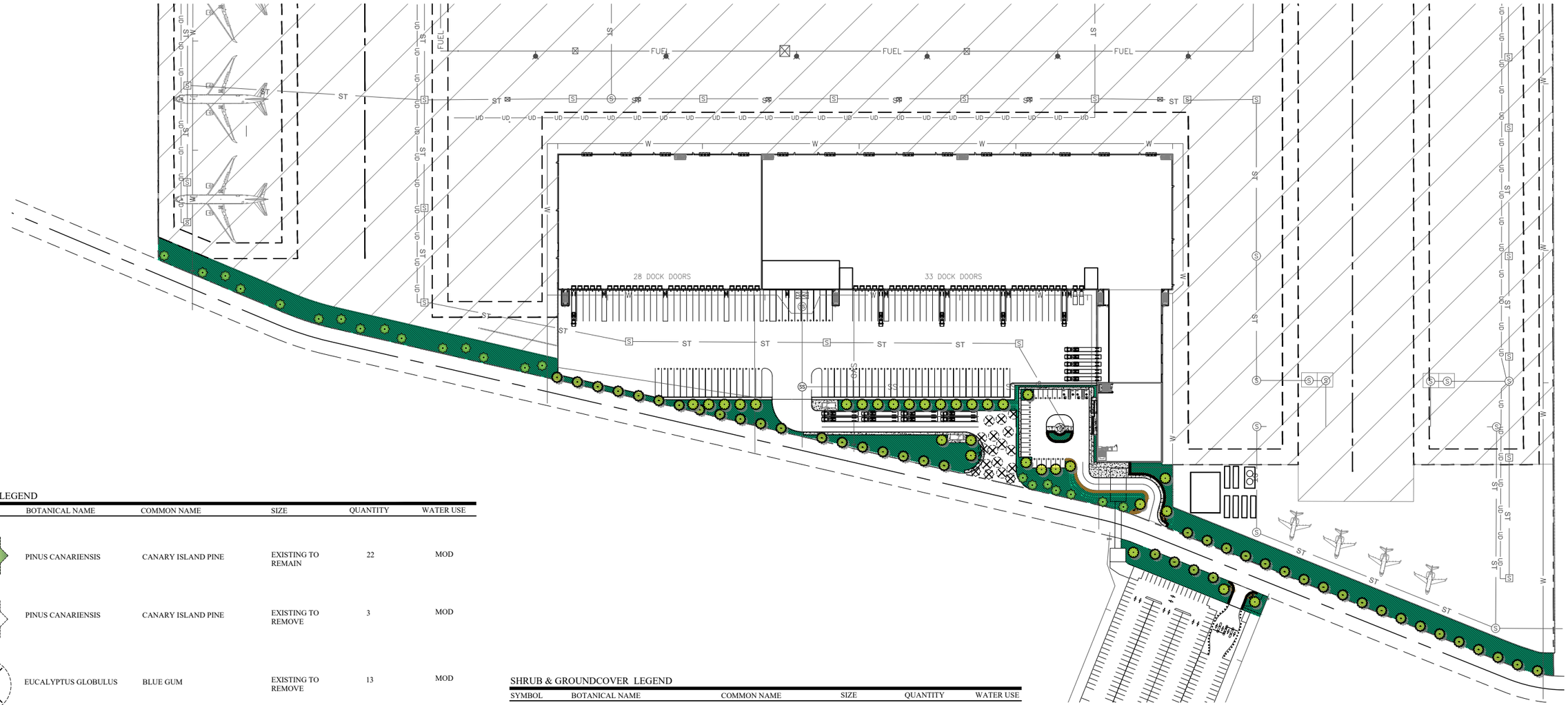
ground floor. Landside cargo transfer operations would occur be on the south side of the ground floor.

Second Floor. The second floor of the Air Cargo Sort Building would include 41,250 square feet of office space in the eastern building wing and 347,270 square feet of cargo sorting area, as shown in **Figure 3.6: Air Cargo Sort Building Second Floor**. Pedestrian access to the Air Cargo Sort Building would occur on the second floor via a pedestrian bridge between the office wing and employee parking structure.

Mezzanine. The mezzanine on the third level would include 41,250 square feet of office space in the eastern building wing and 161,132 square feet of cargo sorting space as shown in **Figure 3.7: Air Cargo Sort Building Mezzanine**.

TABLE 3.2
AIR CARGO SORTING BUILDING
(SQUARE FEET)

	Phase 1	Phase 2	Total
Ground Floor			349,360
Cargo Sorting	228,580	101,780	
Office	19,000		
Second Floor			347,270
Cargo Sorting	204,620	101,400	
Office	41,250		
Mezzanine			161,132
Cargo Sorting	76,458	43,424	
Office	41,250		
Total			
Cargo Sorting	509,658	246,604	756,262
Office	101,500		101,500
Grand Total	**611,158**	**246,604**	**857,762**



PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	WATER USE
	PINUS CANARIENSIS	CANARY ISLAND PINE	EXISTING TO REMAIN	22	MOD
	PINUS CANARIENSIS	CANARY ISLAND PINE	EXISTING TO REMOVE	3	MOD
	EUCALYPTUS GLOBULUS	BLUE GUM	EXISTING TO REMOVE	13	MOD
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	EXISTING TO REMOVE	2	MOD
	CERCIDIUM 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	24" BOX	42	LOW
	CERCIDIUM 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	15 GAL	30	LOW

SHRUB & GROUNDCOVER LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	WATER USE
	AGAVE AMERICANA	CENTURY PLANT	5 GAL	111	LOW
	AGAVE 'BLUE FLAME'	BLUE FLAME AGAVE	5 GAL	544	LOW
	CALLISTEMON 'LITTLE JOHN'	DWARF BOTTLE BRUSH	5 GAL	1191	LOW
	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL	178	LOW
	WESTRINGIA 'BLUE GEM'	BLUE GEM COAST ROSEMARY	5 GAL	188	LOW
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET	HUNTINGTON CARPET ROSEMARY	1 GAL	@ 24" OC	LOW
	ACACIA REDOLENS 'LOW BOY'	LOW BOY ACACIA	1 GAL	@72" OC	LOW
	BULBINE FRUTESCENS	BULBINE	1 GAL	@ 18" OC	LOW

SOURCE: HPA Architecture - June 2022

FIGURE **3.4**

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Landscape Concept Plan

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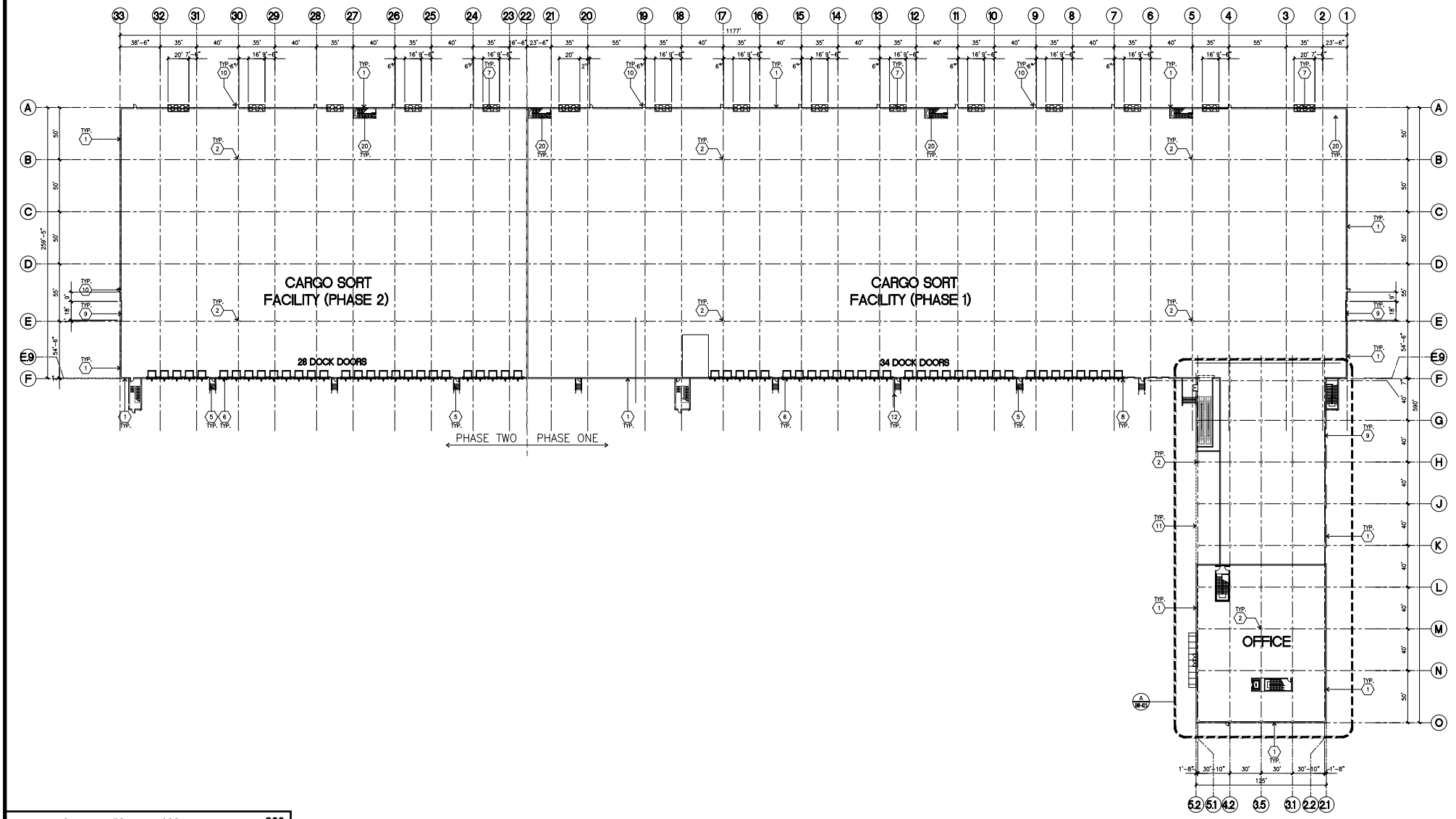

SOURCE: HPA Architecture - October 2022

FIGURE **3.5**

Meridian Consultants

Cargo Sorting Building Ground Floor

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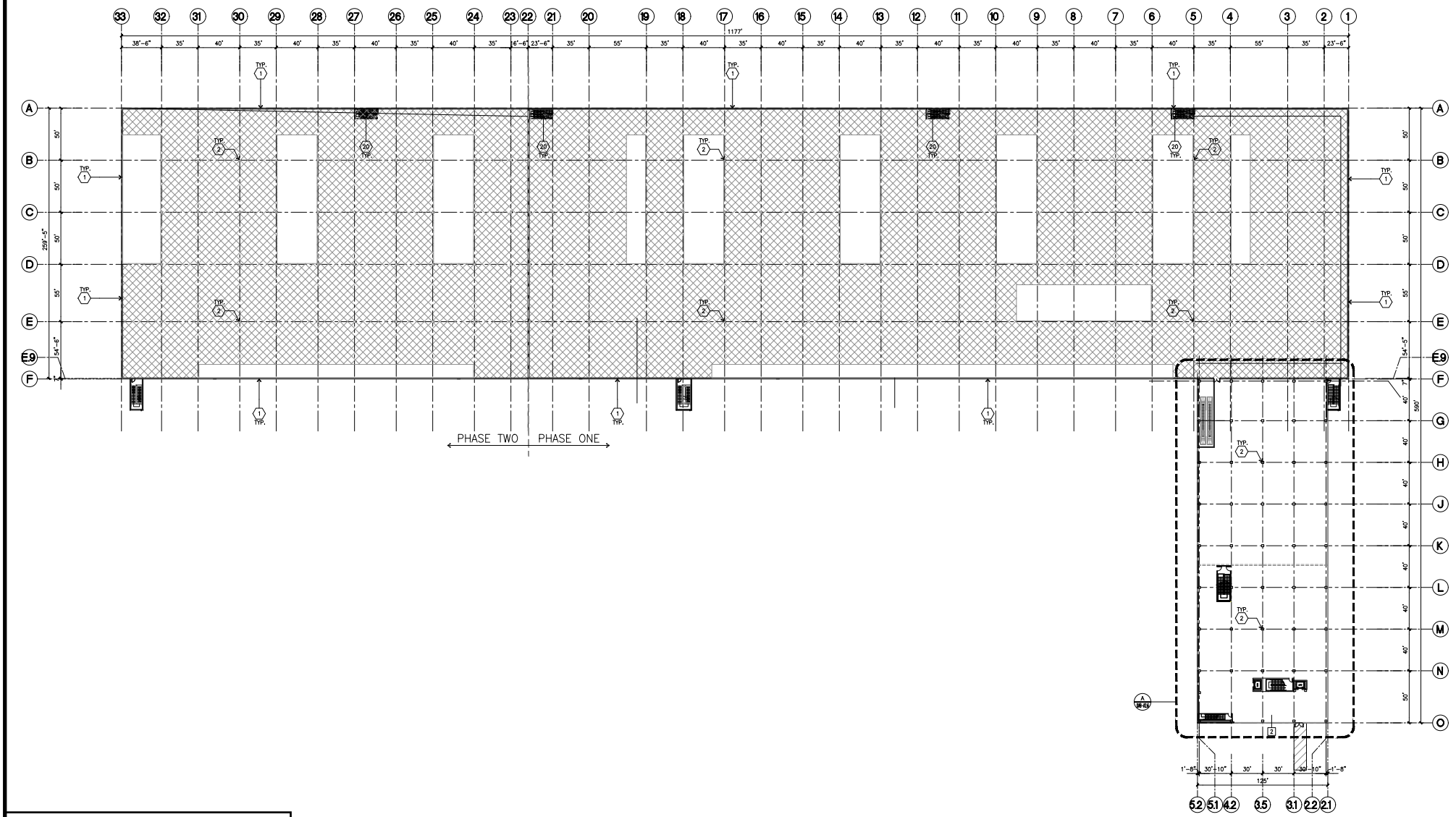


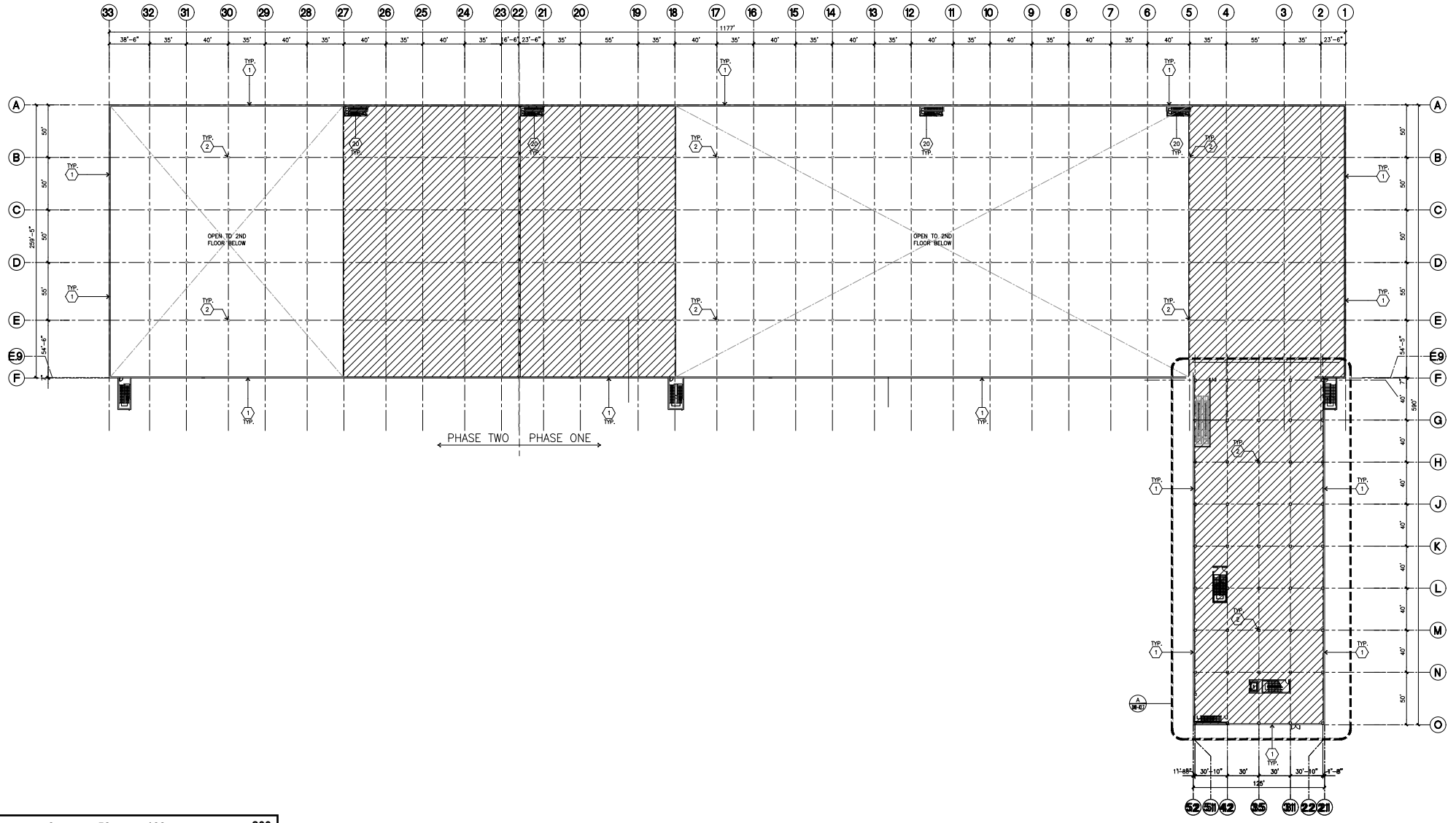
SOURCE: HPA Architecture - October 2022

FIGURE **3.6**

Meridian Consultants

Cargo Sorting Building Second Floor

332-001-21



SOURCE: HPA Architecture - October 2022

FIGURE **3.7**

Meridian Consultants

Cargo Sorting Building Mezzanine

332-001-21

The roof plan is shown in **Figure 3.8: Roof Plan**. Elevations for the Air Cargo Sort Building are shown in **Figures 3.9** through **3.11**. The Air Cargo Sort Building would include the following uses:

- **Administrative Offices**. Three stories of office space would be provided for operations and management personnel and supporting operations. Office space would include support rooms for information technology and data functions. Washrooms, breakrooms, and a small café would be provided.
- **Material/Cargo Sorting**. The cargo sorting operations would occur in a 755,500 square foot area (508,675 square feet in Phase 1 and 246,825 square feet in Phase 2). The ground level would include 67 trailer truck docks (39 in Phase 1 and 28 in Phase 2) facing the truckyard, on the southern side of the building, and 21 overhead doors facing the apron for access in and out of the building. The cargo sorting operations would include the use of material handling equipment (MHE) to sort cargo. The Air Cargo Sort Building would contain cargo holding and sorting areas, including a refrigerated room for the processing and storage of temperature sensitive cargo, office space, breakrooms, lounges, and restroom facilities for employees, maintenance areas, and areas for the storage and charging of electrical forklifts and other automated equipment used for sorting.

Truckyard

A 210,000-square-foot truckyard would be located between the Air Cargo Sort Building and East Avion Street. The truckyard is designed for the safe maneuvering of the staging, parking, loading, and unloading of vans and trucks. The trucks would support the ground-to-air and air-to-ground cargo operations. The truck parking area would include an electrical distribution system designed to accommodate the future installation of electrical charging stations.

A 40-foot-wide driveway with four lanes (two inbound and two out) would provide ingress and egress access from East Avion Street. Two security stations, one for inbound vehicles and another for outbound, would be provided for security screening of vehicles entering and leaving the facility. Four trucks could be staged along each ingress truck drive lane, prior to the inbound guardhouse, before being cleared to enter the truckyard. Three trucks could be staged along each egress truck drive lane, prior to the outbound guardhouse. The truckyard would be illuminated using fixtures mounted on the building walls of the Air Cargo Sort Building and pole mounted light fixtures on the south side of the truckyard parking lot.

Visitor and Employee Parking

The proposed Project would include 961 automobile parking stalls, including 932 employee stalls in the parking structure, south of East Avion Street and 29 at-grade, visitor parking stalls next to the main entrance to the Air Cargo Sort Building.

Visitor Parking

An at-grade visitor parking lot would be located east of the truckyard, next to the office wing. The 15,300-square-foot surface lot would provide 29 parking stalls, including 4 accessible spaces and 6 with access to electric charging points, and 2 five-bike capacity racks. A 24-foot-wide driveway would provide ingress and egress from East Avion Street. Sidewalks would be provided on both sides of the driveway. The visitor parking lot would be illuminated using fixtures mounted on the building walls of the Air Cargo Sort Building and supplemental pole mounted light fixtures on the south side of the parking lot.

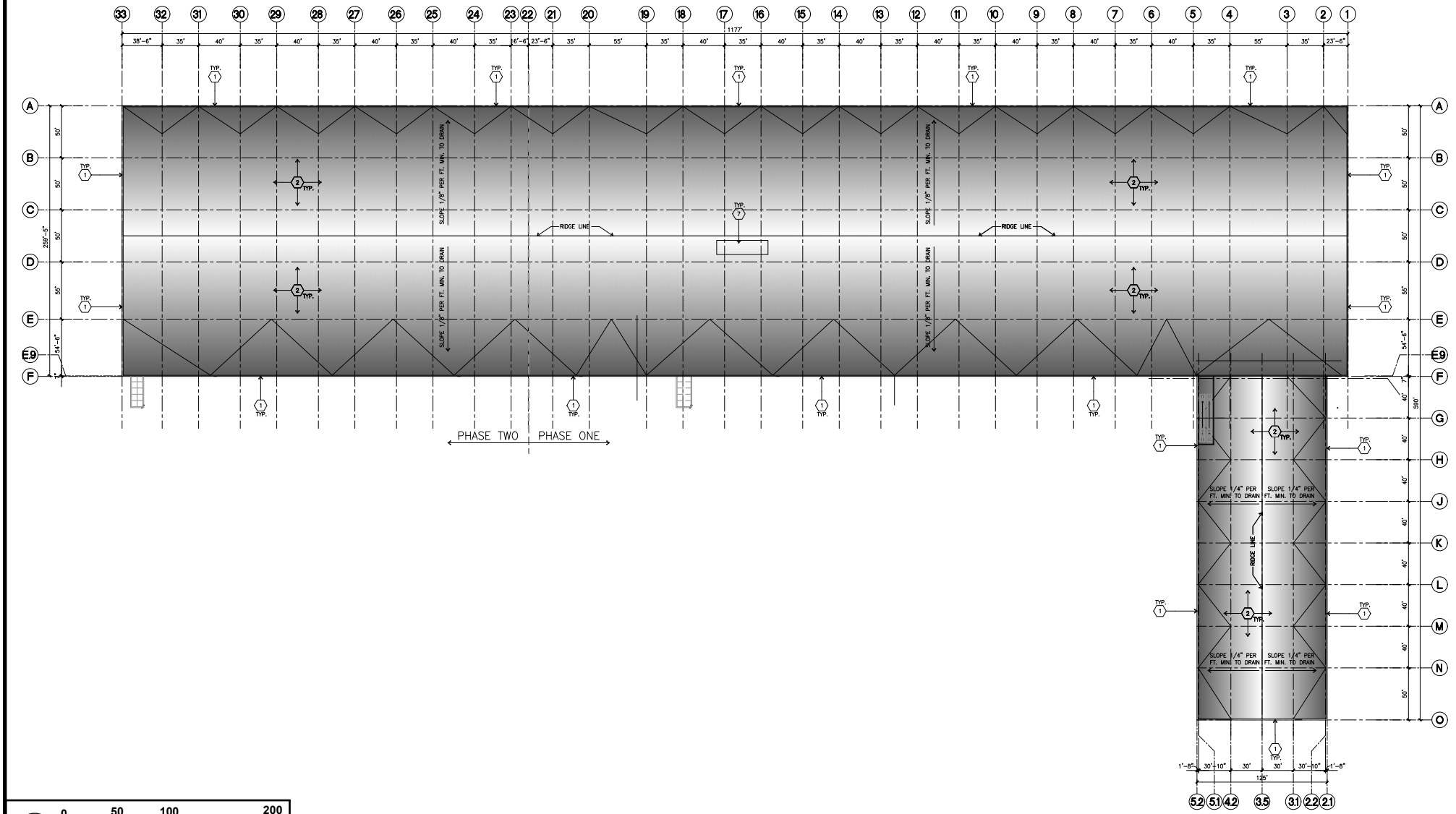
Employee Parking

A four-level parking structure for employees is proposed on 3 acres located south of East Avion Street, across from the office wing of the Air Cargo Sort Building. The 347,600-square-foot parking structure would be rectangular in shape and would accommodate 961 automobile parking spaces—including 4 van and 16 automobile accessible spaces and 300 stalls with access to electric charging stations—and 40 bicycle stalls. One 24-foot-wide driveway would provide ingress and egress access to the parking structure, via East Avion Street. As shown in **Figure 3.2**, a pedestrian bridge over East Avion Street is proposed to connect the parking structure to the eastern office wing of the Air Cargo Sort Building. Elevations for the parking structure are shown in **Figure 3.12: Parking Structure Elevations**.

Aircraft Apron Improvements

Approximately 60 acres of aircraft apron area (2, 514,000 square feet), including 37 acres in Phase 1 and 23 acres in Phase 2, would be constructed for aircraft parking and circulation. Twenty-six aircraft parking positions would be provided, including four positions for feeder aircraft, powered by electric motors. Seventeen parking positions would be provided in Phase 1 and 9 would be provided in Phase 2. The apron would be secured to meet the requirements of the Transportation Security Administration (TSA), Customs and Border Protection (CBP), and OIAA. The apron improvements include the following components:

- Aircraft Parking Positions – The aircraft parking apron and taxiway connectors would support international and domestic cargo aircraft. The aircraft parking area would connect to Taxiway



SOURCE: HPA Architecture - October 2022

FIGURE **3.8**

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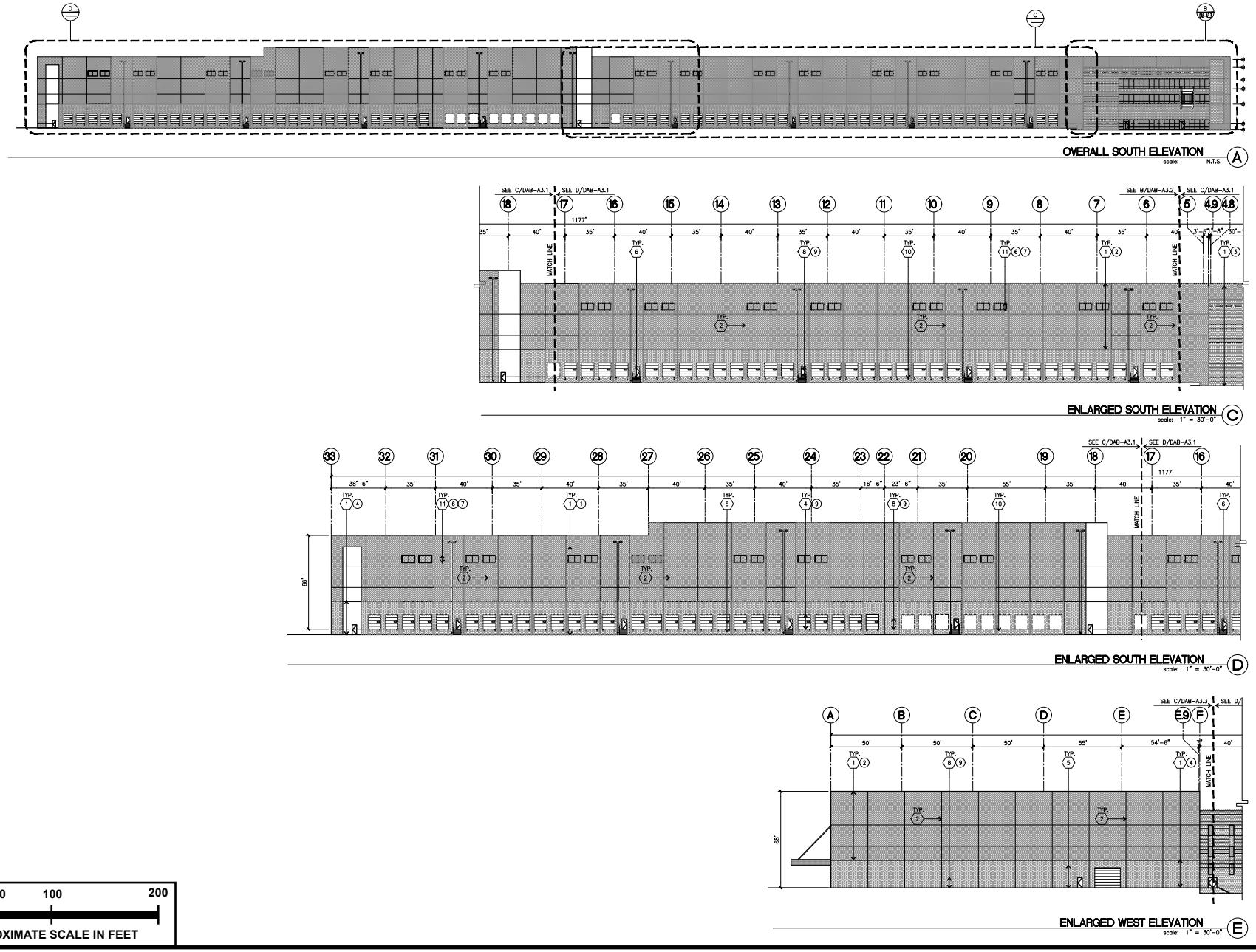
Roof Plan

332-001-21



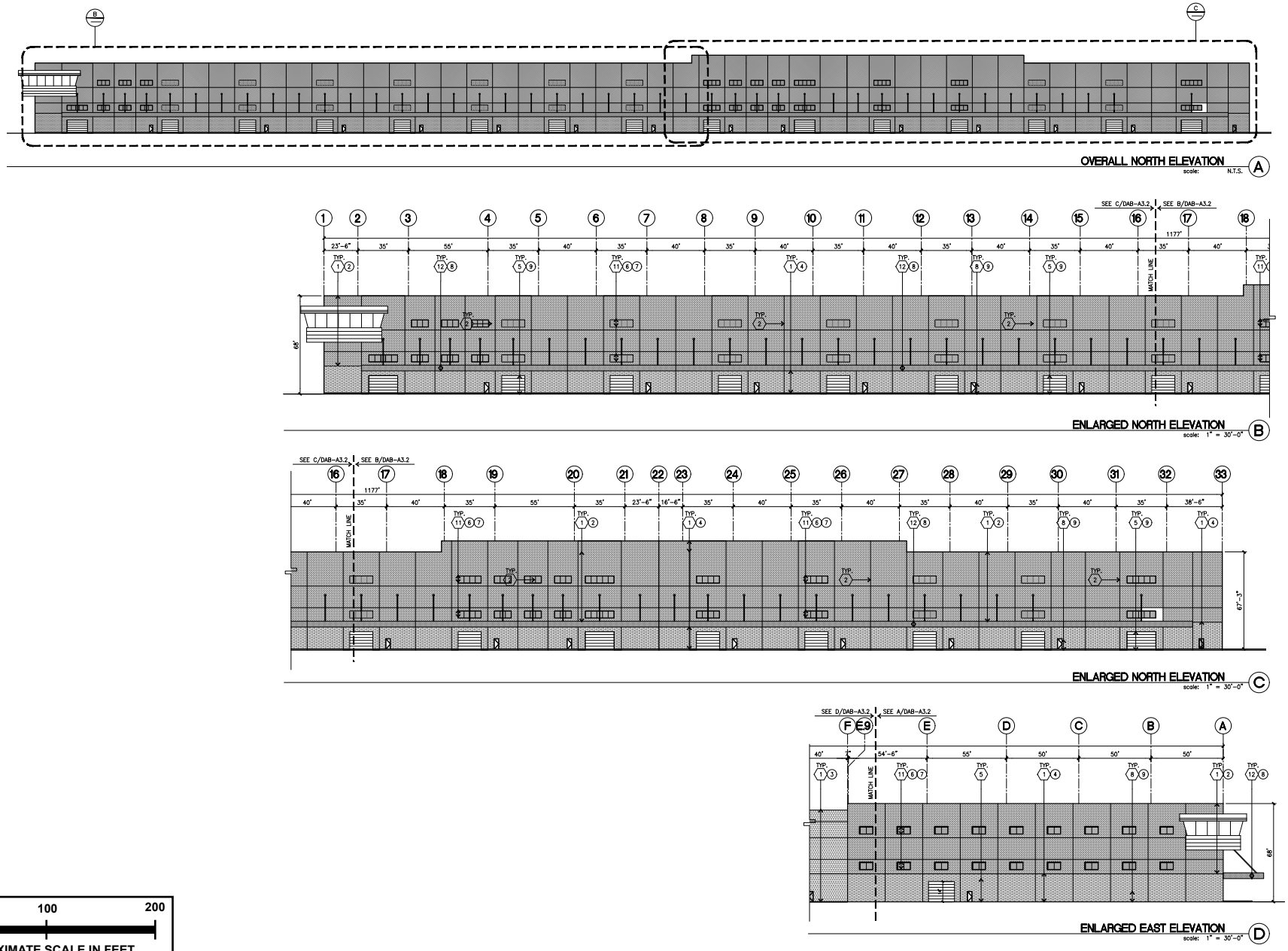
SOURCE: HPA Architecture - October 2022

FIGURE **3.9**

Meridian Consultants

Elevations – South and West

332-001-21



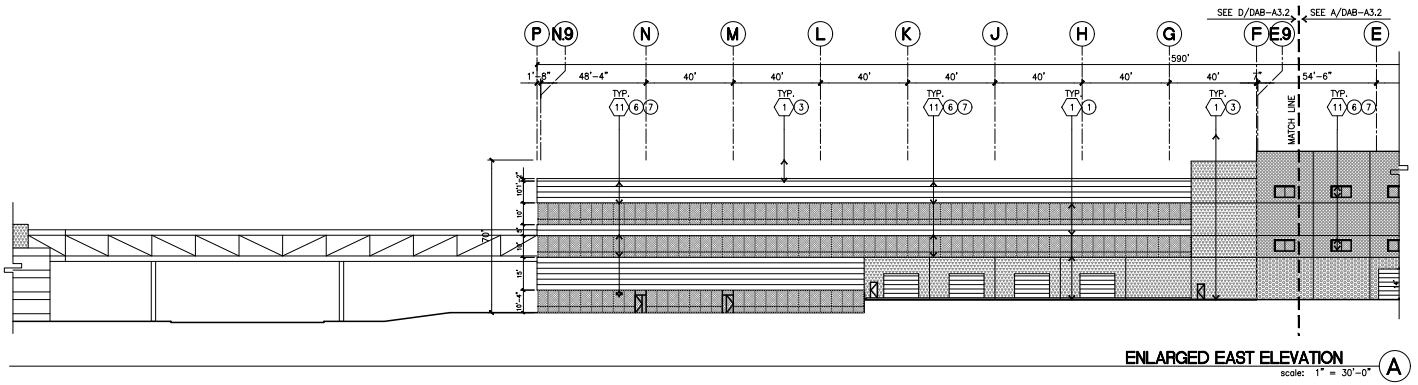
SOURCE: HPA Architecture - October 2022

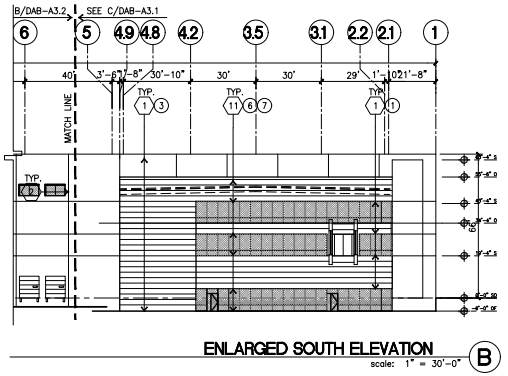
FIGURE **3.10**

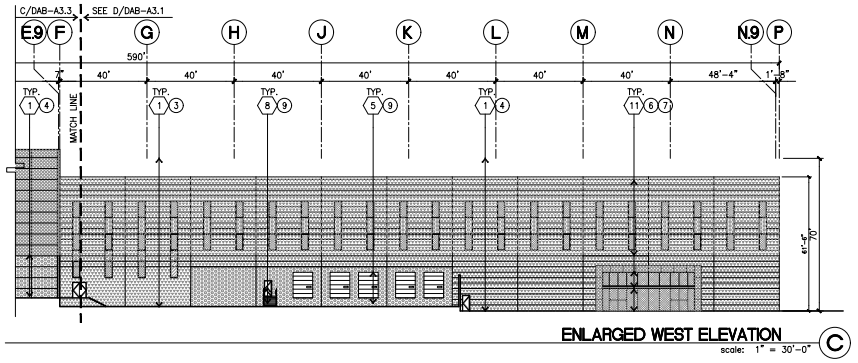
Meridian Consultants

Elevations – North and East

332-001-21





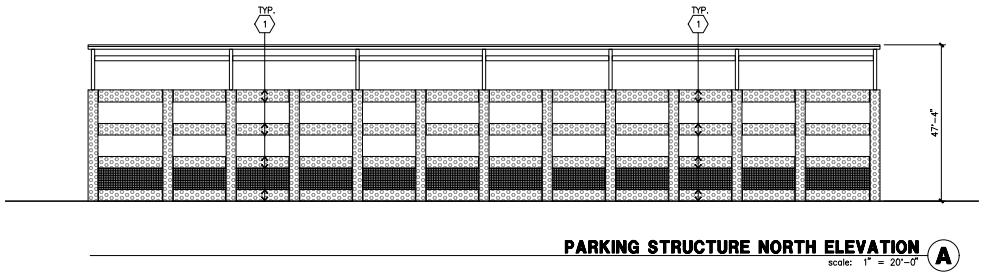


SOURCE: HPA, October 2022

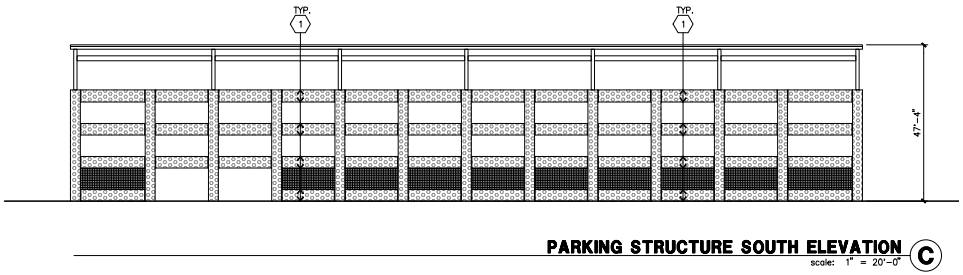
FIGURE **3.11**

Meridian Consultants

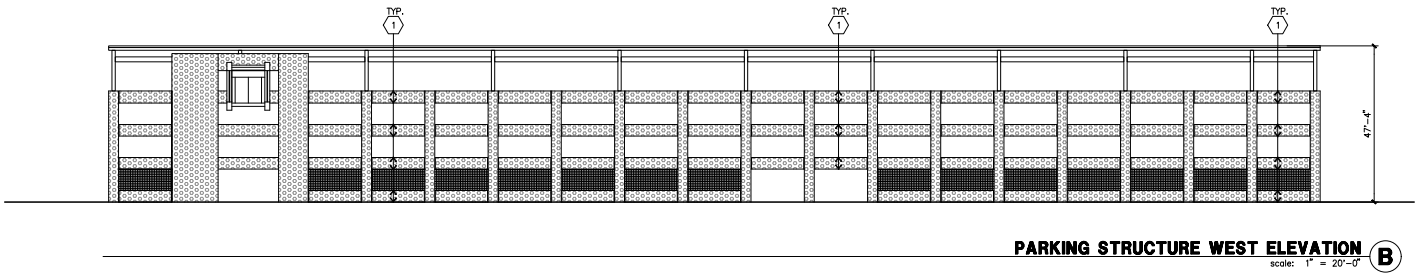
Cargo Sorting Building Elevations



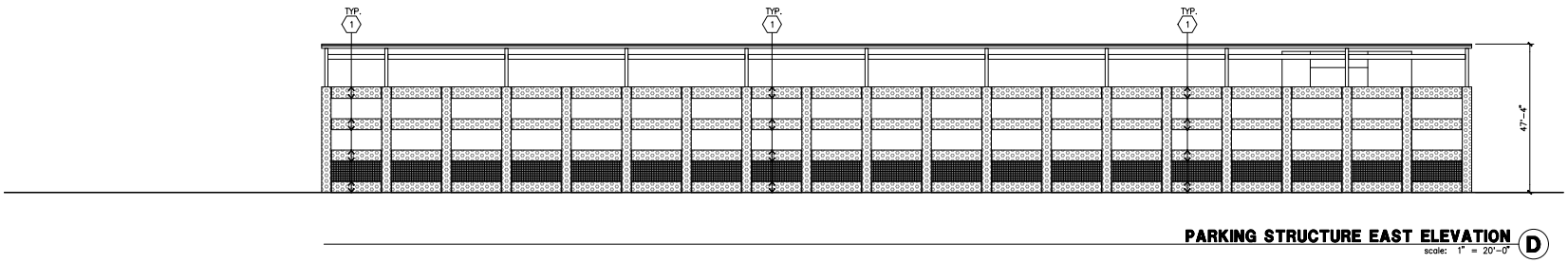
PARKING STRUCTURE NORTH ELEVATION (A)
scale: 1" = 20'-0"



PARKING STRUCTURE SOUTH ELEVATION (C)
scale: 1" = 20'-0"



PARKING STRUCTURE WEST ELEVATION (B)
scale: 1" = 20'-0"



PARKING STRUCTURE EAST ELEVATION (D)
scale: 1" = 20'-0"

SOURCE: CHA - October 2022

FIGURE **3.12**

Meridian Consultants

Parking Structure Elevations

332-001-21

"S" and be constructed to FAA standards and guidelines. Each aircraft parking position would include fixed point-of-use power supply to the aircraft and areas for unloading and loading the aircraft. The apron would include a stormwater collection system with oil/water separators. Aircraft line maintenance activities would also occur in these areas.

- Aircraft In-Ground Fuel System – The aircraft apron would include underground infrastructure and piping for fueling aircraft with fuel hydrants at the aircraft parking positions, north of the Air Cargo Sort Building.

- Ground Service Equipment (GSE) – The aircraft would be serviced by GSE, all of which would be diesel powered during Phase 1 and electric powered by Phase 2. Parking areas, including areas for maintenance and GSE charging/fueling would be provided adjacent to the aircraft parking apron.

- Apron Lighting – The aircraft parking apron would include lighting to support nighttime loading and unloading of aircraft and other aircraft servicing functions.

- Universal Load Device (ULD) Handling and Staging – A multilevel racking system for staging of structured ULDs (which are the pallets and containers to transport large freight in and out of aircraft) would be located adjacent to the aircraft apron.

Taxiway Connectors and Taxilanes

Aircraft would access the aircraft apron via three new taxiway connectors that would have access to/from the Airport's Taxiway 'S,' which is along the northern perimeter of the Project site. Taxiway 'S' is the main parallel taxiway at the Airport, which would provide the Project's aircraft with access to all areas of the airfield, including all runways. The design of the apron and taxilanes would comply with FAA design standards to accommodate B767 Series/AIRBUS A-310 aircraft and B777 Series/B747/A330 Family aircraft. As shown in **Figures 3.13a-b: Aircraft Apron Plan,** aircraft on the apron would have access to four internal taxilanes:

- Taxilane 'A' is oriented north-south on the east side of the Air Cargo Sort Building, connecting Taxiway 'S' and Taxilane 'B.'
- Taxilane 'B' is oriented east-west on the north of the Air Cargo Sort Building.
- Taxilane 'B1' is a north-south taxilane connecting Taxiway 'S' and Taxilane 'B.'
- Taxilane 'C' is a north-south taxilane, west of the Air Cargo Sort Building, connecting Taxiway 'S' and Taxilane 'B.'

Aircraft Support Buildings

Ground Support Equipment (GSE) Maintenance and Aviation Line Maintenance Buildings are proposed in the infield area between the proposed Project aircraft taxilanes and Taxiway 'S.' Both buildings would be located outside the defined "object free area" for Taxiway 'S.' Each building would be approximately 26,000 square feet. The GSE Maintenance Building would have a maximum height of 20 feet and the Aviation Line Maintenance Building would have a maximum height of 18 feet. The Aviation Line Maintenance Building would be constructed in Phase 1 and the GSE Maintenance Building would be constructed in Phase 2.

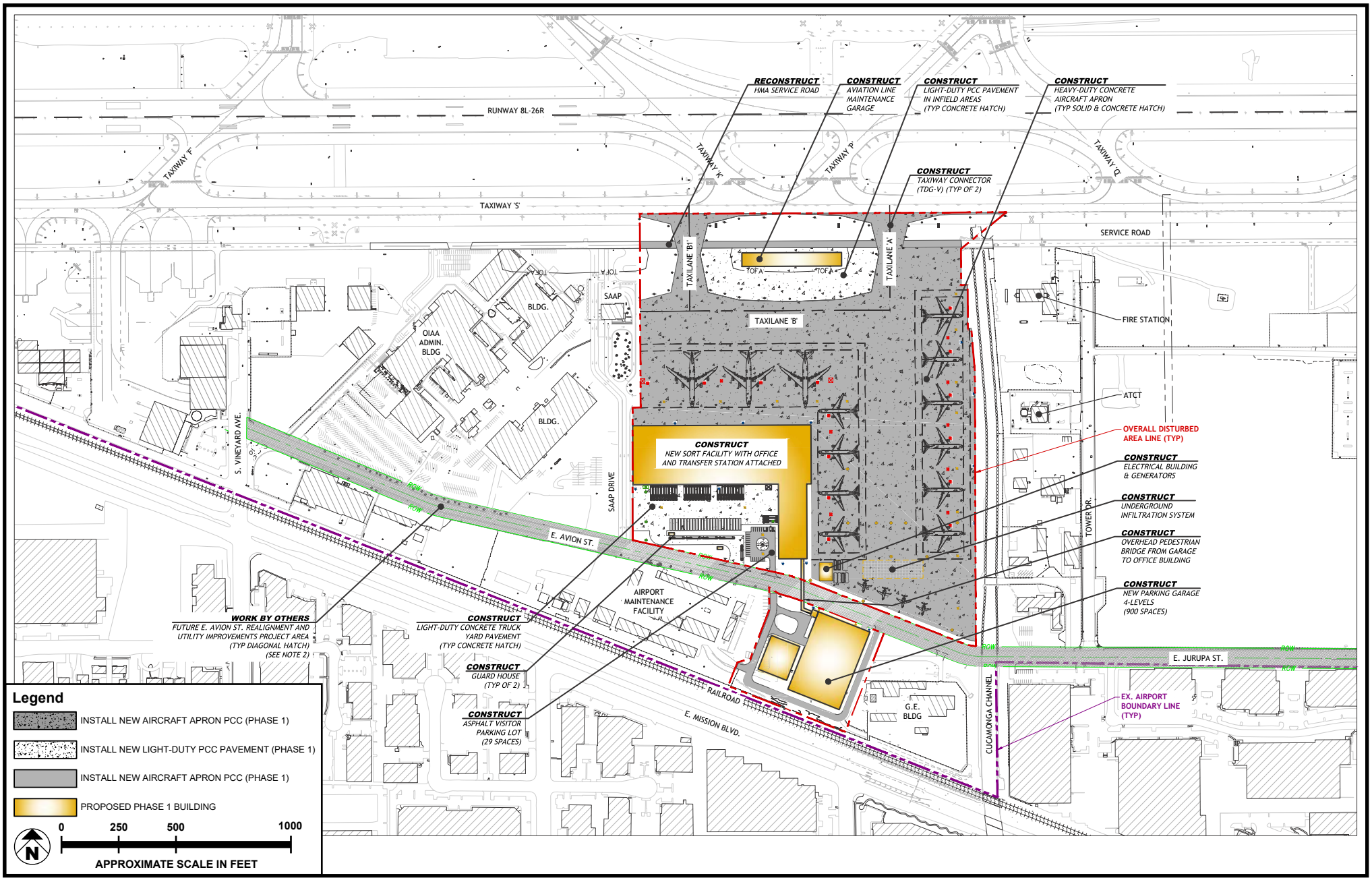
The Aviation Line Maintenance Building, located between Taxilane 'A' and Taxilane 'B1,' would provide storage of aircraft line maintenance parts and equipment including, but not limited to, aircraft wheels, tires, brakes, lights, engine oil, and hydraulic fluids. Aircraft maintenance activities would occur on the apron, where the aircraft would be parked.

The GSE Maintenance Building, located between Taxilane 'C' and Taxilane 'B1,' would include office areas for airline support personnel and shop maintenance staff, and restroom facilities. The building would store maintenance equipment and GSE parts such as batteries, and associated waste systems and disposal facilities for each.

Aircraft Fuel System

Six flush-mounted fuel hydrants would be installed at all aircraft parking positions except those serving the feeder aircraft per OIAA requirements. As shown in **Figure 3.14: Aircraft Fuel System Plan**, the fuel hydrants would be connected to system of underground fuel distribution pipelines ranging in diameter from 6 inches to 14 inches. Two emergency fuel shutoff valve pits would be installed, one for each phase of the Project.

There is currently no aviation fuel line serving Ontario International Airport. Fuel is currently provided by fuel trucks. Under a separate, independent project, OIAA is considering plans for a possible new fuel storage facility on the south side of the Airport near the Project site, adding a new hydrant fuel distribution system and supporting fuel infrastructure to provide hydrant fueling capabilities. The OIAA is considering this separate project to modernize the Airport and provide more efficient access to fuel at the Airport for all users. This separate possible project is currently in the planning stages and will later undergo environmental review. As part of the overall upgrade, the Project site would have access to the fuel supply line along with other operations on the south side of the Airport. The planned fuel line would connect to the Project site at the northeast corner. Until the new fuel system is built, the proponent would hire a jet fueling company that would pump jet fuel from existing storage tanks on northwest side of the Airport into trucks and drive to the proposed Project apron. Aircraft fuel would be delivered to the



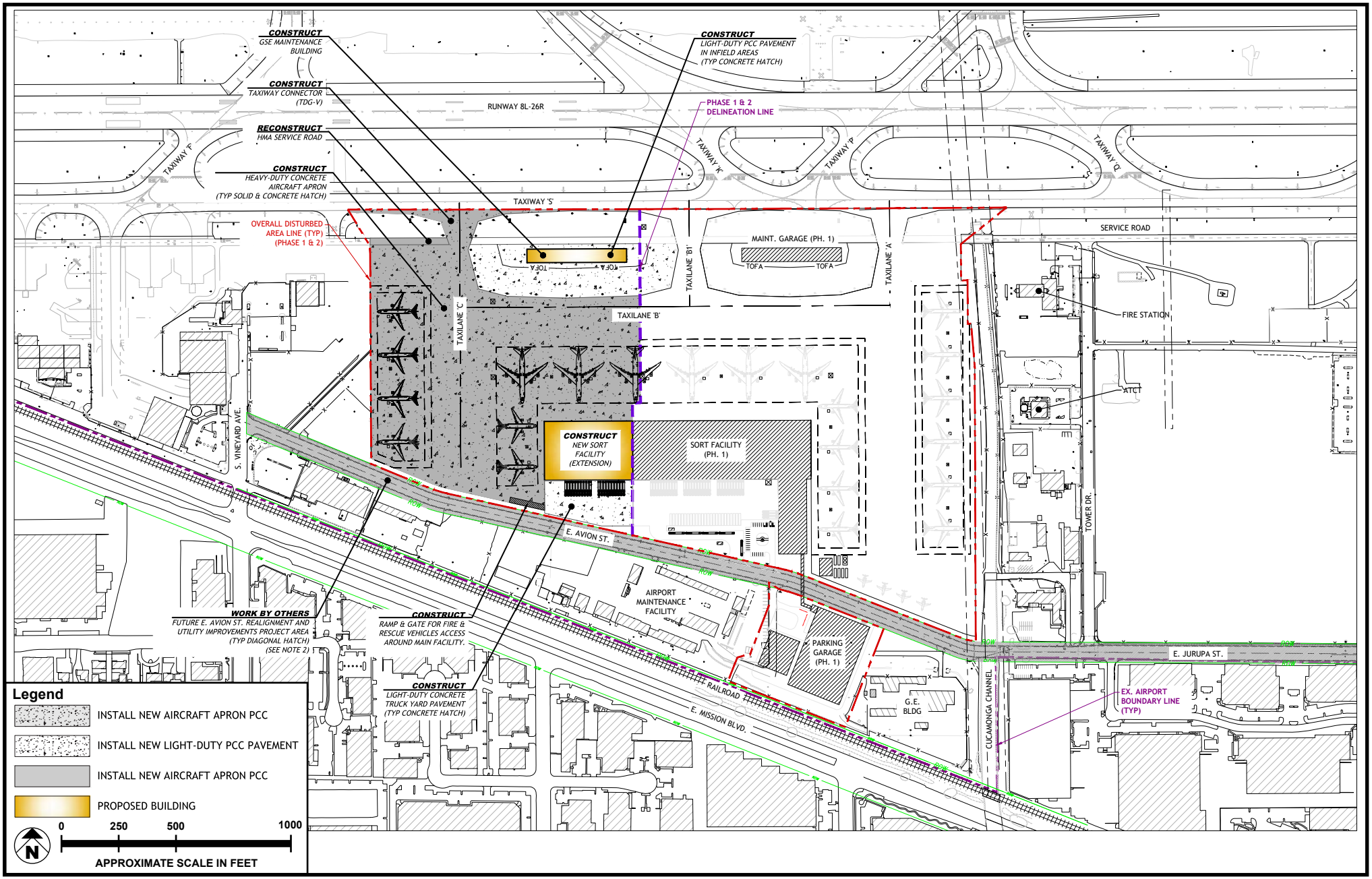
SOURCE: CHA - October 2022

FIGURE **3.13a**

Meridian Consultants

Aircraft Apron Plan

332-001-21



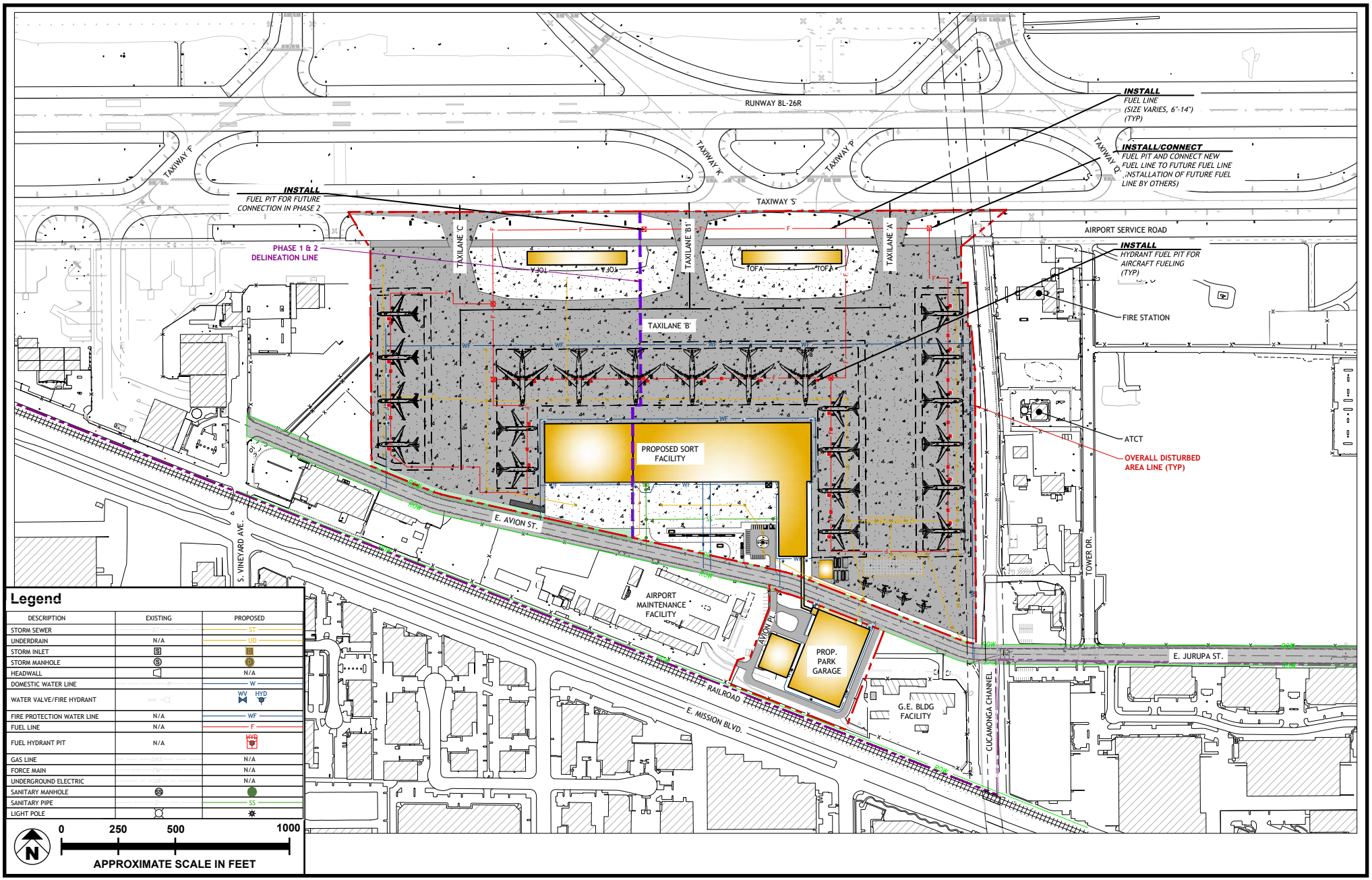
SOURCE: CHA - October 2022

FIGURE **3.13b**

Meridian Consultants

Aircraft Apron Plan

332-001-21



SOURCE: CHA - October 2022

FIGURE **3.14**

Meridian Consultants

Aircraft Fuel System Plan

332-001-21

Project site via these trucks during Phase 1 until this fuel supply line may be available, which is anticipated in 2029 when Phase 2 of the proposed Project would commence.

Utility Substation Building and West Ramp Substation

A Utility Substation/Building, located immediately southeast of the office wing of the Air Cargo Sort Building would be constructed during Phase 1 of the Project. The building would house a medium-voltage power distribution switchgear system, in addition to emergency generator paralleling gear.

The Utility Substation Building would accommodate workstations to monitor and operate the power distribution system, an air-conditioned room for the switchgear central station battery system, an Information Technology closet, storage closet, and restroom. An emergency power generator system would be installed adjacent to the Utility Substation Building. Six 2,200-kilovolt ampere (kVA) diesel engine generators (four generators in Phase 1 and two generators in Phase 2) would be installed to ensure continuous operation of the proposed Project in the event of loss of power. The emergency operation of the entire facility would require only five generators. The sixth generator would be provided as a backup. Two 20,000-gallon, vertical diesel fuel storage tanks would be installed in an approximately 3,500-cubic-foot leak containment enclosure that would be weatherproof. The generators would be sound attenuated, Tier IV emissions compliant, and would require an emissions reduction scheme utilizing injection of diesel exhaust fluid (DEF), contained in a separate 500-gallon container. A central DEF replenishment system would be installed in a conditioned spaced in the Utility Substation Building and connected to the diesel fuel storage tanks.

The West Ramp Substation, proposed under Phase 2, would be at the southern end of Taxilane 'C,' adjacent to East Avion Street. The West Ramp Substation would consist of a prefabricated outdoor substation unit and would house equipment to distribute supplemental power to the equipment, ground powered units, and other ancillary items in the Phase 2 area of the Project site.

Lighting

The aircraft apron would include various lighting to support operations, including the loading and unloading of aircraft and other aircraft servicing functions.

Grading and Drainage

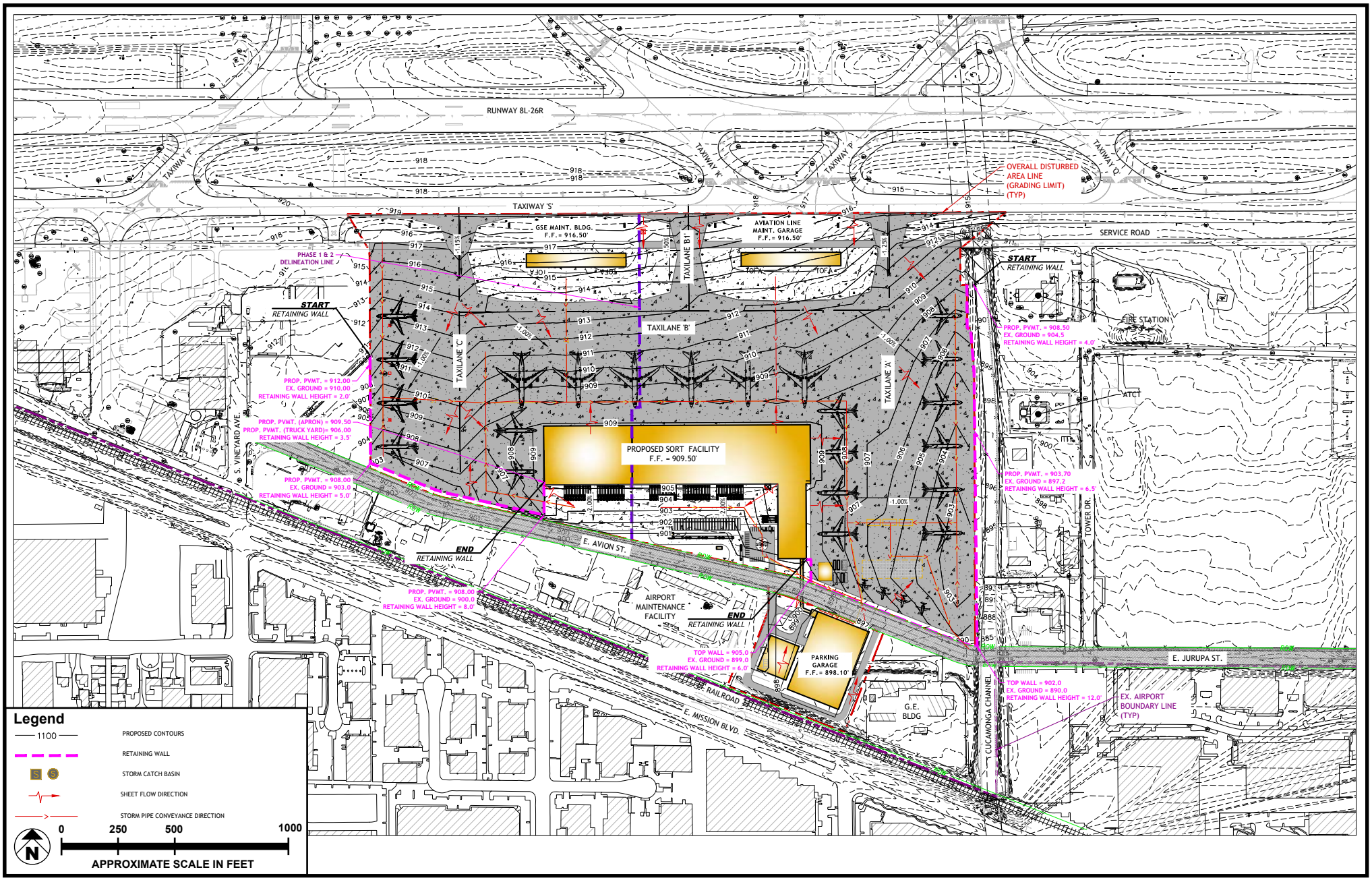
The Project grading plan is shown in **Figure 3.15: Grading Plan**. North of East Avion Street, the southern portion of the site will be raised to match the elevation of the northern portion of the

site adjacent to Taxiway 'S' while continuing to drain to the southeast corner of the site. Approximately 67,000 cubic yards of soil would be cut on this portion of the site and approximately 132,800 cubic yards of soil would be imported to raise the site. **Figure 3.15** shows the location of terrace walls proposed along the western, southern, and eastern edges of the site to accommodate the change in the elevation.

Along East Avion Street, the height of the terrace wall on the west side of the Air Cargo Sort Building would rise from 5 feet on the west to 8 feet on the east. On the eastern side of the Air Cargo Sort Building, the terrace wall would rise from a height of 10 feet on the west to 14.5 feet on the east.

The drainage system would include a stormwater collection and conveyance system designed to collect and pre-treat stormwater in accordance with applicable Low-Impact Design (LID) standards in an underground storage/infiltration facility. Stormwater collected on the airside and landside pavements will be conveyed to this system, which will allow stormwater to be detained while facilitating infiltration through its open bottom. When the system reaches capacity, it will release stormwater at a controlled rate into the Cucamonga Channel in accordance with San Bernadino County Water Quality Management Plan (WQMP) criteria. The proposed aircraft apron would be graded to direct all stormwater runoff within the apron limits to 31 catch basins (18 basins in Phase 1 and 13 basins in Phase 2) installed along the east and west perimeters of the apron, along the nose of the aircraft parking positions on the north side of the Air Cargo Sort Building, and along the tail of the aircraft parking positions to the west of the building; see **Figure 3.16: Drainage Plan**. Apron pavement within 50 feet of the Air Cargo Sort Building would be sloped away from the building to direct stormwater to the catch basins.

Each catch basin would have a two-foot sump to allow sediment in the stormwater to settle before being conveyed downstream through a series of underground pipes. Before stormwater enters the underground infiltration system, it will pass through a central oil-water separator and two main sediment chambers to further treat stormwater to meet water quality standards. Based on calculations, 467,800-cubic-feet of stormwater from the majority of the Project site and 17,600 cubic feet of stormwater from the proposed parking structure site will need to be stored in the underground infiltration systems before being discharged into the Cucamonga Channel. For the Project site north of Avion Street, to store the required runoff volume of 467,800 cubic-feet, footprint of the underground system is approximately 80 feet wide by 265 feet long and would be located in the southeastern portion of the Project site. Based on design of the underground infiltration system, a 24-inch outlet pipe on the downstream side of the system would discharge the stormwater at a controlled rate not greater than 24 cfs (for the 100-year storm) into Cucamonga Channel. For the proposed parking structure site, to store the required runoff volume of 17,600 cubic-feet, footprint of the underground system is approximately 20 feet wide



SOURCE: CHA - February 2023

FIGURE **3.15**

Meridian Consultants

Grading Plan

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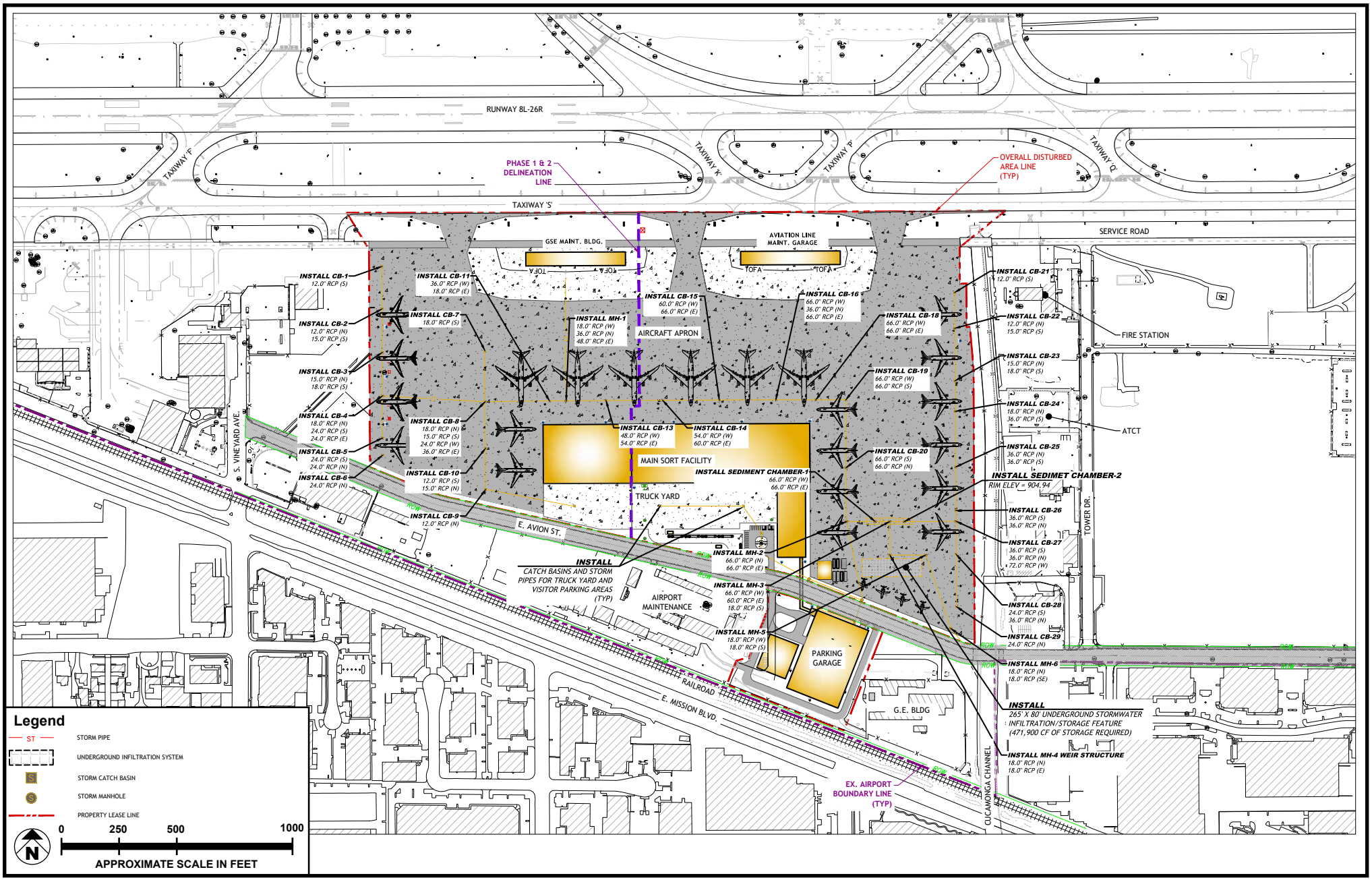


SOURCE: CHA - February 2023

FIGURE **3.16**

Meridian Consultants

Drainage Plan

332-001-21

by 65 feet long and would be located under the parking structure entrance drive. Based on preliminary design of the underground infiltration system, a 24-inch outlet pipe on the downstream side of the system would discharge the stormwater at a controlled rate not greater than 9 cfs (for the 100-year storm) into Cucamonga Channel. The underground systems would be surrounded by stone and filter media to treat the infiltrating stormwater. Pretreated stormwater would be discharged at a controlled rate to a new Avion Street drainage system that would be completed prior to the opening of the proposed Project, which would then discharge into the Cucamonga Channel.

Stormwater in the truckyard and visitor parking lot would be collected in a series of catch basins located within the truck yard and parking lot pavements. The stormwater collected would be conveyed westward to the main airfield apron drainage system via underground storm pipe. The stormwater collected from these areas would ultimately be treated in the same oil-water separator, sediment chamber, and underground storage/infiltration system being used for the aircraft apron area. The layout of this drainage system is shown in **Figure 3.16,** which includes 4 catch basins (3 in the truckyard and 1 in the parking lot).

Utilities

Water

Water would be provided to the Project site by the Ontario Municipal Utilities Company (OMUC). The proposed Project would tie into a 16-inch water main in East Avion Street at five locations. Each connection would have a gate valve and tapping sleeve. As shown in **Figure 3.17: Utility Systems Map**, water would be supplied to the Air Cargo Sort Building, parking structure, and aircraft apron for consumption and fire suppression.

Two connections would occur along the southeast and southwest corners of the apron to feed water lines and hydrants along the east and west perimeters of the apron. Water lines would also connect to the Utility Substation Building, Aviation Line Maintenance Warehouse, and GSE Maintenance Building.

Sewer

Sanitation service would be provided by the OMUC. As shown in **Figure 3.17,** one tie-in would be made to the municipal sewer line in East Avion Street, near the western limit of the Phase 1 construction area. Near the entry of the truckyard, the sewer line would split into two separate service lines serving the Air Cargo Sort Building. An oil-water separator would be installed in the truckyard, adjacent to the Air Cargo Sort Building to separate oil and water mixtures into their separate components generated from the cargo building, as well as surface runoff in the

truckyard and visitor parking lot, before entering the municipal sewer system. A sewer manhole would be installed at the fork of the two service lines per City of Ontario requirements.

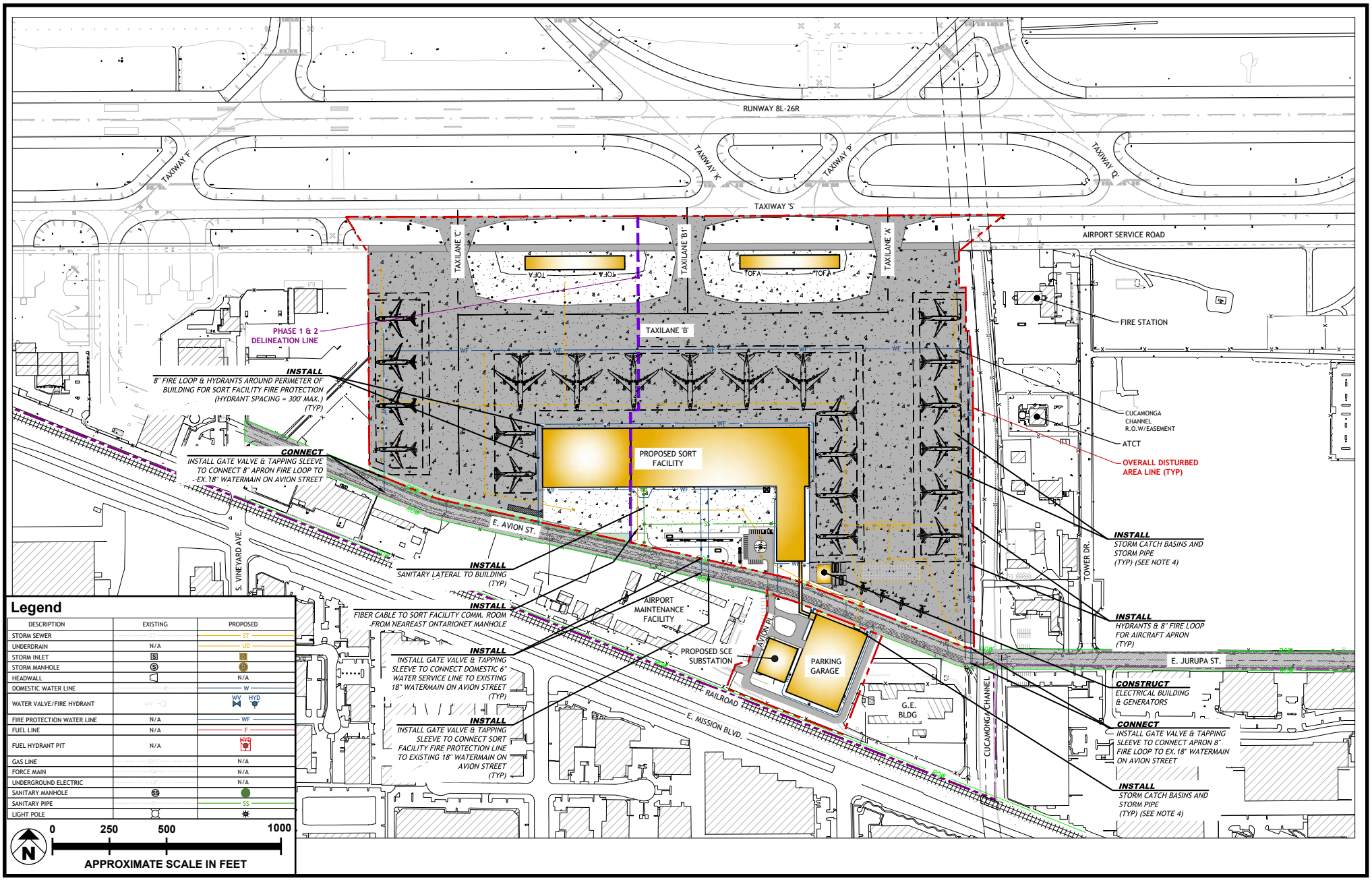
Natural Gas

The proposed Project has been designed to eliminate the consumption of natural gas (see PDF GHG-1 [all-electric Air Cargo Sort Building] in **Section 5.7: Greenhouse Gas Emissions**). This design feature of the proposed Project is not required by the California Building Standards Code and represents a "beyond code" commitment that has been informed by State policy regarding the importance of building electrification to California's overall decarbonization efforts and achievement of statewide GHG emission reductions.

Power and Data/Communication

Electrical distribution would be supplied by Southern California Edison (SCE). Fiber, data, and telecommunication service would also be extended to the Project site. Concrete encased duct banks would be installed underground to provide power and data/communication to the aircraft apron and all buildings (Cargo Sorting Building, Utility Substation Building, Aviation Line Maintenance Warehouse, and GSE Maintenance Building). Medium-voltage duct banks would be separated from low-voltage and communications duct banks, which would be combined s in single runs and split into separate manhole and handholes where pull and access points would be available.

The proposed Project would include a 1.5-Megawatt Solar photovoltaic (PV) Panel system on the rooftops of the Air Cargo Sorting Building and the parking garage. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the Air Cargo Sort Building and aircraft apron. Moreover, the Project proposes a portion of the aircraft fleet would be electric cargo planes, and charging stations would be provided in the southeast corner of the Project site for these aircraft. Electric charging stations would also be provided in the employee and visitor parking lots, and truckyard. Phase 1 of the proposed Project would require approximately 8.5 megawatts (MW) of power at buildout. Phase 2 of the proposed Project which would require approximately 2.85 MW of power at buildout. An additional 10 percent of other miscellaneous loads is needed for the proposed Project, for a total electrical demand of 12.4 MW. A new substation is being planned by SCE to meet the need for additional power for the proposed Project. This 135 foot by 160 foot proposed substation will be located within the Project site to the west of the proposed parking structure



SOURCE: CHA - June 2022

FIGURE **3.17**

Meridian Consultants

Utility Systems Map

332-001-21

as shown in **Figure 3.3**. The new substation would connect to existing infrastructure along Mission Boulevard directly south of the Project site.

3.4.2 Operational Characteristics

The proposed Project would facilitate the delivery of goods and cargo to and from aircraft and trucks. The facility will operate 24 hours a day, 365 days of the year.

Aircraft Operations

The proposed Project would introduce new aircraft operations at the Airport. Some of these flights currently operate at other airports in southern California and would relocate to the Airport. Phase 1 aircraft operations for the proposed Project would include up to 22 daily arrivals and departures with a maximum of 44 total daily aircraft operations. It is anticipated aircraft operations would occur seven days per week, with up to 8 daytime (7:00 AM–6:59 PM) departures and 9 daytime arrivals, 1 evening (7:00 PM–9:59 PM) departure and 3 evening arrivals, and 13 nighttime (10:00 PM–6:59 AM) departures and 10 nighttime arrivals.

In 2029, with completion of Phase 2, up to 22 additional operations (11 arrivals and 11 departures) would be added comprising up to 33 daily departures and arrivals (66 total aircraft operations) with up to 17 daytime (7:00 AM–6:59 PM) departures and 20 daytime arrivals. In addition, it would include 3 evening (7:00 PM–9:59 PM) departures, 3 evening arrivals, 13 nighttime (10:00 PM–6:59 AM) departures, and 10 nighttime arrivals. **Table 3.3: Estimated Maximum Daily Aircraft Operations**, summarizes all proposed flights at the Airport, broken down by day, evening, and nighttime periods.

TABLE 3.3
ESTIMATED MAXIMUM DAILY AIRCRAFT OPERATIONS

	Arrival			Departure		
	7 AM - 6:59 PM	7 PM – 9:59 PM	10 PM – 6:59 AM	7 AM - 6:59 PM	7 PM – 9:59 PM	10 PM – 6:59 AM
Phase 1	9	3	10	8	1	13
Phase 2	11	0	0	9	2	0
Total	20	3	10	17	3	13

The apron and taxi lane improvements, including the number of aircraft parking positions, reflect the estimated maximum number of operations to handle the proposed daily cargo volumes

associated with the proposed Project as shown in **Table 3.4: Estimated Maximum Daily Project Operations Schedule by Aircraft Type by Phase**.

TABLE 3.4
ESTIMATED MAXIMUM DAILY PROJECT OPERATIONS SCHEDULE
BY AIRCRAFT TYPE[1] BY PHASE

Aircraft Type	Aircraft Design Group	Phase 1			Phase 2		
		Number of Arrivals	Number of Departures	Total Daily Operations	Number of Arrivals	Number of Departures	Total Daily Operations
B737-400	III	4	4	8	6	6	12
B747-800	VI	2	2	4	4	4	8
B767-200	IV	3	3	6	5	5	10
B767-300	IV	3	3	6	5	5	10
B777-200	V	7	7	14	10	10	20
Alice Electric	N/A	3	3	6	3	3	6
Total		**22**	**22**	**44**	**33**	**33**	**66**

[1] *Each operation (i.e., arrival and departure) will occur 6 times over a 7-day week.*

Note: For purpose of modeling, the larger B747-800 aircraft was utilized. However, the B747-400 could operate on an ad hoc schedule to cover the B747-800.

Truck Operations

Truck operations would occur daily, primarily coinciding with the arrival and departure times of the scheduled flights. Truck operations would include: (1) Local operations consisting of trucks owned and operated by the Project proponent traveling between the Project site and other facilities in the region operated by the Project proponent; (2) Network operations by 3rd party truck companies picking up and dropping off cargo; and (3) Other operations including movement of cargo from non-SACC aircraft on Unit Load Devices (ULDs)/pallets that are moved between airport stations for sorting and repackaging for loading on truck or aircraft.

Employee Shifts

The facility would operate three work shifts for the office, cargo sorting, and apron/ramp operations. The start times would be staggered to generally coincide with the scheduled arrival

and departure of aircraft and truck operations. Additional employees would be hired as operations grow from Phase 1 to Phase 2. At Project buildout, the proposed facility would operate with 1,315 employees. The first shift (7:00 am to 3:00 pm) would include 640 employees, the second shift (3:00 pm to 11:00 pm) would include 95 employees, and the third shift (11:00 pm to 7:00 am) would include 580 employees.

Equipment

Equipment used during proposed Project operations are listed in **Table 3.5: Operational Equipment**. As shown, these include aircraft support equipment used to aid in the loading, unloading, and sorting of cargo.

TABLE 3.5
OPERATIONAL EQUIPMENT

Type		Number
Forklifts	Electric	27
Loaders (Commander 30)	Electric	8
Ground Power Units (Converter Plug-in to in ground power)	Electric	8
Push Back Tugs	Electric	5
Stairs (Boeing 737)	Non-powered	3
Stairs (Boeing 747/767)	Non-powered	8
Tugs	Electric	25
Dollies	Non-powered	450
Tow Bars	Non-powered	15
Ramp Support (Vans/Carts)	Electric	5
Large Dollies	Non-powered	10

3.4.3 Construction

Construction of Phase 1 of the proposed Project is projected to start in the third quarter of 2023 and be completed by the third quarter of 2025 when the proposed air cargo flight operations at the Airport would begin. Phase 1 construction would include the demolition of existing structures and site improvements in the Phase 1 area, site preparation and grading, and construction of all proposed improvements in the eastern 62 acres of the Project site, including the initial phase of the Air Cargo Sort Building, aircraft apron improvements, and parking structure.

After completion of Phase 1, relocation of existing uses and facilities in the Phase 2 area would occur, followed by the demolition of existing structures and site improvements in the Phase 2 area including site preparation and grading. Construction of the remaining improvements, including the expansion of the Air Cargo Sort Building and aircraft apron improvements, would begin in the third quarter of 2027, after site preparation activities, and be completed by 2029.

Construction is proposed in two separate phases and includes the demolition of the existing structures, site work, and the construction of the proposed improvements, as described in **Table 3.6: Projected Construction Trips and Employees**.

Construction of the proposed Project would include excavation and grading of the Project site. In the aircraft apron area, which is the majority of the Project site, the Project site would be excavated approximately two feet with stabilization of the subgrade with undercuts of up to two feet, for a total of four feet. Trenches would be required for the installation of stormwater piping and structures, as well as other utilities (sanitary, water, electric, communications and hydrant fueling). These improvements would require trenching with depths up to 20 feet in limited areas. The parking structure foundations would reach an approximate depth of five (5) to seven (7) feet below grade.

TABLE 3.6
PROJECTED CONSTRUCTION TRIPS AND EMPLOYEES

	Phase 1	Phase 2
Demolition	• Removal of 192,484 SF of buildings, requiring 10 haul trucks per day. • Removal of 2,047,320 million SF of concrete; recycled on site, avoiding 2,616 haul truck trips.	• Removal of 432,295 SF of buildings, requiring 23 haul trucks per day. • Removal of 1,045,440 SF of concrete, recycled on site, avoiding 910 haul truck trips.
Site Preparation	• Clearing and grading of 107,000 cubic yards (CY) of import materials, requiring 102 haul truck trips per day in addition to the recycled materials utilized by the proposed Project.	• Clearing and grading of 50,000 CY of import materials, requiring 51 haul truck trips per day.

TABLE 3.6
PROJECTED CONSTRUCTION TRIPS AND EMPLOYEES

	Phase 1	Phase 2
Construction	• Maximum of 280 employee trips per day and 100 vendor trips per day during building construction and fewer employee and vendor daily trips for construction of Phase 2	• Maximum of 240 employee trips per day and 100 vendor trips per day during building construction and fewer employee and vendor daily trips for other construction phases

Demolition

The Project site includes existing buildings, hangars, ancillary structures, and parking facilities that would be demolished as part of construction of the proposed Project. Existing landscaping and trees on the Project site would be removed, with some of the existing trees incorporated into the proposed landscaping as described above. Prior to demolition, OIAA would terminate existing leases and non-OIAA tenant operations would vacate the facilities prior to construction of the proposed Project. OIAA occupies facilities on the Project Site and their operations would be relocated to existing facilities both on- and off-airport, prior to construction of Phase 2.

The Airport operates two secured airport access points (SAAP) onto the Airport airfield: one on the north side of the airfield (North SAAP, 590 South Vineyard Avenue) and another on the south side (South SAAP, 2095 East Avion Street). The South SAAP, located in the northeast corner of the Phase 2 Project area, would be relocated prior to the construction of Phase 2 of the Project to a 2.5-acre site located at the north end of South Vineyard Avenue, adjacent to Taxiway 'S,' approximately one-quarter mile west of its current location and approximately 270 feet west of the western boundary of the Project site. Construction of the new South SAAP would occur over approximately six months and the existing South SAAP would remain in operation until the new SAAP is operational.

OIAA administrative offices currently located in an office building and adjoining hangar at 1923 East Avion Street would also be relocated prior to the start of Phase 2 construction. OIAA plans to relocate its administrative operations to leased office space near the Airport. Other Airport operations at this location, including Ontario Police Department's K-9 facility, would be relocated to a vacant hangar on the north side of the Airport.

Construction Staging and Truck Haul Routes

All construction staging would occur within the Project site; no staging would occur off site. Based on the location of the Project site, which is just east of South Vineyard Avenue, it is anticipated that most construction vehicles would access the site via South Vineyard Avenue. Trucks accessing SR-60 would continue southbound on Vineyard Avenue. Trucks that require access to I-10 would take westbound Mission Boulevard to Grove Avenue and Holt Boulevard. I-15 access would require trucks to use eastbound Mission Boulevard, either northbound South Archibald Avenue or South Haven Avenue, and eastbound Jurupa Street, which are identified by the City of Ontario as designated truck routes.

Construction Management

Construction activities would require the use of fuels, oils, solvents, pipe glues, concrete, concrete compounds, and other potentially hazardous materials for operation of equipment and machinery. A construction-specific Health Management Plan (HMMP) would be prepared prior to the start of construction. The HMMP would describe how potentially hazardous materials would be handled, stored, and transported per manufacturers' specifications and local, state, and federal regulations. Potentially hazardous materials would be stored with secondary containment and a spill prevention plan would be developed to identify protocols for accidental spills. Additionally, potentially hazardous materials would be stored in a designated area away from stormwater drainage facilities. Hazardous materials would be stored in sealed containers with proper labeling. A spill cleanup kit would be on hand in the event of an accidental upset of hazardous materials.

A project-specific stormwater pollution prevention plan (SWPPP) would be prepared prior to the start of construction. The SWPPP would identify site-specific best management practices (BMPs) to capture stormwater runoff from the construction site. The proposed Project would be required to submit a notice of intent to the State Water Quality Control Board Stormwater Multiple Application Report Systems (SMARTS). All BMPs would be implemented before construction and may include, but are not limited to buffer strips, hydroseeding, mulching, geotextile swales, storm drain inlet protection, and silt fencing. During the rainy season, typically October through April, temporary stormwater basins would be installed and maintained with graded areas in accordance with the California Stormwater Association Fact Sheet Number SE-2 (CASQA 2019). All drop inlets would be required to be protected by fiber roll barriers secured by gravel bags. Sediment buildup would be removed, as necessary.

The construction ingress and egress would be stabilized using a six-inch layer of one- to three-inch stone, which would remain in place for the duration of construction. All traffic entering and exiting the construction site would access the stabilized entry points that would be approximately 50 feet wide and 30 feet long but may be adjusted for grading of the site.

3.4.4 Sustainable Project Features

The proposed Project incorporates sustainable project features in both design and operation. The Air Cargo Sort Building would meet Leadership in Energy and Environmental Design (LEED) certification standards and would be all-electric (no natural gas usage). Achieved by incorporating the following project design features:

- Enhanced Building Automation Systems
- PVC Energy systems on roof elements
- Advanced low energy HVAC systems
- Electric charging for 1/3 of employee parking spots
- Low Impact Design (LID) systems and rainwater harvesting
- All electric Ground Service Equipment (industry leading)
- In-Ground electric connections to aircraft
- Utilization of electric cargo aircrafts (Alice Aircraft by Eviation)

The Proposed Project would include a 1.5-MW Solar photovoltaic (PV) Panel system on the rooftops of the Cargo Sorting Building and the parking structure. As listed in **Table 3.5: Operational Equipment**, the proposed Project would include the operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the Air Cargo Sorting Building and aircraft apron. The Project proposes the operation of electric cargo planes for a portion of the air cargo operations, for which charging stations would be provided in the southeast corner of the Project site. Electric charging stations would also be provided in the employee and visitor parking lots, and truckyard.

3.5 INTENDED USES OF EIR

This EIR evaluates the environmental effects that would result from the proposed Project, as described herein and compliant with CEQA and CEQA Guidelines, as amended. The OIAA is the CEQA Lead Agency for the proposed Project. The OIAA Commissioners, as the decision-

making body, will evaluate the environmental effects of the Project prior to their consideration of whether the proposed Project is suitable for the Project site and authorization of the lease of the Project site to a future tenant.

Responsible agencies, as defined in Public Resources Code 21069, are public agencies, other than the lead agency, that also have responsibilities for carrying out or approving a project. Responsible agencies for this Project will use this EIR to inform their respective reviews and approvals . **Table 3.7: Intended Uses of EIR**, lists the agencies that are expected to use the EIR in their decision making and the type of approvals required to implement the proposed Project.

TABLE 3.7
INTENDED USES OF EIR

Public Agency	Approvals and Decisions
Ontario International Airport Authority	• Certify Final EIR and Adopt Mitigation Monitoring and Reporting Program • Approve Facility Use Agreement • Approve Lease Agreement • Approve Notice to Proceed for Construction • Approve Air Carrier Operating Permit • Approve Operating Use and Terminal Lease Agreement
City of Ontario	• Approve Development Plan Review and issue Building Permits • Connections to City Utilities
South Coast Air Quality Management District	• Approve Permit for Emergency Generator and Fire Pump

4.0 ENVIRONMENTAL SETTING

4.1 INTRODUCTION

This section provides an overview of the regional and local environmental conditions in the vicinity of the proposed Project, as they existed at the time the notice of preparation of this EIR was released for review. The environmental setting pertaining to the topics analyzed in this EIR is included in the respective section for each topic in **Sections 5.1** through **5.14**. The information provided in this section along with the additional information provided in each of these topical sections define the baseline physical conditions for purposes of determining the potential impacts of the proposed Project.

4.2 REGIONAL SETTING

4.2.1 Location

The proposed Project is proposed at the Ontario International Airport (Airport), in the City of Ontario (City) located in southwestern San Bernardino County. The cities of Chino and Montclair, and unincorporated areas of San Bernardino County border the City to the west; the cities of Upland and Rancho Cucamonga border the City to the north; the city of Fontana and unincorporated land in San Bernardino County border the City to the east; and unincorporated areas of Riverside County border the City to the south (see **Figure 3.1: Regional Location**). The Project site is located approximately 35 miles from downtown Los Angeles, 20 miles from downtown San Bernardino, and 30 miles from Orange County.

4.2.2 Regional Background

The Project site is in a region of Southern California known as the Inland Empire (IE). The IE is a metropolitan area, inland of and adjacent to coastal California, centering around the cities of San Bernardino and Riverside, located east of Los Angeles County. It includes the cities of western Riverside County and southwestern San Bernardino County, including the City, as well as the desert communities of the Coachella and Victor Valleys.

The proposed Project is proposed within the Airport, an existing built environment in the central portion of the Upper Santa Ana River Valley that is bounded by the San Gabriel Mountains to the north; the Chino Hills, Puente Hills, and San Jose Hills to the west; the Santa Ana River to the south; and Lytle Creek Wash on the east. The Santa Ana River Valley was formed by the Santa Ana River and its tributaries. The Santa Ana River originates on the northern and eastern slopes of Mount San Gorgonio and is the largest hydrological feature near the proposed Project area,

approximately 7 miles away. The natural course of Cucamonga Creek flanks the eastern Project boundary.

The U.S. Census Bureau-defined "Riverside–San Bernardino–Ontario" metropolitan area covers more than 27,000 square miles and in 2019, had a population of approximately 4.6 million.[1] Most of the area's population is in southwestern San Bernardino County and northwestern Riverside County. The IE was originally a major center of agriculture, including citrus, dairy, and winemaking. In the 1970s, the region began to experience rapid growth in population. Families have been relocating to the region in search of affordable housing, which has led to regional growth of residential, industrial, and commercial development.

The region has continued to grow with the addition of the supply chain network and air cargo operations. Globalization and increased e-commerce have led to an accelerated expansion of the air cargo market throughout California, including the IE. More than 200 California airports participate in the movement of air freight, yet most goods move through California's 13 busiest airports, including Ontario International Airport.[2]

Overall, the demand for air cargo in the United States is expected to increase in the future. All cargo shares in 2020 were 93.4 percent (domestic). According to the *FAA Aerospace Forecast Fiscal Years 2021-2041*, this anticipated demand for air cargo results from regional economic activity. Between 2021 and 2041, domestic cargo revenue ton miles (RTMs) are forecast to increase at an average annual rate of 1.6 percent. For the forecast period (2021-2041), international cargo RTMs are expected to increase an average of 3.8 percent a year based on projected growth in world gross domestic product (GDP).[3] Caltrans' latest California Air Cargo Groundside Needs data (updated from the 2013 study) indicates the volume of cargo is expected to grow at most airports through 2040.[4]

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1 Census Reporter. "Riverside-San Bernardino-Ontario, CA Metro Area." https://censusreporter.org/profiles/31000US40140-riverside-san-bernardino-ontario-ca-metro-area/. Accessed January 2022.

2 California Transportation Commission. *Aviation Plan California Aviation System Plan*. August 18, 2021. Page 169. 2021. https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/2020_casp_adopted_divofaero_01052022-a11y.pdf. Accessed March 2022.

3 Federal Aviation Administration (FAA). *FAA Aerospace Forecast Fiscal Years 2021-2041*. Page 25. https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2021-41_FAA_Aerospace_Forecast.pdf. Accessed March 2022.

4 California Transportation Commission. *Aviation Plan California Aviation System Plan*.

4.3 LOCAL SETTING

4.3.1 Location

The Project site consists of approximately 97 acres located in the southern half of the Airport, immediately west of the Cucamonga Channel, and north of Mission Boulevard. As shown in **Figure 4.1: Project Site Location,** the Project site includes portions of Assessor Parcel Numbers (APN) 11326106, 11326107, 11326108, 11327101, and 11327102. Most of the Project site is located north of East Avion Street with the remainder located between East Avion Street and Mission Boulevard to the east of South Hellman Avenue.

The Project site is located within Sections 27 and 34, Township 1 South, Range 7 West, San Bernardino Baseline and Meridian, as depicted on the Guasti CA 7.5' U.S. Geological Survey (USGS) topographic quadrangle.

4.3.2 Environmental Background

Ontario International Airport

The Airport is a medium-size, full-service airport with passenger air, air cargo, and general aviation activities. The Airport encompasses 1,741 acres and operates two parallel, commercial-length runways: Runway 8L-26R and Runway 8R-26L. The Airport does not designate a preferential runway for daytime operations (7:00 am to 10:00 pm). However, for noise abatement purposes, during nighttime (10:00 pm to 7:00 am), it operates Runways 26R and 26L for arrivals (from the east) and Runways 8L and 8R for departures (to the east).[5] Certain conditions (e.g., thunderstorms or high winds) require deviation from these standard operating procedures.

The Airport has two primary air carrier passenger terminals: Terminals 2 and 4 on the north side of the Airport. Passenger terminal support facilities and customer amenities include vehicle parking facilities and car rental facilities. Public automobile parking is available on surface lots at the passenger terminals.

Cargo operations at the Airport include Federal Express (FedEx) in the northwest portion of the Airport, Amazon in the northeast portion of Airport, and United Parcel Service (UPS) immediately southeast of the Airport. UPS is currently proposing consolidation of their operations on Airport property, adjacent to their existing facilities; this related project, listed below in **Table 4.2:**

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5 City of Ontario. Ontario International Airport – Inter Agency Collaborative. *Airport Land Use Compatibility Plan*. Adopted April 19, 2011. https://www.ontarioca.gov/planning/ont-iac. Accessed July 2022.

Cumulative Related Projects, will undergo a separate environmental review and approval process from the proposed Project.

The COVID-19 pandemic, which started to affect air travel generally in the first quarter of 2020, caused changes to the aviation landscape, including at the Airport. Although the Airport is currently seeing passenger travel levels normalize to pre-COVID conditions, during 2020 and 2021 the Airport experienced a reduction in passenger carrier and air taxi operations. There was, however, an increase in air cargo operations in 2020, followed by a decline in 2021, as presented in **Table 4.1: Ontario Airport Passenger and Cargo Operation History.**

TABLE 4.1
ONTARIO AIRPORT PASSENGER AND CARGO OPERATION HISTORY

Year	Passengers	Freight (Tons)
2012	4,296,459	454,880
2013	3,971,136	465,537
2014	4,127,280	474,502
2015	4,209,311	509,809
2016	4,251,903	567,295
2017	4,552,225	654,378
2018	5,115,894	751,529
2019	5,583,732	781,993
2020	2,538,482	924,160
2021	4,496,592	890,383

Source: Ontario International Airport. "ONT Stats." https://www.flyontario.com/corporate/statistics. Accessed March 2022.

Baseline Conditions

For purposes of establishing accurate and representative baseline conditions, this EIR uses the passenger air carrier, air taxi, and general aviation operation levels recorded at ONT in 2019 (pre-COVID-19 pandemic) and ONT's air cargo and other aviation operation levels in 2020.[6]

In this EIR, the term "Baseline Conditions" is used when discussing the hybrid 2019/2020 base year condition described in the prior paragraph, as it relates to the air quality, GHG, and noise environments. Per CEQA Guidelines Section 15125(a)(1), "where necessary to provide the most

6 2021 data was not readily available at the time the NOP was issued.

accurate picture practically possible of the proposed Project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence."[7] Due to the COVID-19 pandemic, existing conditions in 2021 at the time of the EIR's Notice of Preparation issuance do not represent activity levels that have been, or will be, typical of the Airport or that are reasonably expected to exist during the timeframe for proposed Project implementation.

Specifically, the Federal Aviation Administration (FAA) advised as part of their annual Terminal Area Forecast (TAF), "In 2020 there was a major decrease in passenger enplanements and commercial operations as a result of the COVID-19 pandemic. There is uncertainty associated with the forecasts because of the uncertainty regarding the path of the pandemic and its economic impacts."[8] FAA estimated that medium hub airports (the Airport is a medium hub airport) would have an aggregate recovery to 2019 levels of aircraft operations and enplanements by 2025; however, the projections for the Airport indicate operations will exceed 2019 levels by 2023.[9] The FAA's estimates were developed prior to the extensive uptake in passenger activity in mid to late 2021 and are thus likely under representative of the recovery expected at the Airport.

Notably, the recovery estimated by FAA in their TAF released in May of 2021 does not incorporate the additional cargo activity that occurred in 2020 in response to the world's reliance on cargo carriers during the pandemic. Airports Council International-North America (ACI-NA) reported an increase of approximately 17 percent in cargo operations between 2019 and 2020, and ONT ranked 10th in North American airports for cargo activity, growing approximately 21 percent in total cargo when compared to 2019.

Thus, to more accurately represent historically-consistent existing conditions at the Airport and to avoid a potentially misleading comparison of project impacts, this EIR considers the impacts to three resource categories (noise, air quality, and GHGs) by using a hybrid of 2019 and 2020 operation levels at the Airport. The Baseline Conditions noise contour for this EIR was developed using calendar year 2019 aircraft operations with modifications to reflect increased cargo operations experienced during 2020 and continuing into 2021. The existing/base year aircraft fleet mix is a hybrid of 2019 and 2020 operations and was based on the Airport Noise & Operations Monitoring System (ANOMS) radar data from 2019 and 2020, FAA Traffic Flow Traffic

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7 Public Resources Code. Section 15125. *CEQA Guidelines*. Environmental Setting.

8 FAA. "Terminal Area Forecast (TAF)." Executive Summary Fiscal Years 2020-2045. https://www.faa.gov/data_research/aviation/taf/. Accessed July 2022.

9 FAA. "Terminal Area Forecast (TAF)."

Flow Management System Count (TFMSC), and Operations Network (OSPNET). Specifically, passenger air carrier, air taxi, and general aviation operations were obtained from the 2019 ANOMS data and the all-cargo operations were obtained from the 2020 ANOMS data. The military operations were obtained from the FAA TFMSC data. This approach serves to normalize operations to represent Baseline Conditions, recognizing that the temporary reduction in passenger air carrier and air taxi operations, due to the COVID-19 pandemic, is not indicative of baseline/existing conditions at the Airport.

Airport Related Projects

The Airport serves an important role in Southern California's supply chain network. The Airport has been modernizing and implementing infrastructure upgrades to meet local and regional demands. The related projects currently proposed at the Airport are discussed here and included as Projects A-H in the list of related projects in **Table 4.2**, below, and **Figure 4.6: Related Cumulative Projects** for consideration in the proposed Project's cumulative impact analysis.

A. **Reconstruct Connector Taxiways and Relocate South Electrical Vault.** This project involves rehabilitating, modifying, reconstructing/relocating Taxiways N2, E, F, K, L, P, and Q from Taxiway N to the North RSA Boundary of Runway 8R-26L; and relocating the South Airfield Electrical Vault. Construction is expected to commence in 2023.

B-C. **Rehabilitation of Runway 8R-26L and Taxiways (Phases 1 and 2).** This project proposes to rehabilitate the existing Runway 8R-26L and airfield improvements. This project would occur in two separate phases. Phase 1 would involve rehabilitating the westerly one-third of Runway 8R-26L and connecting Taxiways S3, E, F, S5, and K from within the runway safety area (RSA) to Taxiway 'S.' Phase 2 would involve rehabilitating the easterly two-thirds of Runway 8R-26L and connecting Taxiways S8, P, Q, and S11 from within the RSA to Taxiway 'S.' Construction of Phase 1 would commence in 2024 and the second phase would start in 2025.

D. **UPS West Coast Regional Air Hub Facility.** This project involves relocation and consolidation of UPS' existing air cargo facilities and operations at ONT. A new facility would be constructed on approximately 40 acres of Airport Property, located east of Tower Drive, north of East Jurupa Street, and west of South Archibald Avenue, adjacent to existing UPS facilities. Construction is proposed to begin in 2024 and continue for approximately 18 months.

E. **Radio Tower (Remote Transmitter/Receiver (RTR)) Relocation.** The Southeast Cargo Expansion would displace the existing RTR at the Airport. The RTR Relocation would be relocated to another location on the south side of the airfield, subject to FAA approval.

F. **East Avion Street Realignment.** OIAA approved in May 2022 the realignment and improvement of East Avion Street and Jurupa Avenue, between Vineyard Avenue to Archibald Avenue. The eastern segment of East Avion Street, between Jurupa Avenue and South Hellman Avenue, would be removed and the western terminus of Jurupa Avenue would be extended over the Cucamonga Channel to South Hellman. The entire segment of the East Avion/Jurupa Avenue, between Vineyard and Archibald, would be improved to its planned width to more efficiently and safely facilitate trailer truck and other vehicle traffic. Construction of the proposed East Avion Street Realignment is currently planned to start in the fourth quarter of 2022 and be completed by 2023.

G. **Golden Bridge Project.** This project is a freight forwarder development (non-aeronautical), proposed immediately south of the Project site, between Mission Boulevard and East Avion Street, adjacent to the Cucamonga Channel. Construction is anticipated to start in 2024.

Project Site

Historically, the Project site was used for agricultural production until the mid to late 1950's when development of the existing improvements on the Project site and the adjacent Cucamonga Channel were constructed. The Project site is developed with concrete and asphalt pavement areas, buildings, aircraft hangars, and landscaped areas. It slopes slightly from the northwest to the southeast. The surface elevation ranges from approximately 890 to 920 feet above mean sea level. As shown in **Figure 4.1**, the Phase 1 and Phase 2 project areas are generally delineated along a private airport road that provides access to the South SAAP.

Phase 1 Project Area

As shown in **Figures 4.2** and **4.3, Photos of Phase 1 Project Area,** the Phase 1 Project area contains vacant buildings associated with a National Guard station that previously operated at the Airport and a hangar in the southeast corner of the Project site, two aircraft aprons in the northeast portion of the site, vacant office buildings related to the previous operations of Atlantic/Guardian Jet, paved asphalt lots leased for trailer truck parking and trailer storage, grass areas leased for cargo container storage, and ornamental landscape, including pine trees around the National Guard facilities, along East Avion Street, and near the private Airport road to the

South SAAP. The paved asphalt lots and grass areas have been leased on a temporary basis to UPS for the storage of trucks, trailers, and cargo containers. The Phase 1 Project area also includes a segment of East Avion Street that is proposed for realignment, as discussed above.

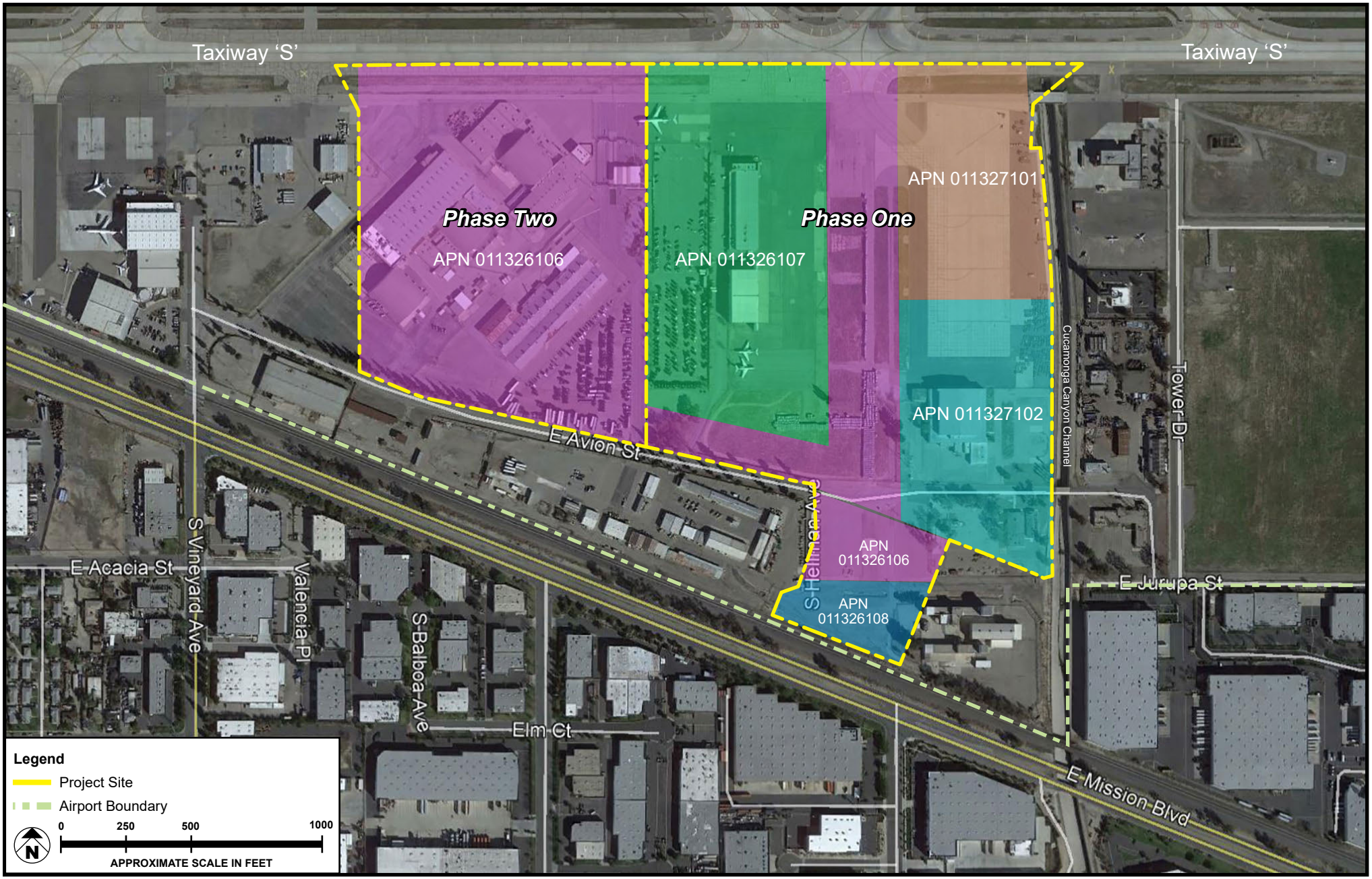
Phase 2 Project Area

As shown in **Figure 4.4: Photos of Phase 2 Project Area**, the Phase 2 Project area includes the South SAAP at the northeast corner of the Phase 2 project area, asphalt paved areas adjacent to East Avion Street currently used for employee parking and leased for both overflow trailer truck and container storage. The Phase 2 Project area also includes hangars and buildings. The OIAA Administrative Offices occupy a building and uses nearby existing hangar buildings for storage. The Ontario Police Department K-9 substation is located at the OIAA offices. There is no existing landscaping within the Phase 2 Project Area.

Surrounding Uses

The Project site is surrounded by the Airport and industrial uses as shown in **Figure 4.5: Photos of Surrounding Uses**.

- **North.** Taxiway 'S' runs along the northern perimeter of the Project site. It is the main parallel taxiway on the south side of the airfield. Taxiway 'S' has a 400-foot separation from Runway 8R-26L, the southern runway at the Airport. Beyond Taxiway 'S,' the former Southern Pacific Railroad tracks, Airport terminals, parking lots, prime flight aviation services, airline cargo hangars, and commercial facilities are also located to the north. Car rental businesses and commercial facilities are located to the northeast on the southwest corner of South Haven Avenue and East Airport Drive.
- **East.** The Cucamonga Channel is adjacent to the eastern perimeter of the Project site. The segment of the channel, adjacent to the site is an open concrete lined box-culvert and flows from north to south. Immediately east of the channel at the service road is the Airport's fire station and the FAA Air Traffic Control Tower on the west side of Tower Drive. Across Tower Drive is a vacant lot, industrial and commercial facilities, and large warehouses.
- **South.** South of East Avion Street and west of South Hellman Avenue is the Airport's Maintenance facility. The area south of the National Guard facility, at the southeast corner of the Project site, contains vacant buildings formerly occupied by General Electric. Farther south is the Union Pacific Railroad/Metrolink right-of-way and Mission Boulevard, beyond which are industrial uses. An open drainage channel is located directly south of the Project site along the Airport boundary.



SOURCE: Google Earth - 2021

FIGURE **4.1**

Meridian Consultants

Project Site Location

332-001-21

View of the future East Avion Street connection point and the National Guard facility at southeast corner of the Project site at the western terminus of Jurupa Avenue at Cucamonga Canyon Channel.

View of grassy area used as storage for cargo containers and Guardian Jet Building in the background from East Avion Street.

Facing northeast on East Avion Street at the private Airport road to the South SAAP.

SOURCE: Meridian Consultants, LLC - 2022

FIGURE **4.2**

Meridian Consultants

Photos of Phase 1 Project Area

View of the private Airport road to the South SAAP, near East Avion Street. The private road is the general boundary between the Phase 1 and Phase 2 Project areas.

View of the Guardian Jet Building and parking lot, facing south at the southern end of the lot.

View of container parking at the northeast corner of South Hellman Avenue and East Avion Place.

SOURCE: Meridian Consultants, LLC - 2022

FIGURE **4.3**

Meridian Consultants

Photos of Phase 1 Project Area

View of the OIAA Administration Offices at the southwest corner of the Project site on East Avion Street.

View of hangars and buildings used for storage from the southern end of the private Airport Street that provides access to the South SAAP.

View of South SAAP facility.

SOURCE: Meridian Consultants, LLC - 2022

FIGURE **4.4**

Meridian Consultants

Photos of Phase 2 Project Area

View of former GE buildings, south of the Project site at the Cucamonga Canyon Channel and future realigned East Avion Street.

View of ONT Maintenance Facility, facing southwest on East Avion Street at the private Airport Road.

View of trailer storage, immediately west of the Project on East Avion Street at the driveway to the OIAA Administration Offices.

SOURCE: Meridian Consultants, LLC - 2022

FIGURE **4.5**

Meridian Consultants

Photos of Surrounding Uses

332-001-21

- **West**. Airport related buildings and hangars, the intersection of East Avion Street at South Vineyard Avenue, and the new Guardian Jet hangar, are west of the Project site. Industrial and commercial uses are located farther west.

Land Use Plans

The proposed Project is an aeronautical development and use that is within the Airport boundaries and is consistent with the Ontario International Airport Layout Plan (ALP). Use of the Project site is controlled by the FAA and the ALP. The ALP serves as a guide for the Airport's future development and designates the proposed Project site as "Airport Development Area."[10]

Also, the City of Ontario General Plan land use designation for the Project site is Airport and the site is zoned ONT, Ontario International Airport.[11,12] The ONT zoning district allows airport terminals (including commercial and service uses related to the terminals), car rental agencies, airport related industrial uses, and delivery uses at a maximum intensity of 0.55 floor to area ratio (FAR).

4.4 PLANNING CONSIDERATIONS

State Aeronautics Act

The State Aeronautics Act of the California Public Utilities Code establishes statewide requirements for airport land use compatibility planning, including requirements for the preparation of Airport Land Use Compatibility Plans. In most counties, the responsibility for the preparation and adoption of compatibility plans falls to the county airport land use commission (ALUC). State law also provides for what is generally referred to as an "Alternative Process" wherein a county does not have to form an ALUC and the required compatibility planning responsibilities fall to local jurisdictions. San Bernardino County and its cities elected to follow the Alternative Process.[13] Use of the Alternative Process within San Bernardino County was established in 1995 by resolutions of the County Board of Supervisors and the city councils of

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10 Ontario International Airport Authority. *Airport Layout Plan Narrative Report*. Future Land Use, Sheet 16. April 2021.

11 City of Ontario. *The Ontario Plan*. Exhibit LU-01, Land Use Plan. https://www.ontarioplan.org/wp-content/uploads/sites/4/2021/05/TOPLUP_Map24x3610_6_20210524_V_1. Accessed October 2021.

12 City of Ontario. "Zoning Map." Adopted December 1, 2015, and amended on February 2, 2021. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Documents/Zoning%20Map/Zoning_20210212.pdf. Accessed October 2021.

13 City of Ontario. *Airport Land Use Compatibility Plan*.

cities affected by airports. Specifically, the Ontario City Council adopted the Alternative Process through Resolution No. 95-34 utilizing the Airport Environs Section of the City's General Plan as the basis for airport land use compatibility planning. The California Division of Aeronautics approved the San Bernardino County Alternative Process in 1996. The approval of the Alternative Process designated the City of Ontario as the local jurisdiction responsible for leading the compatibility planning process for ONT.[14]

The Ontario International Airport Land Use Compatibility Plan (ONT ALUCP) was adopted by City of Ontario City Council on April 19, 2011, and amended in July 2018.[15] The purpose of the ONT ALUCP is to promote compatibility between the Airport and the surrounding land uses. It also provides guidance regarding airport land use compatibility matters involving the Airport and affected local jurisdictions, to avoid future compatibility conflicts.[16]

The OIAA owns and operates the Airport. Under the ALUCP, OIAA, not the City, controls aeronautical development and uses at the Airport. Based on the ONT ALUCP and related California law, the ALUCP and the City Zoning Code do not impose any zoning restrictions or other regulations relating to the aviation or aeronautical operations and development at the Airport.[17,18,19,20,21,22]

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14 City of Ontario. *Airport Land Use Compatibility Plan*.

15 City of Ontario. *Airport Land Use Compatibility Plan*.

16 City of Ontario. *Airport Land Use Compatibility Plan*.

17 City of Ontario. *Airport Land Use Compatibility Plan*.

18 City of Ontario. Ontario International Airport – Inter Agency Collaborative. *Airport Land Use Compatibility Plan*. "Chapter 2 Procedural and Compatibility Policies." Section 1.3.1. Page 2-4. July 2018 Amendment. https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

19 City of Ontario. "Ontario International Airport – Inter Agency Collaborative." https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

20 California Public Utilities Code. Section 21674(e).

21 Height restrictions within the boundaries of ONT are governed only by Federal Aviation Administration Regulations Part 77.

22 California Department of Transportation (Caltrans). *California Airport Land Use Planning Handbook*. Page 6-7. October 2011. https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/californiaairportlanduseplanninghandbook-a11y.pdf. Accessed September 2022.

The State Aeronautics Act (SAA) identifies the types of local actions subject to review for compliance with the criteria and policies set forth and as adopted in ONT ALUCP.[23] These actions include the proposed adoption or amendment of general plans, specific plans, zoning ordinances, and building regulations affecting land within an airport influence area. The need for submittal of individual development proposals, assuming they do not involve amendment to local plans, or zoning changes, is subject to mutual agreement between affected jurisdictions.[24]

Aviation-Related Use are defined in the ONT ALUCP as any facility or activity directly associated with the air transportation of persons, or cargo, or the operation, storage, or maintenance of aircraft at an airport or heliport. Such uses specifically include runways, taxiways, and their associated protection areas defined by the FAA, together with aircraft aprons, hangars, fixed base operations facilities, terminal buildings, etc.[25] The proposed Project, which includes aircraft apron areas and a fixed base air cargo facility, proposed at the Airport in an area identified for Future Aeronautical Development on the Airport Layout Plan, included as Exhibit 1-6 in the ONT ALUCP, is an anticipated and allowed aviation-related use.

Federal Aviation Administration

The FAA has authority over aircraft arrivals, departures, and movement of aircraft on the Airport, and also reviews planned facilities to ensure that the heights of these structures do not pose a hazard to air navigation. The FAA's statutory mission is to ensure the safe and efficient use of navigable airspace in the United States pursuant to Title 49, United States Code (USC) § 47101(a)(1). In Advisory Circular 150/5300-13B, *Airport Design*, the FAA provides airport design standards for airport operators to use. Portions of the proposed Project, including the proposed aircraft apron designed to meet applicable airport design standards, require FAA approval, and represent a federal action requiring environmental review by the FAA in compliance with the National Environmental Policy Act (NEPA). The OIAA has initiated the preparation of a separate Environmental Assessment (EA) to identify and consider the potential environmental impacts associated with the proposed Project.

The EA will be prepared to meet requirements of the NEPA and the FAA implementing regulations, i.e., FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, and 5050.4B, *NEPA Implementing Instructions for Airport Actions*.

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23 California Public Utilities Code. Section 21674(e).

24 California Public Utilities Code. Section 21676.5(b).

25 City of Ontario. *Airport Land Use Compatibility Plan*.

Connect SoCal, Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region and encompasses an area over 380,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, including air cargo, 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.

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), known as Connect SoCal, was adopted in September 2020. Major themes in the 2020-2045 RTP/SCS are:

- Integrating strategies for land use and transportation.
- Striving for sustainability.
- Protecting and preserving existing transportation infrastructure.
- Increasing capacity through improved system managements.
- Providing more transportation choices.
- Leveraging technology.
- Responding to demographic and housing market changes.
- Supporting commerce, economic growth, and opportunity.
- Promoting the links between public health, environmental protection, and economic opportunity.
- Incorporating the principles of social equity and environmental justice into the plan.

The proposed Project's consistency with these major themes is discussed below.

Integrating Strategies for Land Use and Transportation

The proposed Project would conform to the procedural and land use compatibility policies of the ONT ALUCP, which guides airport land use.

Additionally, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce

GHG emissions from transportation sources, with the exception of goods movement. The RTP/SCS includes an environmental strategy to address the air quality impacts of goods movement, while also allowing for the efficient and safe movement of goods throughout the region with the integration of advanced technologies that have benefits such as air quality improvements, energy security, and economic growth opportunities. This plan reaffirms zero and near-zero emission technologies as a priority, describes progress to date, and outlines a framework and key action steps to reach that goal.[26] The process, framework, and action steps of this strategy, as well as specific details of goods movement challenges, are found in the Goods Movement Technical Report of the RTP/SCS.[27] The RTP/SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to government and developers to take actions consistent with the plan.

The 2020-2045 RTP/SCS includes an Aviation Technical Report (ATR) with data collected from the seven primary airports in the region, including Ontario International Airport, and other sources. The ATR found that in 2017, the seven commercial service airports in the SCAG region accommodated 110.17 million annual passengers (MAP) from almost 50 countries and over 40 states. Related to cargo movement, in 2017, the SCAG region airports moved 3.14 million tons of cargo to 114 destinations in approximately 23 countries and over 30 states. Five of the SCAG region airports, including Ontario International Airport, are ranked in the top 100 nationally for the movement of cargo.

The ATR found that downturns in the global economy kept the overall growth in regional air cargo traffic relatively flat from 2000 to 2017. During this period, air cargo grew at an annual rate of 0.52 percent per year, from 2.87 million tons of cargo in 2000, to 3.14 million tons in 2017. The overall growth during this period primarily occurred in the latter portion of this period. From 2012 to 2017, air cargo grew at an annual rate of 4.6 percent from 2.5 million tons in 2012 to 3.14 million tons in 2017. Despite increases in air passenger and cargo activity, aircraft operations (i.e., number of aircraft take-offs and landings) actually decreased due to the use of larger aircraft and higher load factors. As a result, overall aircraft operations in the region decreased by an annual rate of 1.8 percent from 2000 to 2017.

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26 Southern California Association of Governments (SCAG). *Connect SoCal, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*. Adopted September 3, 2020. Page 78. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176. Accessed April 2022.

27 SCAG. *Connect SoCal, 2020-2045 RTP/SCS*.

The ATR regional air cargo forecast for the SCAG region is 3.3 percent a year, based on the 2019 FAA Aerospace Forecast. Based on the 3.3 percent growth rate and the SCAG 2017 base year of 3.14 million tons of moved cargo, the air cargo forecast for the SCAG region in 2045 is 7.7 million tons. According to the ATR, there is a growing number of cargo carriers entering the market, particularly international carriers. Currently, most of the international freight is carried in the cargo holds of passenger aircraft.[28]

While SCAG has developed and adopted the ATR as a part of the 2020-2045 RTP/SCS, as a regional planning agency, it has no authority over airport development. Development authority rests with the airports (i.e., airport sponsors retain authority over planning and development decisions) and the FAA, which makes airport funding decisions based on national priorities. Nevertheless, as discussed above in **Section 4.2.2, Regional Background**, for 2021-2041, the FAA expects international cargo RTMs to increase an average of 3.8 percent a year based on projected growth in world gross domestic product (GDP).[29] Caltrans latest California Air Cargo Groundside Needs data (updated from the 2013 study) indicates the volume of cargo at airports is expected to grow at most airports by 2040.[30] As discussed in **Section 5.7, Greenhouse Gas Emissions** of this Draft EIR, though the proposed Project would result in significant and unavoidable impacts related to SCAQMD's established GHG threshold of 10,000 metric tons of CO2e per year for industrial facilities during operation, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases. Additionally, **Section 5.12, Transportation,** of this Draft EIR analyzes and concludes the proposed Project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including the 2020-2045 RTP/SCS. As discussed above, SCAG has no authority over airport development. Nevertheless, the proposed Project would not conflict with the 2020-2045 RTP/SCS related to greenhouse gases and transportation, and the development and operation of the proposed air cargo facility at the Airport would be consistent with land use and transportation strategies of the 2020-2045 RTP/SCS.

Striving for Sustainability

As discussed in **Section 3.0, Project Description**, of this Draft EIR, the proposed Project incorporates sustainable project design features and technology in both design and operation. The Air Cargo Sort Building would meet LEED certification standards. A 1.5-Megawatt Solar PV Panel system would be installed on the rooftop of the Air Cargo Sort Building with an option to

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28 Caltrans. "Freight Planning Fact Sheet: California – Air Cargo." 2010.

29 FAA. *FAA Aerospace Forecast Fiscal Years 2021-2041.*

30 California Transportation Commission. *Aviation Plan California Aviation System*.

construct an additional 0.75-megawatt rooftop system on the parking garage. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron. Moreover, the proposed Project proposes the operation of electric cargo planes, for which charging stations would be provided in the southeast corner of the Project site. Electric charging stations would also be provided in the employee and visitor parking lots, as well as the truckyard.

Protecting and Preserving Existing Transportation Infrastructure

Transportation infrastructure includes air transportation facilities in a location with access to major transportation corridors. The proposed Project would include demolition of existing buildings consisting of hangars, ancillary structures, and parking facilities, as well as existing landscaping and trees on the Project site. The proposed Project includes an Air Cargo Sort Building, truckyard, parking facilities, aircraft parking apron improvements, GSE parking, and aviation support facilities. OIAA would terminate existing leases, and non-OIAA tenant operations would vacate the facilities prior to construction of the proposed Project. OIAA occupies facilities on the Project site and their operations would be relocated to existing facilities both on- and off-airport. The proposed Project would redevelop underutilized Airport property, accommodate regional growth of air cargo operations, and integrate proposed Project air transportation facilities in a location with access to major transportation corridors. In addition to protecting air transportation, the proposed Project would not conflict with a program, plan, ordinance, or policy related to the roadway, transit, bicycle, and pedestrian facilities (see **Section 5.12, Transportation,** of this Draft EIR for further discussion). Therefore, the proposed Project would improve existing transportation infrastructure at and around the Airport.

Increasing Capacity Through Improved System Managements

As discussed above, the FAA and Caltrans forecast air cargo volume to increase in the region. The proposed Project would redevelop an underutilized portion of the Airport with an air cargo center that would accommodate a portion of the regional growth in air cargo operations forecasted by the FAA and Caltrans. The new air cargo center would provide an efficient facility for the proposed Project proponent's airside, landside, and sorting operations. Specifically, the Air Cargo Sort Building for the proposed Project would include state of the art technology to support the efficient processing of cargo. The proposed new air cargo center would increase air cargo capacity at the Airport.

Providing More Transportation Choices

While the proposed air cargo center would not provide more transportation choices for passengers, the proposed Project would increase the air cargo capacity at the Airport and increase transportation choices to meet the increased demand for air cargo services in the region, consistent with this theme.

Leveraging Technology

The proposed Project would use and operate electric-powered equipment, electric cargo planes, and electric charging stations in the employee and visitor parking lots and truckyard. This technology would be leveraged to ensure the Air Cargo Sort Building would meet LEED certification standards. For these reasons, the proposed Project would be consistent with this theme.

Responding to Demographic and Housing Market Changes

This theme addresses demographic and housing market changes. As the proposed Project would develop a new air cargo center on a site currently containing airport office buildings and support facilities, implementation of the proposed Project would not displace people or result in the demolition of existing housing that would require the construction of replacement housing; the proposed Project would also not impact housing stock. Therefore, this theme does not apply to the proposed Project. Nevertheless, the proposed Project would accommodate regional growth in air cargo operations, which is the result of demographic growth, and would not conflict with this theme.

Supporting Commerce, Economic Growth, and Opportunity

The proposed Project would accommodate a portion of the projected regional growth in air cargo operations as forecast by the FAA and Caltrans. By redeveloping an underutilized portion of the Airport, the proposed Project would maximize revenue generation from Airport property. The proposed Project would also increase employment opportunities in the region by creating approximately 1,315 jobs. According to the US Bureau of Labor Statistics, in June 2021 there was an unemployment rate of 7.9 percent (or 165,600 people were unemployed) in the Riverside-San Bernardino-Ontario area.[31] The 1,315 jobs generated by the proposed Project would be available to existing residents in the Riverside-San Bernardino-Ontario area. For these reasons, the proposed Project would support commerce, economic growth, and opportunity.

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31 U.S. Bureau of Labor Statistics. Riverside-San Bernardino-Ontario, CA. https://www.bls.gov/eag/eag.ca_riverside_msa.htm. Accessed: August 2021.

Promoting the Links Between Public Health, Environmental Protection, and Economic Opportunity

The Air Cargo Sort Building would meet LEED certification standards with the utilization of electric-powered equipment, electric cargo planes, and electric charging stations in the employee and visitor parking lots and truckyard. This Draft EIR provides decision makers, public agencies, and the public with analysis of the environmental effects of the proposed Project, discloses the significant environmental impacts that cannot be avoided, and identifies ways to reduce or avoid potentially significant environmental damage through the incorporation of mitigation measures into the proposed Project, as well as considerations of project alternatives. Specifically, **Sections 5.2, Air Quality; 5.5, Energy**; and **5.7, Greenhouse Gas Emissions,** of this Draft EIR analyze the public health and environmental effects of the proposed Project. As discussed above, the proposed Project would create approximately 1,315 jobs, thus providing economic opportunities for existing residents in the Riverside-San Bernardino-Ontario area. The proposed Project would promote links between public health, environmental protection, and economic opportunity.

Incorporating the Principles of Social Equity and Environmental Justice into the Plan

The ALP identifies the site as "Airport Development Area," which is the designation for future development.[32] The Project site is designated Airport and zoned ONT, Ontario International Airport by the City of Ontario in the City's General Plan and zoning ordinance.[33] [34] The proposed Project would be consistent with the ALP and ONT zoning district, which allow development of the proposed cargo facility. As the proposed Project would be developed entirely within Airport property and is adjacent to other Airport uses, the proposed Project would not physically divide an established community. As discussed above in **Section 4.2.3 Environmental Background**, the surrounding land uses are other airport-related facilities at the Airport, car rental businesses, commercial and industrial uses, the Cucamonga Channel, the former Southern Pacific Railroad tracks, and surface streets. No residential or other sensitive uses are located near the Project site. Approximately 88 percent of the population living in the surrounding area of the Project site is considered minorities, which is higher than both San Bernardino County and the City of Ontario. As discussed in **Section 5.1 Aesthetics, Section 5.3 Biological Resources, Section 5.4 Cultural Resources, Section 5.8, Hazards and Hazardous Materials,** and **Section 5.9 Hydrology**, no

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32 Ontario International Airport Authority. *Airport Layout Plan Narrative Report*.

33 City of Ontario. *The Ontario Plan*.

34 City of Ontario. "Zoning Map."

significant operational impacts from the proposed Project are anticipated. Additionally, as discussed in **Section 5.2, Air Quality**, it can be concluded based on the results of the Health Risk Assessment (HRA) that the proposed Project would result in less than significant health impacts for all sensitive receptors due to operational activities. Implementation of **Mitigation Measure NOI-1** in **Section 5.10, Noise**, would define a residential noise program for housing units affected by aviation noise generated by the Project would reduce impacts related to aircraft noise to unmitigated residences to less than significant levels. Further, no unique circumstances are known to exist that indicates adverse environmental impacts that are not significant represent disproportionately high and adverse effects for environmental justice purposes. Therefore, no disproportionately high or adverse impacts to minority or low-income populations would occur. As the proposed Project would not physically divide an established community or affect residential uses or populations, the proposed Project would not conflict with the principles of social equity and environmental justice.

For the reasons discussed above, the proposed Project would be consistent with the above themes of the 2020-2045 RTP/SCS.

South Coast Air Basin Air Quality Management Plan

The proposed Project lies in the northwest portion of the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (AQMD). Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law, and standards are detailed in the SoCAB Air Quality Management Plan (AQMP). Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants, including ozone (O_3), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOx), sulfur dioxide, coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead. VOC and NOx are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O_3, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. Based on the SoCAB AQMP, the SoCAB is designated nonattainment for O_3, $PM_{2.5}$, PM_{10}, and lead (Los Angeles County only) under the California and National AAQS, and nonattainment for NO_2 under the California AAQS. Analysis and consistency with the SoCAB AQMP are further discussed in **Section 5.02, Air Quality**.

Greenhouse Gas Emissions Reduction Legislation

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in a number of State regulations. Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction goals for the State of California:

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

AB 32, the Global Warming Solutions Act (2006), was passed by the State legislature on August 31, 2006, to place the State on a course toward reducing its contribution of GHG emissions. AB 32 established a legislative target for the year 2020 goal outlined in Executive Order S-03-05. CARB prepared its first Scoping Plan in 2008 that outlined the State's plan for achieving the 2020 targets of AB 32.

In 2008, SB 375 was adopted to connect passenger-vehicle GHG emissions reduction targets for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled (VMT) and vehicle trips.

In September 2016, Governor Brown signed SB 32, making the Executive Order B-15-30 goal for year 2030 of a 40 percent reduction below 1990 levels by 2030 into a Statewide-mandated legislative target. CARB issued an update to its Scoping Plan in 2017, with programs for meeting the SB 32 reduction target.

Executive Order B-55-18 sets a goal for the State to achieve carbon neutrality no later than 2045 and to achieve and maintain net negative emissions thereafter. SB 100 would help the State reach the goal set by Executive Order B-55-18 by requiring that the State's electricity suppliers have a source mix that consists of at least 60 percent renewable/zero carbon sources in 2030 and 100 renewable/zero carbon sources in 2045. Analysis and consistency with GHG legislation is further discussed in **Section 5.07, Greenhouse Gas Emissions**.

Senate Bill 743

On September 27, 2013, SB 743 was signed into law and started a process that has fundamentally changed transportation impact analysis for CEQA compliance. With the adoption of SB 375, the State signaled its commitment to encourage land use, transportation planning

decisions, and investments that reduce VMT, and contribute to the reduction of GHG emissions, as required by the California Warming Solutions Act of 2006 (AB 32).

SB 743 generally eliminates auto delay, level of service, and other similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts under CEQA. Pursuant to the CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code § 21099[b][1]).

Pursuant to SB 743, the Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743 on December 28, 2018. Under the new guidelines, VMT-related metric(s) that evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects, were required beginning July 1, 2020. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements for evaluation of level of service, but these metrics can no longer be the basis for determining transportation impacts under CEQA. SB 743 is further discussed in **Section 5.12, Transportation**.

Regional Water Quality Control Board, Region 8

Under the Porter-Cologne Water Quality Act, California's water quality control law, the State Water Resources Control Board has ultimate control over water quality policy and allocation of State water resources. Through its nine Regional Water Quality Control Boards, the State Water Resources Control Board carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan. The Airport, including the Project site, is in the Santa Ana River Basin, Region 8.

The Water Quality Control Plan for the Santa Ana River Basin was last updated in 2019. This Basin Plan gives direction on the beneficial uses of the State waters within Region 8; describes the water quality that must be maintained to support such uses; and provides programs, projects, and other actions necessary to achieve the standards in the basin plan. Analysis of water quality impacts of the proposed Project is further discussed in **Section 5.9, Hydrology and Water Quality**.

Ontario Plan

The Ontario Plan is the City of Ontario's policy and implementation framework that guides the long-term growth and improvement of the Ontario community. The Ontario Plan contains the following six components:

1) Vision. This provides the purpose and mission for governance. The central them of the Vision is a sustained, community-wide prosperity which continuously adds value and yields benefits.
2) Governance Manual. This establishes a set of goals and policies to promote consistent City of Ontario leadership. The leadership is based on the principles of regional leadership, transparency, long-term value, accountability, and inclusivity.
3) Policy Plan.
4) City Council Priorities.
5) Implementation Plan.
6) Tracking and Feedback.[35]

The Ontario Plan was adopted in 2010. The Ontario Plan 2050 is currently being prepared by the City of Ontario.[36] The proposed Project is an aeronautical development and use that is within the Airport boundaries and is consistent with the ALP. As the use proposed Project is controlled by the FAA and the ALP, thus not by the City of Ontario, consistency with the Ontario Plan is not necessary for the proposed Project. However, for a conservative analysis, the Ontario Plan is discussed in the analyses in topical sections of this EIR related to consistency with applicable programs, plans, and policies.

4.5 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Cumulative impacts are defined as "two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15130[b]). They are the changes caused by the incremental effects of a project combined with the incremental effects from other past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects occurring over a period of time.

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35 City of Ontario. *The Ontario Plan.* June 2021. "Fact Sheet." https://www.ontarioplan.org/wp-content/uploads/sites/4/2021/08/TOP_2050_Fact-Sheet_REVISED_2021-05-08.pdf. Accessed March 2022.

36 City of Ontario. *The Ontario Plan.*

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable. It further states that this discussion shall reflect the level and severity of the impact and likelihood of occurrence, but not in as much detail as the project.

The information used in an analysis of cumulative impacts comes from one of two sources:

a. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, projects outside of the control of the agency.
b. A summary of projections in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, that described or evaluated regional or area-wide conditions contributing to the cumulative impact.

The cumulative impact analyses in this EIR use a combination of sources A and B. Depending on the environmental category, the cumulative impact analysis may use either source.

A list of approved and reasonably foreseeable projects near the proposed Project are listed in **Table 4.2: Cumulative Related Projects**. This list includes projects located near the Airport (labeled 1 through 25) as well as project located within the Airport (labeled A through H). **Figure 4.6: Related Cumulative Projects**, shows where these projects are relative to the Project site. Please refer to sections in **Section 5.0: Environmental Analysis**, for a discussion of the environmental impacts associated with cumulative development.

TABLE 4.2
CUMULATIVE RELATED PROJECTS

Map Number	Project Description	Location/APN	Residential Units	Commercial Building SF	Industrial Building SF	Entitled	Under Construction	Environmental Review In Process
1	Industrial Development	NEC of Airport Drive/ Haven Avenue APN: 0211-222-66			200,291	X		
2	Top Golf - Recreation	2714 East 4th Street		50,000 (Site 600,000)			X	
3	Palmer Apartments / Commercial Retail	SEC of Vineyard/ Inland Empire Blvd. APN: 0110-311-52, 53, 54 and 55	950	5,000			X	
4	IKEA-Retail Development	APNs: 0110-321-74, 75, 76 and 0110-321-29 and 77		329,850				X
5	Hyatt Dual Hotel 265 Rooms	SEC of Archibald/ Inland Empire APNs: 0210-191-29 thru 32		157,370		X		
6	Townhomes	SWC of Via Alba/ Via Villagio APN: 0210-204-40	72				X	
7	Townhomes	NEC of Ontario Center Parkway/ Via Alba APN: 0210-204-26	110				X	

TABLE 4.2
CUMULATIVE RELATED PROJECTS

Map Number	Project Description	Location/APN	Residential Units	Commercial Building SF	Industrial Building SF	Entitled	Under Construction	Environmental Review In Process
8	Retail Shopping Center	SEC of Haven Ave. and 4th Street. APNS: 0210-531-06 thru 14		91,163		X		
9	Extended Stay Hotel 138 rooms	5060 East 4th Street APN 0238-012-30		57,060				X
10	Cambria Hotel 124 Rooms	535 N Turner Avenue APN: 0210-192-24		83,500		X		
11	Industrial Development	SEC of Jurupa/Milliken APN: 0238-121-75			168,172			X
12	Industrial Development	NEC of Haven Ave. and 60 FWY			281,000	X		
13	Industrial Development	SWC of Milliken and 60 FWY			393,334	X		
14	Industrial Development	NWC of Riverside Dr/ Milliken Ave.			295,991	X		
15	Industrial Development	SWC Riverside Dr. and Hamner Ave.			968,092	X		

TABLE 4.2
CUMULATIVE RELATED PROJECTS

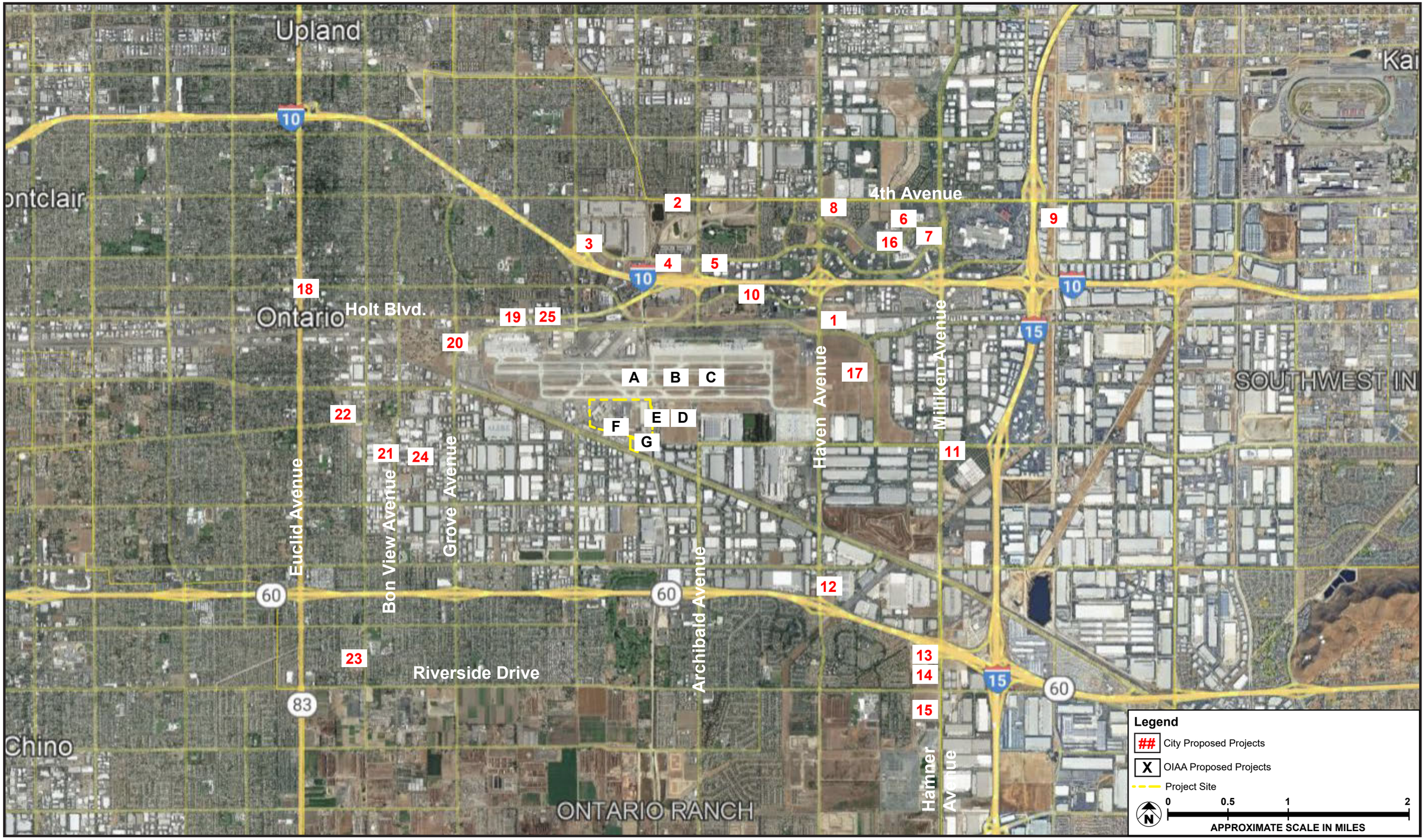
Map Number	Project Description	Location/APN	Residential Units	Commercial Building SF	Industrial Building SF	Entitled	Under Construction	Environmental Review In Process
16	Adept	4th Street south to Concours' between Via Asti and Via Oiemonte	691	70,538				X
17	California Logistic Center	Airport Drive south to Jurupa Street between Haven Avenue and Double Day Avenue			4,285,380			X
18	Mixed-Use	NEC of Euclid Ave. and C Street	144	4,500		X		
19	Industrial Development	1486 East Holt Blvd.			26,000	X		
20	Mixed-Use	1001 East Holt Blvd.	42	12,119				X
21	Industrial Development	1516 South Bon View			31,500			X
22	Industrial Development	Sec of Sultana Ave. and Belmont			60,455			X
23	Residential	2862 South Campus Avenue	92				X	

TABLE 4.2
CUMULATIVE RELATED PROJECTS

Map Number	Project Description	Location/APN	Residential Units	Commercial Building SF	Industrial Building SF	Entitled	Under Construction	Environmental Review In Process
24	Industrial Development	1612 South Cucamonga Ave.			211,358		X	
25	Industrial Development	1650 East Holt Blvd.			83,416		X	
A	Reconstruct Connector Taxiways and Relocate South Electrical Vault	ONT Airfield and west of Tower Dr.						X
B	Rehabilitate Runway 8R-26L and Connector Taxiways Phase 1	ONT Airfield						X
C	Rehabilitate Runway 8R-26L and Connector Taxiways Phase 2	ONT Airfield						X
D	Southeast Cargo Expansion	East of Tower Dr.			185,300			X
E	Radio Tower Relocation	West of Tower Dr.						X

TABLE 4.2
CUMULATIVE RELATED PROJECTS

Map Number	Project Description	Location/APN	Residential Units	Commercial Building SF	Industrial Building SF	Entitled	Under Construction	Environmental Review In Process
F	Avion Roadway Realignment	W Terminus of Jurupa Avenue and E. Avion Road						X
G	Golden Bridge Project	South of E. Avion Road			125,000			X



SOURCE: City of Ontario and Ontario International Airport Authority - November 2021

FIGURE **4.6**

Meridian Consultants

Related Cumulative Projects

340-001-21

5.0 ENVIRONMENTAL ANALYSIS

In accordance with Section 15126 of the State CEQA Guidelines, Section 5 examines the direct and indirect project and cumulative environmental effects resulting from the construction, and operation of the proposed Project. Where significant impacts are identified, feasible mitigation measures are recommended and discussion is provided to determine the level of impact after the implementation of mitigation measures.

Potential impacts related to the following environmental topics are evaluated in this Section:

5.1 Aesthetics
5.2 Air Quality
5.3 Biological Resources
5.4 Cultural Resources
5.5 Energy
5.6 Geology and Soils
5.7 Greenhouse Gas Emissions
5.8 Hazards and Hazardous Materials
5.9 Hydrology and Water Quality
5.10 Noise
5.11 Public Services: Fire and Police
5.12 Transportation
5.13 Tribal Cultural Resources
5.14 Utility and Service Systems

FORMAT OF ENVIRONMENTAL TOPIC SECTIONS

Each environmental topic section listed above will include the following main subsections:

5.X.1 Introduction. This describes the purpose of analysis for the environmental topic and referenced documents used to complete the analysis.

5.X.2 Environmental Setting.

5.X.2.1 Existing Conditions. This subsection describes the existing physical environmental conditions (environmental baseline) related to the environmental topic being analyzed.

5.X.2.2 Regulatory Background. This subsection describes applicable federal, state, and local plans, policies, and regulations that the proposed Project must address and may affect its implementation.

5.X.3 Environmental Impact Analysis.

5.X.3.1 **Thresholds of Significance.** This subsection sets forth the thresholds of significance (significance criteria) used to determine whether impacts are "significant." The thresholds of significance used to assess the significant of impacts are based on those provided in Appendix G of the CEQA Guidelines.

5.X.3.2 **Methodology.** This subsection provides a description of the methods used to analyze the impact and determine whether it would be significant or less than significant.

5.X.3.3 **Project Impacts.** This subsection provides an analysis of the impact statements for each identified significance threshold. The analysis of each impact statement is organized as follows:

- A statement of the CEQA threshold being analyzed.
- The Draft EIR's conclusion as to the significance of the impact.
- An impact assessment that evaluates the changes to the physical environment that would result from the proposed Project.
- An identification of significance comparing identified impacts of the proposed Project to the significance threshold with implementation of existing regulations, prior to implementation of any required mitigation.

5.X.4 **Cumulative Impacts.** This subsection describes the potential cumulative impacts that would occur from the Project's environmental effects in combination with other cumulative projects (See **Table 4-2: Cumulative Related Projects**).

5.X.5 **Plans, Policies, and Programs.** This section lists the applicable laws and regulations discussed in **5.X.2.2: Regulatory Background**, that would reduce potentially significant impacts.

5.X.6 **Level of Significance Before Mitigation.** A determination of the significance of the impacts after the application of applicable existing regulations and regulatory requirements.

5.X.7 **Mitigation Measures.** For each impact determined to be potentially significant after the application of applicable laws and regulations (as listed in **5.X.5: Plans, Policies, and Programs**), feasible mitigation measure(s) will be identified for implementation. Mitigation measures include enforceable actions to:

- Avoid a significant impact;
- Minimize the severity of a significant impact;
- Rectify an impact by repairing, rehabilitating, or restoring the effected physical environment;
- Reduce or eliminate the impact over time through preservation and/or maintenance operations during the life of the Project; and/or
- Compensate impacts by replacing or providing substitute resources or environmental conditions.

5.X.8 **Level of Significance after Mitigation.** This section provides the determination of the impact's level of significance after the application of regulations, regulatory requirements, and mitigation measures.

5.X.9 **References.** This provides the sources and links to documents used and cited in the preparation of this section.

IMPACT SIGNIFICANCE CLASSIFICATIONS

The below classifications are used throughout the impact analysis in this Draft EIR to describe the level of significance of environmental impacts. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines.

- **No Impact.** The Project would not change the environment.
- **Less Than Significant.** The Project would not cause any substantial, adverse change in the environment.
- **Less Than Significant with Mitigation Incorporated.** The Draft EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and Unavoidable.** The Project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5.1.1 INTRODUCTION

This section of the Draft EIR describes the visual character and aesthetic setting of the Project site and evaluates the potential for the proposed Project to impact scenic vistas, the visual character and quality of the Project site, conflict with applicable zoning and other regulations governing scenic quality, and cause light and glare impacts. The analysis focuses on changes that would be seen from public viewpoints and provides an assessment of whether the proposed Project would impact the existing visual character of the proposed Project site and the surrounding area.

5.1.2 ENVIRONMENTAL SETTING

5.1.2.1 Existing Conditions

Visual Character

Project Site

The 97-acre Project site is located south of the Airport airfield and is developed with airport-related buildings and site improvements. The majority of the Project site is located north of East Avion Street with the remainder located between East Avion Street and Mission Boulevard west of South Hellman Avenue. Existing development includes abutting administrative offices, warehouses, and hangars on the western portion of the site, giving the appearance of large, connected buildings. The majority of the existing buildings are vacant.

Figure 5.1-1: Viewpoint Key Map – Existing Site identifies the location of eight existing viewpoints on and around the proposed Project site. As shown in **Figure 5.1-2: Viewpoint 1 and Viewpoint 2 – Existing Site**, the existing hangars located in the northwestern portion of the site are approximately three stories tall and the other buildings are generally two stories tall. Building colors range from white, gray, light brown, and off-white/beige. The western portion of the Project site also contains large, paved surfaces developed with driveways and parking for truck trailers and automobiles. As shown in **Figure 5.1-2**, the structures and paved areas to the west have not been maintained as they would if they were actively used.

The proposed Project site north of East Avion Street is surrounded by chain link fencing on the north, east, and west. A masonry wall and chain link fence along the north side of the existing East Avion Street alignment separates the road from existing uses to the north.

The northeast portion of the Project site consists of an aircraft apron and an open area currently used for storage of cargo containers. As shown in **Figure 5.1-3: Viewpoint 3 and Viewpoint 4 – Existing Site**, the southeast portion of the site contains a vacant hangar and training buildings previously used by the California Air National Guard, and a segment of East Avion Street located between the hangar and training buildings. The southeast portion of the Project site, adjacent to East Avion Street, is entirely paved with few mature trees clustered near the southeast corner. This area was fenced off and used for parking of truck trailers, as shown in **Figure 5.1-4: Viewpoint 5 – Existing Site**.

Ornamental landscaping exists at the South Secured Area Access Point (SAAP) located on the north side of the airfield at 2095 East Avion Street (see Viewpoint 6 within **Figure 5.1-5: Viewpoint 6 and Viewpoint 7 – Existing Site**). Otherwise, landscaping is sparse on the Project site and surrounding areas. A mixture of pines and deciduous trees are grouped near the entrance of the private road, which is planted with younger ornamental trees, leading to the South SAAP on East Avion Street. There are pine trees along both sides of existing East Avion Street. Large deciduous trees and palm trees also exist in the southeast portion of the Project site near the former Air National Guard facilities.

Surrounding Area

The visual character of the area around the Project site is dominated by airport facilities and activities, including aircraft operations. The Project site is surrounded by Airport and industrial uses, as shown in **Figures 5.1-1 through 5.1-7**. A mix of airport, commercial, and light industrial uses are to the east, west, and south, while airfield facilities are located to the north of the Project site, as described below.

- **North.** Taxiway 'S' runs along the northern perimeter of the Project site. It is the main parallel taxiway on the south side of the airfield. Taxiway 'S' has a 400-foot runway separation from Runway 8R-26L, the southern runway at the Airport. Beyond Taxiway 'S,' the former Southern Pacific Railroad tracks, airport terminals, parking lots, prime flight aviation services, airline cargo hangars, and commercial facilities are also located to the north. All structures further north consist of one and two stories except for the Airport's control tower, which is an estimated 70 feet tall or 6 stories. Car rental businesses and commercial facilities are located to the northeast on the southwest corner of South Haven Avenue and East Airport Drive. These structures consist of two-story buildings and associated surface parking lots.

- **East.** The Cucamonga Channel is adjacent to the eastern edge of the Project site. The segment of the channel adjacent to the site is an open concrete lined box-culvert and flows from north to south. Immediately east of the channel at the service road is the Airport's fire

station and the FAA Airport Traffic Control Tower (ATCT) is on the west side of Tower Drive. The fire station consists of a two-story building and associated surface parking lot. The FAA ATCT consists of a one-story building, associated surface parking lot, and a 6-story control tower. Across Tower Drive is a vacant lot, industrial and commercial facilities, and large warehouses, all consisting of one-story structures. There are few existing trees or landscaping except for a small number of pine trees, eucalyptus trees, palms, and other ornamental trees lining East Avion Street.

- South. This area consists of mainly one- and two-story warehouses, office buildings, and surface parking areas. South of East Avion Street and west of South Hellman Avenue is the Airport's Maintenance Division facility. The area south of the National Guard facility, at the southeast corner of the Project site, contains vacant buildings formerly occupied by General Electric. Mature eucalyptus trees line the buffer between the railroad and Mission Boulevard traveling east to west.

  Farther south is the Union Pacific Railroad/Metrolink right-of-way and Mission Boulevard, beyond which are industrial uses. An open drainage channel is located directly south of the Project site along the Airport boundary.

- West. Airport-related buildings and hangars, the intersection of East Avion Street at South Vineyard Avenue, and the new Guardian Jet hangar are west of the Project site. Industrial and commercial uses are located farther west. The hangars associated with Guardian Jet Center consist of two stories while the FedEx Ground Center and other office buildings are one story.

Light and Glare

Lighting at the Project site includes security lights on buildings, pole-mounted lights over paved lots and driveways, and security screening lights under the SAAP canopy. Portable construction lights were observed in the proposed parking garage area, south of East Avion Street, where truck trailers were parked. Existing structures on the Project site generate little glare because reflective glass or brightly painted surfaces is minimal. Lighting surrounding the Project site include the airfield lights to guide aircraft movement and pole-mounted lighting along public streets.

Visual Resources

Scenic Vistas

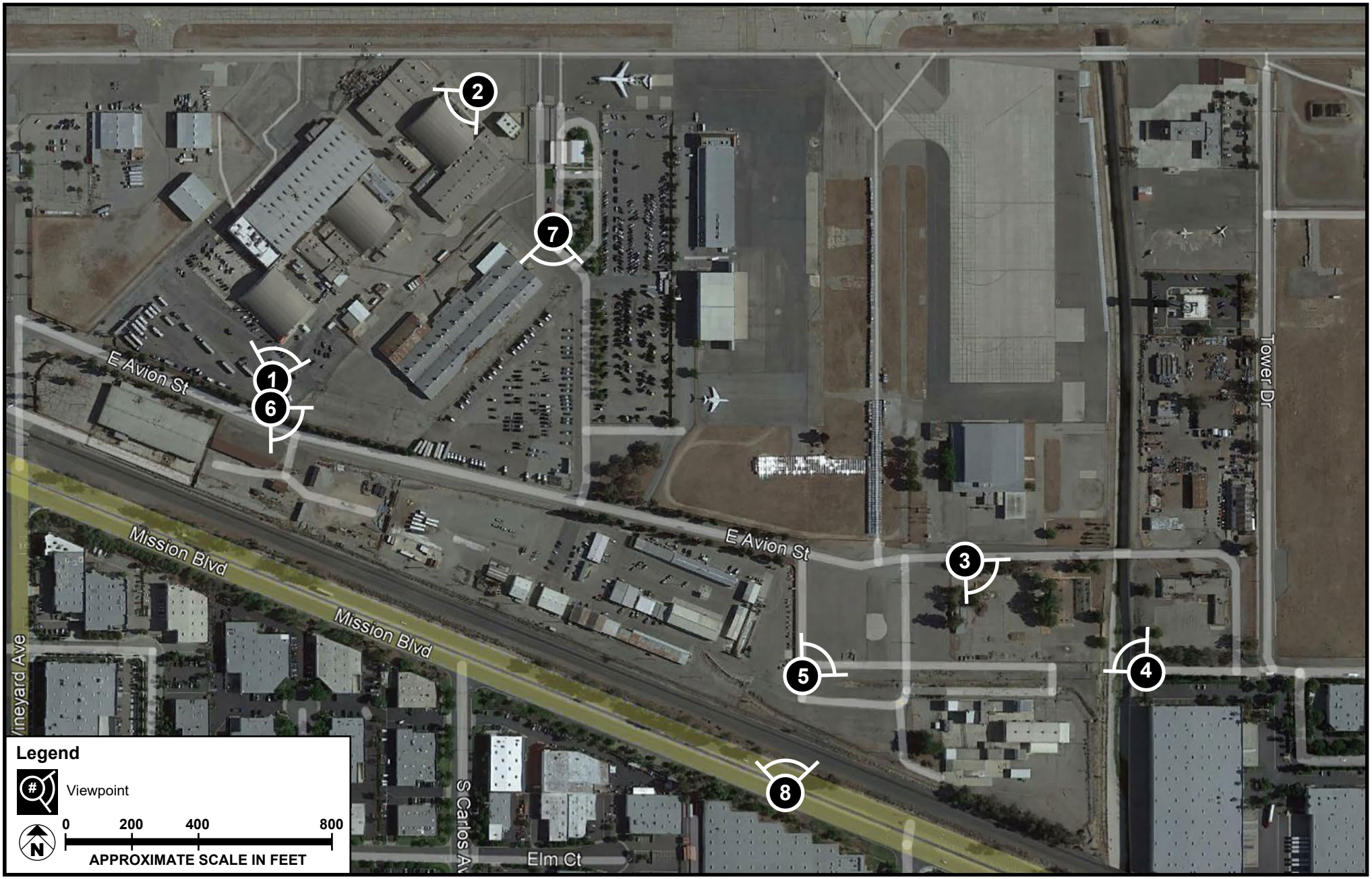
The dominant visual resources in the vicinity of the Project site are the San Gabriel Mountains to the north. Less dominant, long-distance views include the Jurupa Mountains and the San Bernardino Mountains to the east, the Santa Ana Mountains to the south, and Chino Hills to the southwest. Additionally, Mission Boulevard, located south of the Project site, is a City-designated primary scenic resource, as discussed further below, for available views of the San Gabriel Mountains. The Project site is entirely disturbed and neither the Project site nor other properties in the project vicinity provide substantial views of any water bodies, mountains, hilltops, or other significant visual resources.

Viewsheds

Based on the relatively flat terrain of the Project site and surrounding area, views of the Project site are limited and are primarily defined by the presence of intervening structures or vegetation that block views to the site.

Public views of the Project site are available from East Avion Street and Mission Boulevard, which run parallel to and south of the proposed Project site. Views of the Project site along East Avion Street include long-distance, partial views of the San Gabriel Mountains to the north. East Avion Street begins east of the Project site, crossing over the Cucamonga Channel and continuing west, traveling the length of the Project site. As shown in **Figure 5.1-6: Viewpoint 8 – Existing Site**, views along Mission Boulevard traveling northwest include portions of the Project site to the north. The site, as viewed from Viewpoint 8, consists of a flat gravel area with airport uses on the Project site north of East Avion Street and the San Gabriel Mountains in the background. As such, the existing airfield and associated structures on the Project site partially obscure the full view of the mountains.

Views of most of the Project site north of East Avion Street are limited from Mission Boulevard. Existing structures located south of East Avion Street, as well as a continuous line of tall utility poles with cross-arms and multiple strings of high utility lines running northwest between Mission Boulevard and East Avion Street, obstruct or interfere with views of the Project site from Mission Boulevard. Additionally, Mission Boulevard is at a lower grade than the Project site and the Union Pacific railroad, which is adjacent to Mission Boulevard to the north and separates the Project site from Mission Boulevard.



SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

FIGURE **5.1-1**

Meridian Consultants

Viewpoint Key Map – Existing Site

332-001-21

Existing Viewpoint 1

Existing Viewpoint 2

SOURCE: Meridian Consultants LLC - 2022

FIGURE **5.1-2**

Meridian Consultants

Viewpoint 1 and Viewpoint 2 – Existing Site

Existing Viewpoint 3

Existing Viewpoint 4

SOURCE: Meridian Consultants LLC - 2022

FIGURE **5.1-3**

Meridian Consultants

Viewpoint 3 and Viewpoint 4 – Existing Site

Existing Viewpoint 5

SOURCE: Meridian Consultants LLC - 2022

FIGURE **5.1-4**

Meridian Consultants

Viewpoint 5 – Existing Site

Existing Viewpoint 6

Existing Viewpoint 7

SOURCE: Meridian Consultants LLC - 2022

FIGURE **5.1-5**

Meridian Consultants

Viewpoint 6 and Viewpoint 7 – Existing Site

Existing Viewpoint 8

SOURCE: Meridian Consultants LLC - 2022

FIGURE **5.1-6**

Meridian Consultants

Viewpoint 8 – Existing Site

332-001-21

Scenic Highways

There are no State Designated or Eligible Scenic Highways within the vicinity of the Project site. The nearest officially State Designated Scenic Highway is a segment of State Route 91 (SR-91 Santa Ana/East Anaheim), located approximately 16 miles southwest of the Project site in Orange County.[1] The nearest Eligible State Scenic Highway is State Route 142 (SR-142 Orange County/Peyton Drive) which is approximately 9.5 miles southwest of the Project site.

As stated above, the Mission Boulevard corridor is a City-designated primary scenic resource.[2] Mission Boulevard has a wide landscaped median and runs east–west immediately south of the Airport and the Project site. This corridor is designated as a primary scenic resource because of the mostly unobstructed views of the San Gabriel Mountains available to the north from Mission Boulevard. However, as the existing Airport contains numerous buildings between one and three stories, these views are partially obstructed along the portion of Mission Boulevard adjacent to the Airport. In addition, the continuous line of tall utility poles with cross-arms and multiple strings of high utility lines running northwest between Mission Boulevard and East Avion Street interfere with views of the San Gabriel Mountains available to the north from Mission Boulevard.

5.1.1.2 Regulatory Background

State

California Department of Transportation (Caltrans) Scenic Highway Program

The California Scenic Highway Program is maintained by the California Department of Transportation (Caltrans) and identifies scenic highway corridors for preservation and protection of aesthetic value. Caltrans maintains a list of routes that are "adopted" and "eligible." A highway may be designated scenic based on the amount of natural landscape visible by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the

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1 Caltrans. "California State Scenic Highway System Map." https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed November 2021.

2 City of Ontario. *Ontario Plan Environmental Impact Report*. Ch. 5.1 Aesthetics. Page 5.1-6. https://www.ontarioplan.org/wp-content/uploads/sites/4/2016/05/31672.pdf. Accessed February 2022.

traveler's enjoyment of the view.[3] The State Scenic Highway System includes a list of highways that are either eligible for designation, or are currently designated, as scenic highways. Eligible routes are those that are proposed for further study and may be officially designated when a local jurisdiction adopts a scenic corridor protection program and applies to Caltrans for scenic highway approval.

Local

City of Ontario

The Ontario Plan

The Ontario Plan serves as the City's General Plan, which is mandated by State law. The Ontario Plan states long-term goals, principles, and policies for achieving Ontario's Vision and is used for guidance for the proposed Project as applicable, determined by the OIAA. The following elements are relevant to the proposed Project.[4]

Community Economics Element

The Community Economics Element articulates the City's approach to developing and maintaining the community's economy and its relationship to the City's fiscal health, creates a framework to attract investment in the City, and establishes policies for economic development. The following goals and policies of the Community Economics Element relate to visual and scenic resources:

Goal CE-2: A City of distinctive neighborhoods, districts, and corridors, where people choose to be.

- **CE-2.1:** *Development Projects.* We require new development and redevelopment to create unique, high-quality places that add value to the community.
- **CE-2.2:** *Development Review.* We require those proposing new development and redevelopment to demonstrate how their projects

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3 Caltrans. "California State Scenic Highways." https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed November 2021.

4 City of Ontario. *The Ontario Plan*. "Policy Plan." https://www.ontarioca.gov/Ontarioplan/Policyplan. Accessed October 2022.

will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

Community Design Element

The Community Design Element of the Ontario Plan establishes goals and policies to enhance the City's image and identity, and to ensure physical improvements—including site design, landscaping, building design and orientation, architectural details, and building materials—enhance the value and livability of the City. The following goals and policies relate to visual and scenic resources.

Goal CD-1: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

- **CD-1.1:** *City Identity.* We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

Goal CD-2: A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.

- **CD-2.1:** *Quality Building Design and Architecture.* We encourage all development projects to convey visual interest and character through:
  1. Building volume, massing, and height to provide context-appropriate scale and proportion;
  2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
  3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

- **CD-2.7:** *Sustainability.* We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive

solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.

- CD-2.9: *Landscape Design.* We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.
- CD-2.10: *Parking Areas.* We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:
    1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field.
    2. Structured parking: façade articulation, screening, appropriate lighting, and landscaping.
    3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.
- CD-2.12: *Site and Building Signage.* We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.

Ontario International Airport Authority

Ontario Airport Land Use Compatibility Plan (ALUCP)

Airport Land Use Compatibility Plans are documents that address airport impacts and provide implementation techniques to ensure the development of compatible land uses around airports. The Ontario International ALUCP addresses land use impacts around the Ontario International Airport. The ALUCP includes provisions for Airspace Protection Zones, which include a composite of the various airspace surfaces prepared in accordance with 14 CFR Part 77, the United States Standards for Terminal Instrument Procedures (TERPS), and applicable obstruction clearance standards published by the Federal Aviation Administration (FAA). The airspace surfaces reflect both the existing and ultimate runway configurations and have been merged into a single set of

airspace protection zones. To determine the allowable heights of future objects, the underlying ground elevation is compared with the elevation of the controlling portions of the 14 CFR Part 77, TERPS, and One-Engine Inoperative (OEI) surfaces. Additionally, the City's Development Code states that "Properties within the Airport Influence Area (AIA) established by the Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP."[5] The Project site is located within an area where building heights of 100 feet to 200 feet are allowed.[6] As discussed in **Section 4.0 Environmental Setting** of this EIR, the Ontario Airport Land Use Compatibility Plan (ALUCP) does not impose any zoning restrictions or other regulations relating to the aviation or aeronautical operations and development at the Airport.[7] [8] [9] [10] [11] [12] The Project site is located at the Airport in an area identified for Future Aeronautical Development on the Airport Layout Plan, included as Exhibit 1-6 in the ALUCP. The proposed Project includes aircraft apron areas and a fixed base air cargo facility, which is an anticipated and allowed aviation-related use under the ALUCP.

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5 City of Ontario. Municipal Code, Ontario Development Code. Table 5.03-3: ONT Development Standards. https://www.ontarioca.gov/Planning/Applications. Accessed November 2021.

6 City of Ontario. *Ontario International Airport Land Use Compatibility Plan (ALUCP) (July 2018 Amendment)*. Chapter 2. Policy Map 2-4. https://www.ont-iac.com/airport-land-use-compatibility-plan/. Accessed September 2022.

7 City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan*, Chapter 1 Background and Methodology. Functions of the Compatibility Plan. Page 1-2. July 2018 Amendment. https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

8 City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan*, Chapter 2 Procedural and Compatibility Policies. Section 1.3.1. Page 2-4. July 2018 Amendment. https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

9 City of Ontario. "Ontario International Airport – Inter Agency Collaborative." https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

10 California Public Utilities Code Section 21674(e).

11 Height restrictions within the boundaries of ONT are governed only by Federal Aviation Administration Regulations Part 77.

12 Caltrans. *California Airport Land Use Planning Handbook*. Page 6-7. October 2011.

Design and Construction Handbook

The OIAA Design and Construction Handbook (Handbook) has been established to standardize OIAA processes.[13] All projects within the Airport go through similar stages of development, review, scoping, award, and approval. The Design Standards within the Handbook address requirements for development through construction and operation of the project. Construction requirements consist of access to the Airport, security for construction areas, utility connections and shutdown procedures, road closure and traffic control, and construction safety. The following includes utilities design standards for operation:

12.01 Temporary Barricade & Enclosure Standards

1. Fencing shall be used at exterior construction locations as approved by the OIAA Owner's Representative. Contractor to submit renderings and barricade specifications to the OIAA for approval prior to installation. All fencing installation shall be secured or anchored using approved means and methods at the discretion of the OIAA.
2. Standard 6- or 8-foot construction fencing with post buried in the ground are required. Where K-rails or concrete barriers are used, screen chain link fencing shall be secured atop the barrier in order to reach the appropriate height. A screened 4-foot chain link fence shall be secured along the top of the concrete barriers. The top of the fence shall be uniform and even along the entire length of the fence.
3. Construction entrances shall be constructed of framed and screened chain linked fences. Gates shall be chained and locked at all times.
4. The Airport perimeter fence surrounding the Air Operations Area (AOA)[14] has a safety zone of ten (10) feet on either side of the fence. The Airport perimeter fence shall remain free of vehicles, stored materials, unattended equipment, or other property.
5. Construction Contractors working on the Airport requiring access to the AOA though gates not normally granted via the Secured Area Access Point (SAAP) locations, shall furnish guard personnel to control such gates and prevent access to the AOA by unauthorized persons and

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13 Ontario International Airport Authority. *Design and Construction Handbook (January 2019)*. https://www.flyontario.com/sites/default/files/oiaa_design_construction_handbook_final_january_2019_0.pdf. Accessed February 2022.

14 The AOA is located inside of the Airport Security Perimeter Fence and includes the aircraft movement areas, including but not limited to the following: runways, taxiways, in-field safety areas, taxi lanes, roadways, fuel storage facilities, aircraft aprons, cargo ramps, aircraft parking positions, passenger terminals, buildings and aircraft hangars.

vehicles. The preferred OIAA security vendor is Securitas. All OIAA Owners Representative shall approve the use of guards on a project site. All guards will be required to go through the badging process.

6. Plastic covers shall not be used in any portion of the AOA, except to cover pallets or containers and only where such covered pallets or containers are completely secured by netting. Plastic covers shall not be disposed of in any exterior waste containers within the boundaries of the Airport.
7. Barricades used on the airfield must have red flashers and comply with FAA Specifications, including Advisory Circular 150/5370.

Ontario International Airport Rules and Regulations

The Rules and Regulations Manual for the Airport is published under the authority of the OIAA to govern the use and control of the Airport. These rules and regulations are subject to the powers of the United States respecting commerce and empowers the Airport Chief Executive Officer (CEO), or his/her authorized representative, to enforce all Rules and Regulations adopted by the OIAA. Section 3 covers rules and regulations for aircraft operations within the Airport. The following regulations apply specifically to the proposed Project:[15]

3.18 Aircraft Lighting During Hours of Darkness:

a. Every aircraft parked on unlighted ramp or apron areas shall have navigational/position lights illuminated or wingtips marked by delineation between the hours of official sunset and sunrise, or during periods of low visibility, except in areas designated by ONT Airside Operations such as ramp and apron areas which are properly illuminated during these hours.

b. All aircraft being taxied, towed, or otherwise moved on the ramp, apron or taxiways, shall proceed with navigational lights illuminated or approved alternative lighting between the hours of official sunset and sunrise, and during periods of low visibility. Aircraft unable to provide operational navigational lights require (dark tow) escort by ONT Airside Operations, (909) 214-7682 or (909) 214-7683.

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15 Ontario International Airport Authority (OIAA). "ONT Rules and Regulations." https://www.flyontario.com/corporate/rules-and-regulations. Accessed April 2022.

3.26 Aircraft Movement Area Lighting:

ONT is equipped with two (2) parallel runways: 08L-26Rand 08R-26L. Runways 26L, 26R, and 08L are equipped with FAA Instrument Landing Systems (ILS); Runway 08R is a visual approach only runway. As necessary, FAA ONT ATCT approves ILS Category II/IIIb low visibility approaches to ONT Runway 26L when Runway Visual Range (RVR) values are below 1800 feet and above 600 feet horizontal visibility. More information on low visibility aircraft operations is identified in Appendix 1, ONT LVO/Surface Movement Guidance Control System (LVO/SMGCS) Plan.

a. AMA lighting supporting the runway environment includes runway edge, centerline, and touchdown zone lighting systems; and a system of lighting and signs, which help to provide guidance to pilots on taxiways leading to/from active runways, which includes lighted signs, runway hold position guard lights, taxiway edge, and taxiway centerline lighting installed at every runway intersection and on every major taxiway at ONT.

5.1.3 ENVIRONMENTAL IMPACT ANALYSIS

5.1.3.1 Thresholds of Significance

The potential for the proposed Project to result in aesthetic impacts is based on Appendix G of the CEQA Guidelines and is as follows:

Would the project:

AES-1: Have a substantial adverse effect on a scenic vista?

AES-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

5.1.3.2 Methodology

The documentation of aesthetics involves establishing existing visual character, including resources and scenic vistas unique to the Project area. Visual resources are determined by identifying existing landforms, views (e.g., scenic resources such as natural features or urban characteristics), viewing points/locations, and existing light and glare (e.g., nighttime illumination). Guidance provided by the Ontario Plan and ONT Rules and Regulations are identified and used to assess the changes to the visual environment caused by the implementation of the proposed Project. Aesthetic effects are identified and qualitatively evaluated based on the proposed modifications to the existing setting, the viewer's sensitivity, and the above thresholds of significance AES-1 through AES-4 listed above. Viewer sensitivity to visual changes depends, in large part, on the activities in which they are engaged. For example, park visitors or travelers on designated scenic highways generally are considered more sensitive to visual changes than workers in an industrial area. Sensitive viewers near the Project site are those who work in the area or are traveling to/from the Airport on Mission Boulevard. The sensitivity of workers and Airport-related travelers to changes in the visual character of the Project site is considered low because the appearance of the Project site is not integral to either group's activities.

The analysis considers the compatibility of the proposed Project with the visual character of the surrounding area and potential to remove valued scenic elements and to block scenic vistas. The potential for proposed Project lighting and/or glare to adversely affect Airport activities were also assessed.

5.1.3.3 Project Impacts

Impact AES-1: Would the Project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact.

A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Aesthetic components of a scenic vista generally include (1) scenic quality, (2) sensitivity level, and (3) view access. Scenic vistas usually include areas with views of the coastline, mountains, or other prominent scenic features that are considered significant visual resources.

As discussed above, the dominant scenic resources in the City are the San Gabriel Mountains, which are visible to the north of the Project site along East Mission Boulevard. Mission Boulevard corridor has been designated a primary scenic resource by the City because of the available views of the San Gabriel Mountains. Other long-distance views generally available in the area

include the Santa Ana Mountains to the south and Chino Hills to the southwest of the Project site, which can be seen from East Avion Street adjacent to the Project site. Neither the Project site nor other properties in the vicinity of the Project site provide substantial views of any water bodies, mountains, hilltops, or any other significant visual resources.

Construction Impacts

On-site construction would occur in two phases. Phase 1 would be completed by third quarter 2025. After completion of Phase 1, relocation of existing uses and facilities in the Phase 2 area would occur, followed by the demolition of existing structures and site improvements in the Phase 2 area, including site preparation and grading, with remaining construction beginning in the third quarter of 2027. Phase 2 construction would be completed by 2029.

Construction would include demolition of the existing structures and improvements on the Project site, as well as development of the Air Cargo Sort Building, aircraft apron improvements, a parking structure, the Ground Support Equipment (GSE) Maintenance Building, an Aviation Line Maintenance Garage, roadway improvements, landscaping, and utilities improvements. Staging of construction equipment and materials will occur on-site.

Construction phases would include demolition, site clearing, and removal of existing structures, grading, construction of wet and dry utilities, and finally construction of the buildings and aircraft apron improvements.

The Project site is bordered by the existing airfield to the north, airport related structures to the east and south, East Mission Boulevard and Union Pacific Railroad/Metrolink tracks to the south, and additional structures and paved areas to the west. There is an existing 500- to 1,000-foot buffer between the southern edge of the Project site and East Mission Boulevard, where partial views of the San Gabriel Mountains are available. During Phase 1 and Phase 2 of the proposed Project, equipment would be staged on-site, which would have a minimal impact on scenic views from East Mission Boulevard looking north during proposed Project development. The existing views from East Mission Boulevard are largely obscured by existing buildings south of East Avion Street, mature trees, and through the right of way (ROW) that creates a buffer between Mission Boulevard and the Union Pacific Rail. Construction would be relatively brief, so any impacts to partial views from the proposed Project site would be minimal and occur over a short period of time. Additionally, the proposed Project would comply with the OIAA Handbook requirements for construction, including fencing.

For these reasons, the construction of the proposed Project would not have a substantial adverse effect on a scenic vista. Any impacts would be less than significant, and no mitigation is required.

Operation Impacts

After construction of the proposed Project, changes to the existing visual character along Mission Boulevard and Avion Street would result from the addition of the Air Cargo Sort Building and four-level parking structure with a bridge over East Avion Street, connecting it to the Air Cargo Sort Building.

The approximately 857,762-square-foot Air Cargo Sort Building would include a sorting facility and office space and is proposed to be constructed immediately adjacent to the aircraft apron. The Air Cargo Sort Building would be approximately 80 feet tall and include three levels: ground floor, second floor, and mezzanine. The building would be L-shaped and cargo sorting activities would occur in the longer east-west portion of the building, with most of the office space in the eastern wing of the building. In addition to the Air Cargo Sort Building, a GSE Maintenance Building and an Aviation Line Maintenance Garage are proposed in the infield area between the proposed Project aircraft taxi lanes and Taxiway 'S.' Both structures would be approximately 26,000 square feet in size. The GSE Maintenance Building would be a maximum of 20 feet tall and the Aviation Line Maintenance Garage would be a maximum of 18 feet tall, which would not be visible from Avion Street or Mission Boulevard compared to the Air Cargo Sort Building. A four-level parking structure for employees is proposed south of East Avion Street, across from the office wing of the Air Cargo Sort Building. The 347,600-square-foot parking garage would be rectangular in shape and approximately 50 feet in height. A pedestrian bridge over East Avion Street is proposed to connect the parking garage to the eastern office wing of the Air Cargo Sort Building. There will also be two (2) guard houses located at the entrance and exit of the truck drive, both sized 25 feet by 12 feet.

North of East Avion Street, which is the southern portion of the site, will be raised to match the elevation of the northern portion of the site adjacent to Taxiway 'S' while maintaining drainage to the southeast corner of the site. Approximately 67,000 cubic yards of soil would be cut on this portion of the site and approximately 132,800 cubic yards of soil would be imported to raise the site. Additionally, in order to reduce the amount of borrow/fill for the Project site and reduce the linear footage and height of a retaining wall, all pavement slopes will be designed as steep as possible while maintaining safety and efficiency of maneuvering aircraft. Terrace walls are proposed along the eastern, southern, and western perimeter of the Project site to accommodate the change in elevation, ranging from 2 feet in height on the west side of the Project site to 12 feet on the southeast corner of the Project site. A fence would be installed along the aircraft apron or Project site surface level for security, as well as around the perimeter of the site adjacent to East Mission Boulevard. This fence would be similar to the existing fence and would not obscure any existing available views of the San Gabriel Mountains to the north.

The proposed Project would include new landscaping along the northern and southern sides of East Avion Street. Landscaping would be planted along the southern edge of the Project site, around the truck and visitor parking entrances as well as in front of the entrance to the parking garage adjacent to the Air Cargo Sort Building. Plant varieties would include Desert Museum Palo Verde trees with complementary drought tolerant shrub and groundcover species. Some existing Canary Island Pine trees would be retained and incorporated into the landscape areas.

As shown in **Figures 5.1-2** through **5.1-8**, the existing buildings on the Project site range from approximately 30-45 feet in height. Existing views of the San Gabriel Mountains to the north of the Project site are limited since the Union Pacific Railroad tracks north of Mission Boulevard are at a higher grade than the road and because the structures along the airfield block many potential views north. Travelers along Mission Boulevard, however, will have views of the Air Cargo Sort Building. Partial views of the San Gabriel Mountains would be visible to those traveling along Mission Boulevard, past the existing mature eucalyptus trees lining the buffer between the railroad and Mission Boulevard, and the continuous line of tall utility poles with cross-arms and multiple strings of high utility lines in that same buffer area, as well as past the mature trees and structures further in the distance within the Airport boundaries to the north. However, most travelers along Mission Boulevard would not be facing north since the roadway travels east to west.

To illustrate the proposed Project's effects on the existing visual character of the area, a series of 3D visual representations of the proposed Project site were created at locations of public viewpoints available to the general public traveling to or near the proposed Project site along Mission Boulevard and East Avion Street, as shown in **Figure 5.1-7: Viewpoint Key Map – Conceptual View with Project**.

Conceptual Views 1 through **8** in **Figures 5.1-8** through **5.1-11** show overhead and ground-level views of the Air Cargo Sort Building, four-level parking structure, and the pedestrian bridge. **Conceptual View 1** shows a north-facing view including the Project site, the Airport runways, and uses north of the Airport, and in the background, the San Gabriel Mountains. **Conceptual View 2** shows a southwestern view of the proposed Project including Mission Boulevard just south of the site and the existing uses south of Mission Boulevard in the background, with long-distance views of the Santa Ana Mountains and Chino Hills to the southwest of the Project site. **Conceptual View 3** illustrates a northwest view of the Project site originating east of the Cucamonga Channel. From here, the Cucamonga Channel is visible east of the Project site and the San Gabriel Mountains; uses beyond the Airport are visible in the background. **Conceptual View 4** shows a northeast view of the four-level parking structure just north of Mission Boulevard and the Union Pacific Railroad tracks. The Airport and uses north of the Airport and the San Gabriel Mountains are also visible.

SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

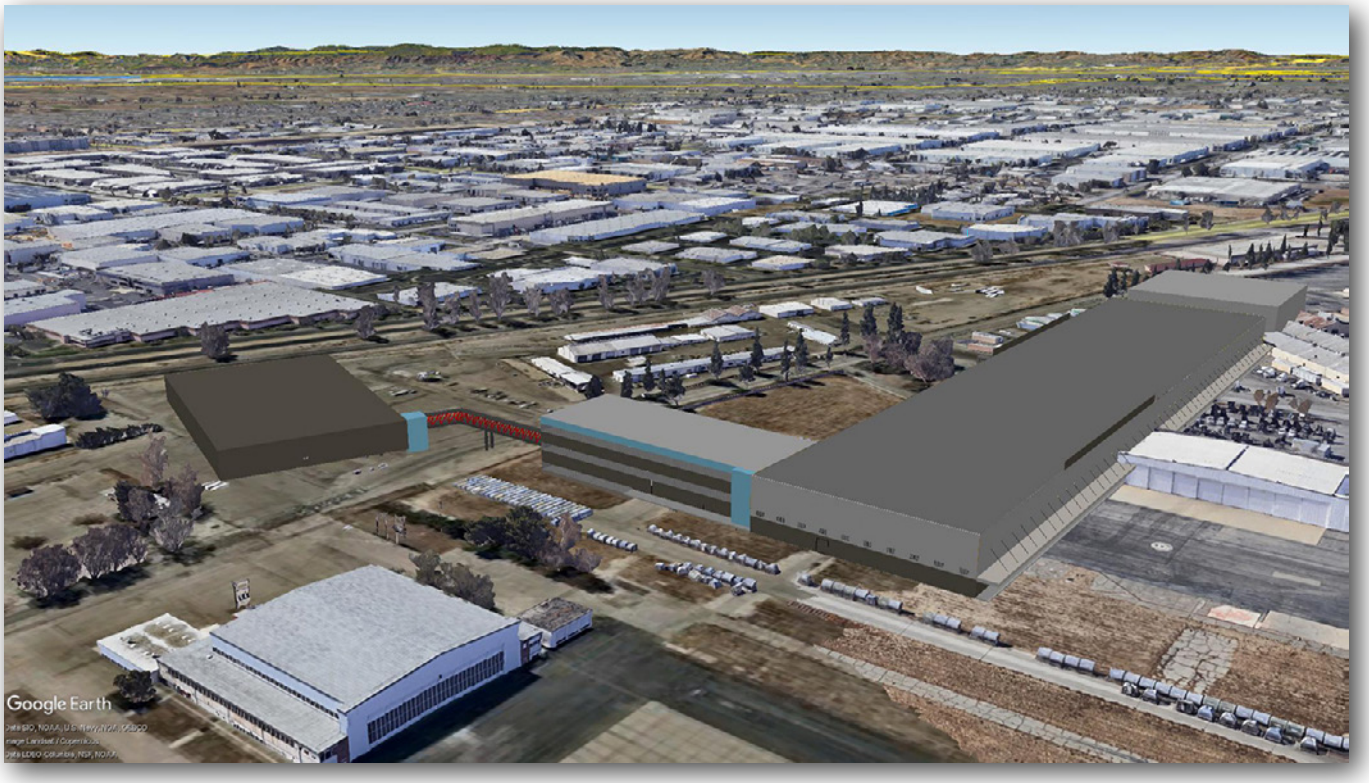
FIGURE **5.1-7**

Meridian Consultants

Viewpoint Key Map – Conceptual View with Project

332-001-21

Conceptual View 1



Conceptual View 2

SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

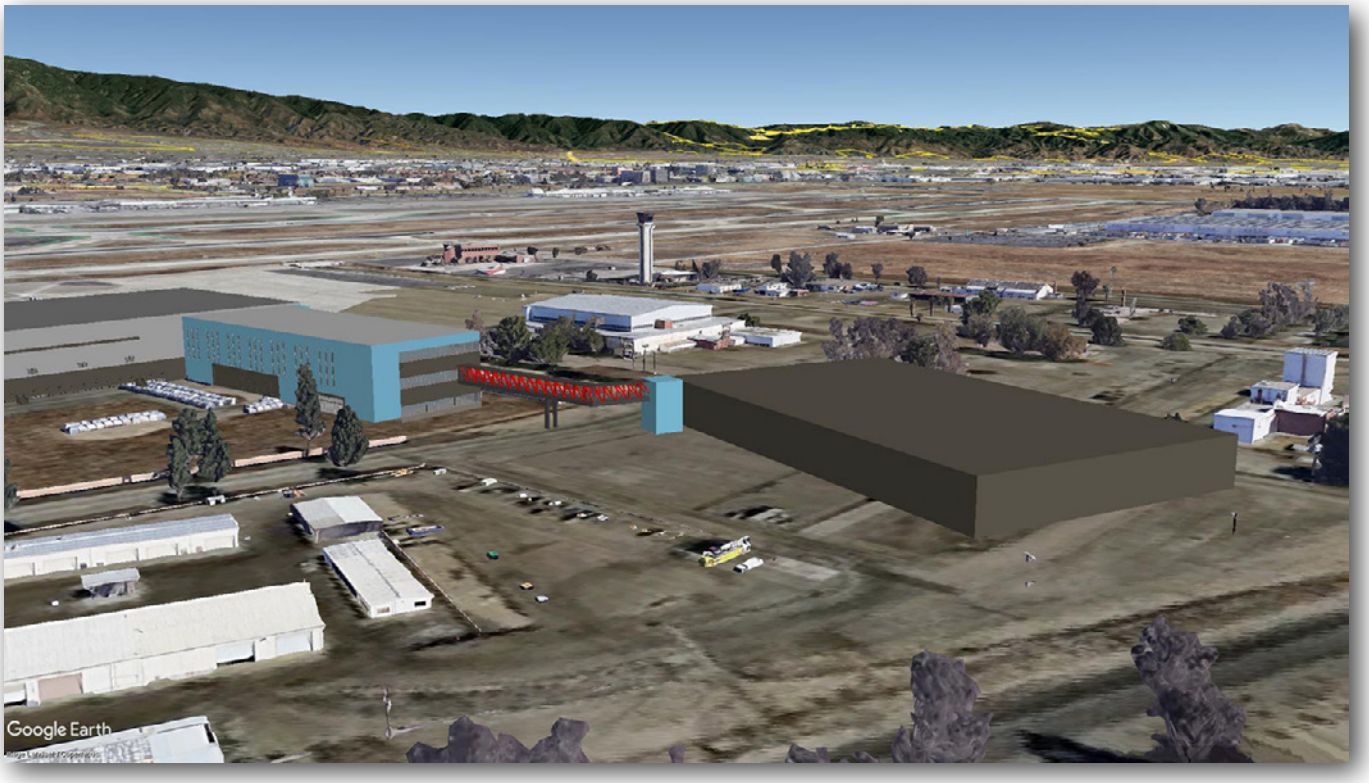
FIGURE **5.1-8**

Meridian Consultants

Viewpoint 1 and Viewpoint 2 – Conceptual View with Project

332-001-21

Conceptual View 3



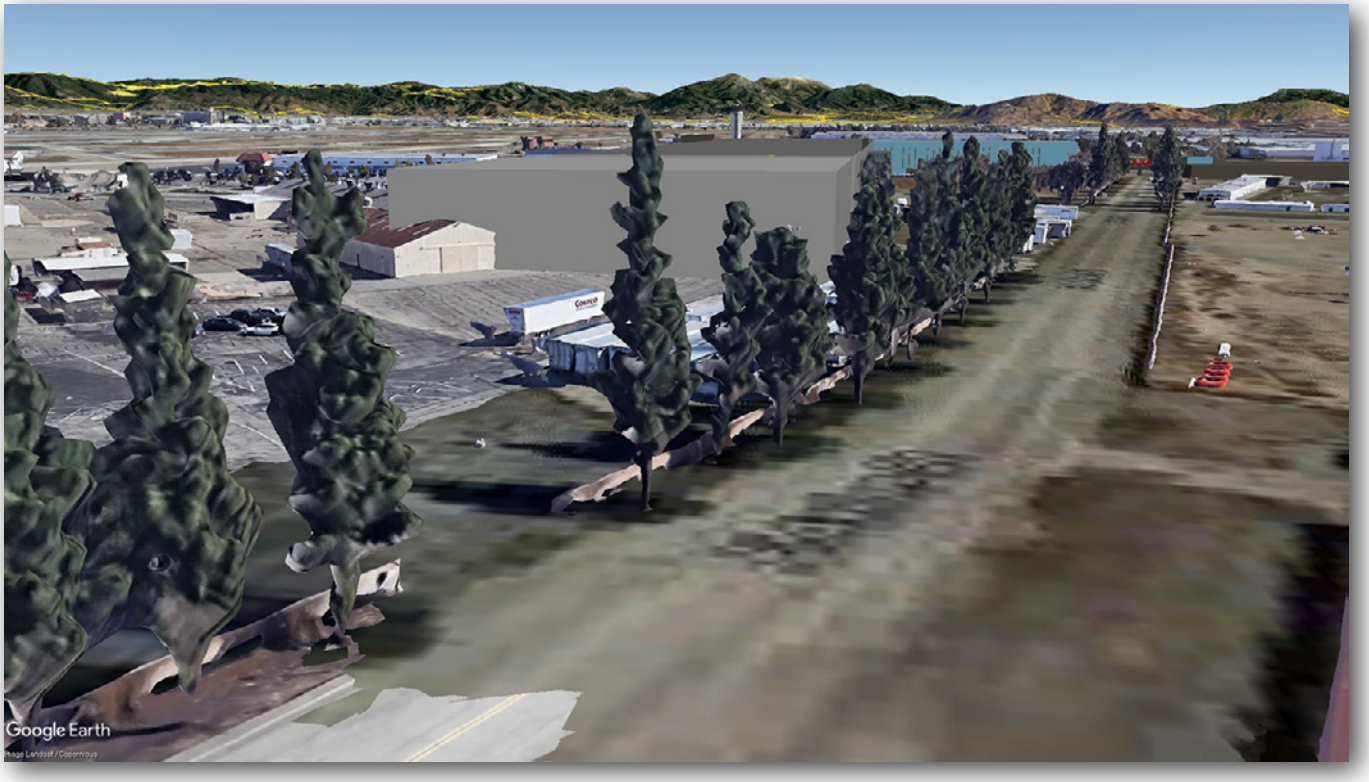
Conceptual View 4

SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

FIGURE **5.1-9**

Meridian Consultants

Viewpoint 3 and Viewpoint 4 – Conceptual View with Project



Conceptual View 5

Conceptual View 6

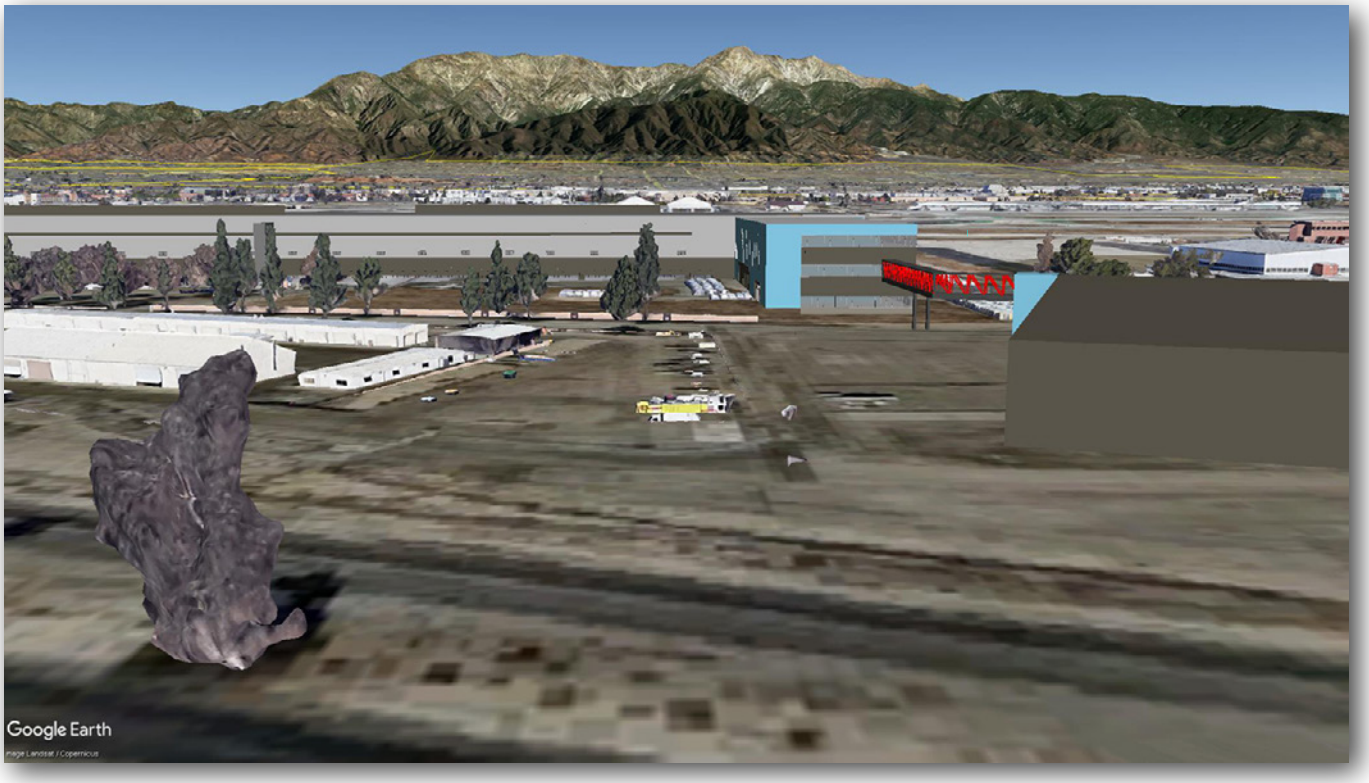
SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

FIGURE **5.1-10**

Meridian Consultants

Viewpoint 5 and Viewpoint 6 – Conceptual View with Project

Conceptual View 7



Conceptual View 8

SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

FIGURE **5.1-11**

Meridian Consultants

Viewpoint 7 and Viewpoint 8 – Conceptual View with Project

Conceptual Views 5 and 6 show the Project site traveling from east to west along East Avion Street. Conceptual View 7 shows the Air Cargo Sort Building facing south traveling from an access road to the north of the site. This viewpoint is located approximately 478 feet in front of the building, on Airport property. Long-distance views of the Santa Ana Mountains and Chino Hills can be seen above the top of the Air Cargo Sort Building.

Conceptual View 8 illustrates the view of the Project site traveling east to west along Mission Boulevard. From here, views of the existing uses beyond the Airport are visible, along with views of the San Gabriel Mountains.

As shown in Figures 5.1-8 through 5.1-11, the addition of the proposed Air Cargo Sort Building, four-level parking structure, connecting pedestrian bridge, the GSE Maintenance Building, and the Aviation Line Maintenance Building would not have a substantial effect on the currently available scenic vistas.

The Air Cargo Sort Building, with a proposed height of approximately 80-feet, would be taller than existing buildings within the vicinity of the Project site. Existing views of the San Gabriel Mountains are partially obstructed or interfered with by the existing buildings, tall utility poles and strings of high utility lines, and mature trees along the north side of East Mission Boulevard. The proposed Project would have minimal impacts to available views of the San Gabriel Mountains to the north, as shown in Figure 5.1-10 and Figure 5.1-11. The proposed Air Cargo Sort Building would be approximately 1,200 feet in length from east to west and the remainder of the site would contain the apron; existing long-distance views would continue to be available over these portions of the site. The GSE Maintenance Building and the Aviation Line Maintenance Building would be constructed north, adjacent to the Air Cargo Sort Building, but would be a maximum of approximately 20 feet in height. This would keep views relatively open around the Air Cargo Sort Building. The heights of the GSE Maintenance Building and the Aviation Line Maintenance Garage, at a maximum of 20 and 18 feet tall, respectively, have been approved by the FAA. These heights are similar to the existing buildings on the Project site and, therefore, would not alter existing views of scenic vistas. The proposed parking garage would be similar in height to the surrounding buildings and would not significantly impact the views from East Mission Boulevard. Additionally, all buildings would consist of neutral gray and brown tones that would be consistent with surrounding structures and complimentary with design of existing buildings in the area.

As discussed above, views of the Santa Ana Mountains and Chino Hills to the east and south would not be affected with implementation of the proposed Project. Development within this area of the City would not substantially alter the scenic views of the San Gabriel Mountains backdrop provided along Mission Boulevard because the peaks rise to 7,000 feet above mean

sea level (amsl).[16] For these reasons, the development of the proposed Project would not have a substantial adverse effect on a scenic vista. Therefore, impacts would be less than significant and no mitigation is required.

AES-2: **Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

No Impact.

The Project site is not located in the vicinity of a State Scenic Highway. Due to the distance and intervening land uses, no portion of the Project site or surrounding area is viewable from the officially designated R-91 or the eligible portion of the SR-142, which are approximately 16 miles southwest and 9.5 miles southwest of the Project site, respectively. Additionally, the Project site does not contain any scenic resources, such as rock outcroppings or trees, or historic buildings that would be damaged by the proposed Project. As such, the Project would not result in impacts related to the substantial damage of scenic resources within a State Scenic Highway. Therefore, impacts would be less than significant and no mitigation is required.

AES-3: **If the project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?**

Less Than Significant Impact.

The Project site is designated "Airport" in The Ontario Plan and zoned "ONT" – Ontario Airport zone and is consistent with Airport uses. Use of the Project site is subject to regulatory oversight by OIAA and the FAA through the approved Ontario International Airport Layout Plan (ALP) and Airport Land Use Compatibility Plan (ALUCP). The ALP serves as a guide for the Airport's future development and designates the Project site as "Airport Development Areas." However, as discussed above, the proposed Project is an aviation-related use that is anticipated and allowed under the ALUCP.

The proposed Project would consist of a newly constructed 80-foot-tall Air Cargo Sort Building. Other site improvements consist of a four-story parking structure south of the Air Cargo Sort Building, a 20-foot-tall GSE Maintenance Building, an 18-foot-tall Aviation Line Maintenance

16 City of Ontario. *The Ontario Plan Draft EIR*. Section 5.1 Aesthetics. https://www.ontarioplan.org/wp-content/uploads/sites/4/2016/05/31672.pdf. Accessed July 2022.

Garage, aircraft apron improvements, roadway improvements, a truck yard, and utility improvements.

Terrace walls are also proposed around the perimeter of the Project site for safety and security. The walls would range from 2 feet in height on the west side of the Project site to 12 feet on the southeast corner of the Project site. Other than the Air Cargo Sort Building, the parking structure, GSE Maintenance Building, Aviation Line Maintenance Garage, and terracing wall, all other improvements would be at ground level. The proposed heights of the GSE Maintenance Building and the Aviation Line Maintenance Garage would be similar to existing structures on the Project site and the Airport. The Air Cargo Sort Building, parking structure, GSE Building, Aviation Line Maintenance Garage, and terracing wall/fence would be constructed based on the Ontario Plan policies and the ALUCP related to scenic quality.

The City's Development Code states that "Properties within the Airport Influence Area (AIA) established by the Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP."[17] The proposed Project would include the Air Cargo Sort Building with a height of approximately 80-feet in height, which is within the 100 to 200-foot maximum allowable height for that area, as stated in the ALUCP.[18]

The proposed Project would be consistent with policies in The Ontario Plan applicable to the Airport and the regulations in the ALUCP. Therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality, and impacts would be less than significant.

AES-4: **Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Less Than Significant Impact.

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17 City of Ontario. Municipal Code, Ontario Development Code. Table 5.03-3: ONT Development Standards. https://www.ontarioca.gov/Planning/Applications. Accessed November 2021.

18 City of Ontario. *Ontario International Airport Land Use Compatibility Plan (ALUCP)*. Chapter 2. Policy Map 2-4. https://www.ont-iac.com/airport-land-use-compatibility-plan/. Accessed September 2022.

Construction Impacts

Construction activities would occur during daylight hours to the extent feasible. Existing lighting systems in operation during the construction period would be maintained.[19] Additional lighting during the construction period would be placed within and along the exterior of the Project site and would be available during night-time for on-site security and pedestrian safety purposes. There are no light sensitive uses within the vicinity of the Project site. As such, light resulting from construction activities would not substantially impact sensitive uses. Any construction lighting on-site would be temporary in nature and removed post construction and, therefore, would not substantially alter the character of surrounding uses or interfere with the performance of off-site activities. Therefore, construction of the proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and light and glare impacts associated with construction would be less than significant. No mitigation is required.

Operational Impacts

The proposed Project would not introduce a substantial source of light which would affect day or nighttime views in the area. The Project site presently produces exterior light from the existing structures, the surface parking area, and wall-mounted building lighting. Several light poles exist throughout the surface parking lots and are an existing source of light on the Project site.

Operation of the proposed Project would require lighting (both exterior and interior) that would be operational 7 days a week. As part of the proposed Project, exterior lighting would use energy efficient LED fixtures. The truck parking area would be illuminated using fixtures mounted on the building walls of the Air Cargo Sort Building and pole mounted light fixtures on the south side of the truckyard parking lot. The visitor parking lot would also be illuminated using fixtures mounted on the building walls of the Air Cargo Sort Building and supplemental pole-mounted light fixtures on the south side of the parking lot. The employee surface parking area will have similar lighting fixtures. The aircraft parking apron would include lighting to support nighttime loading and unloading of aircraft and other aircraft servicing functions.

Outdoor lights would be designed and constructed to reflect light away from East Avion Street and adjacent properties. Additionally, lighting would be installed such that light would not shine directly at or cause reflections on the Airport's taxiways or runways. All new lighting would comply with applicable regulations of the 2019 State Building Energy Efficiency Standards (Title 24). The proposed lighting sources would be similar to other lighting sources in the Project

19 OIAA. *Design and Construction Handbook*. Section 12.01 (C.) (5.).

vicinity and would not generate artificial light levels that are out of character with the surrounding area, which is densely developed and characterized by a high degree of human activity and ambient light during the day and night. As such, the intensity of Project-related lighting would be concentrated on-site with little potential to create perceptible changes in ambient lighting intensity at off-site, light-sensitive locations.

Glare associated with the proposed Project design would be minimal and efforts would be taken to reduce as much glare as possible. The proposed Air Cargo Sort Building would be comprised of concrete tilt-up walls. There is a minimal amount of glass along the top and center of the Air Cargo Sort Building. As necessary, treatments to minimize reflection would be utilized on windows to further reduce glare. The GSE Maintenance Building and Aviation Line Maintenance Garage include very little reflective exterior surfaces and, as such, would not have any impacts to the surroundings due to glare. The view from public vantage points is obstructed due to setbacks and the proposed retaining wall/fence, so there would be minimal visible glare from the Project site towards these vantage points.

Nighttime lighting and glare sources from the proposed Project would also include lighting from interior and exterior building lighting, security lighting, signage, parking lot lighting, and vehicle headlights. The nighttime glare produced by these sources would be similar to the existing nighttime glare produced by the buildings and parking lots on the Project site, as well as the surrounding industrial uses, and would not result in enough glare to be considered substantial or affect nighttime views because lighting would be consistent with the development regulations in the Ontario Plan and ALUCP. For these reasons, the proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the surrounding urban area and Project impacts would be less than significant. No mitigation is required.

5.1.4 CUMULATIVE IMPACTS

As defined in Section 15130 of the State CEQA Guidelines, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for aesthetics. Cumulative projects in the City would have the potential to result in a cumulative impact to aesthetic resources if, in combination, they would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of a neighborhood, community, State scenic highway, or localized area, such as a designated landmark, historic resource, trees, or rock outcropping. As shown in **Table 4.2: Cumulative Related Projects in Section 4.0**, projects A through H occur on Airport property and are all currently in progress. Projects D through E are within the vicinity of the Project site on the south

portion of the Airport and include the Southeast Cargo Expansion project, Radio Tower Relocation project, Avion Roadway Realignment project, and Golden Bridge project. The Avion Roadway Realignment project intersects the existing Project site; however, it would be completed before Phase 1 of the proposed Project. Each of these projects, as well as all proposed projects in the City, would be subject to their own consistency analysis for policies and regulations governing scenic quality and would be reviewed for consistency with any applicable specific plan goals, policies, and Zoning Code development standards. If there were any potential for significant impacts to aesthetics, appropriate mitigation measures would be identified to reduce and/or avoid impacts related to aesthetics.

As described above, implementation of the proposed Project would not result in a significant impact related to aesthetics. The proposed Project and all related projects are required to adhere to Airport, City, and State regulations designed to reduce and/or avoid impacts related to aesthetics. Additionally, projects within the Airport and the proposed Project would be subject to FAA and OIAA approval to avoid impacts related to aesthetics and aviation. With compliance with these regulations, no significant cumulative impacts related to aesthetics would result from the proposed Project, related projects, and other growth; and the proposed Project's contribution to cumulative impacts would not be cumulatively considerable.

5.1.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, impacts would be less than significant.

5.1.6 MITIGATION MEASURES

No mitigation measures are required.

5.1.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with local, State, and federal plans, policies, and programs would ensure impacts related to aesthetics would be less than significant.

5.1.8 REFERENCES

California Public Utilities Code, Section 21674(e).

Caltrans. "California State Scenic Highway System Map." https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed November 2021.

Caltrans. "California State Scenic Highways." https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed November 2021.

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5.2.1 INTRODUCTION

This section of the Draft EIR evaluates the potential effects of the air emissions that would be generated by construction and operation of the proposed Project. The analysis also addresses consistency of the proposed Project with the air quality rules, regulations and policies set forth by the South Coast Air Quality Management District (SCAQMD), including those contained within its Air Quality Management Plan (AQMP). The analysis of air emissions generated by the proposed Project focuses on whether the proposed Project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold. The analysis in this section is based in part on the following technical report:

- RCH Group, *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, February 2023 (**Appendix 5.2-1**).

5.2.2 ENVIRONMENTAL SETTING

5.2.2.1 Air Quality Background

The Project site is located within the South Coast Air Basin (Air Basin), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and San Diego County to the south. The Air Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the Coachella Valley area in Riverside County. The regional climate within the Air Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Air Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

Air pollutant emissions within the Air Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbeque lighter fluid and hair spray. Mobile sources are emissions from motor vehicles, including tailpipe and

evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

The U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) designate air basins where air pollution levels exceed the State or federal ambient air quality standards (AAQS) as "nonattainment" areas. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. The federal and State standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations, such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, an area is considered "unclassified." Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. The USEPA approved California's SIP revisions for attainment of the 1997 8-hour ozone (O_3) National AAQS for the Basin in October 2019.

Ambient air pollution can cause public health concerns and can contribute to increases in respiratory illness and death rates. Air pollution can affect the health of both adults and children. The adverse health effects associated with air pollution are diverse and include cardiovascular effects, premature mortality, respiratory effects, cancer, reproductive effects, neurological effects, and other health outcomes.[1]

Criteria Air Pollutants and Health Effects

The criteria air pollutants and their precursors that are most relevant to current air quality planning and regulation in the Air Basin include, ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur dioxide

1 South Coast Air Quality Management District (SCAQMD), *2016 Air Quality Management Plan*, Appendix I: Health Effects (March 2017), https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-i.pdf?sfvrsn=14. Accessed November 2022.

(SO_2), and lead (Pb). In addition, volatile organic compounds (VOC) and toxics air contaminants (TACs) are a concern in the Air Basin but are not classified under AAQS.

The State and federal AAQS and their attainment status in the Air Basin for each of the criteria pollutants are summarized in **Table 5.2-1: Ambient Air Quality Standards and Attainment Status**. Under the federal standards, the Air Basin is currently designated as nonattainment for O_3, Pb, and $PM_{2.5}$. Under the State standards, the Air Basin is currently designated as nonattainment for O_3, PM_{10}, and $PM_{2.5}$.

TABLE 5.2-1
AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS

Criteria Pollutant	Standard	Averaging Time	Standard Concentration	Designation
Ozone (O_3)	NAAQS	1-Hour	0.12 ppm	Non-attainment (Extreme)
		8-Hour	0.08 ppm (1997)	Non-attainment (Extreme)
			0.075 (2008)	
			0.070 ppm (2015)	
	CAAQS	1-Hour	0.09 ppm	Non-attainment
		8-Hour	0.070 ppm	
Carbon Monoxide (CO)	NAAQS	1-Hour	35 ppm	Maintenance (Serious)
		8-Hour	9 ppm	
	CAAQS	1-Hour	20 ppm	Attainment
		8-Hour	9 ppm	
Nitrogen Dioxide (NO_2)	NAAQS	1-Hour	0.10 ppm	Attainment
		Annual	0.053 ppm	Maintenance
	CAAQS	1-Hour	0.18 ppm	Attainment
		Annual	0.030 ppm	
Sulfur Dioxide (SO_2)	NAAQS	1-Hour	75 ppb	Attainment
		24-Hour	0.14 ppm	
		Annual	0.03 ppm	
PM_{10}	NAAQS	24-Hour	150 µg/m^3	Maintenance (Serious)
	CAAQS	24-Hour	50 µg/m^3	Non-attainment
		Annual	20 µg/m^3	

TABLE 5.2-1 AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS				
Criteria Pollutant	**Standard**	**Averaging Time**	**Standard Concentration**	**Designation**
$PM_{2.5}$	NAAQS	24-Hour	35 µg/m^3	Non-attainment (Serious)
		Annual	15 µg/m^3 (1997)	Attainment
			12 µg/m^3 (2012)	Non-attainment (Serious)
	CAAQS	Annual	12 µg/m^3	Non-attainment
Lead (Pb)	NAAQS	3- months rolling	0.15 µg/m^3	Attainment[1]
Hydrogen Sulfide (H_2S)	CAAQS	1-Hour	0.03 ppm	Attainment
Sulfates	CAAQS	24-Hour	25 µg/m^3	Attainment

[1] *Partial Nonattainment designation in Los Angeles County portion of Basin only for near-source monitors.*

Sources: SCAQMD, NAAQS and CAAQS Attainment Status for South Coast Air Basin, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf, Accessed November 2022. USEPA, Nonattainment Areas for Criteria Pollutants (Green Book), *https://www.epa.gov/green-book*. Accessed November 2022.

Table 5.2-2: Airport Nonattainment and Maintenance Designations, summarizes the attainment status for the NAAQS and CAAQS for the zip code area the Airport is located in, according to CARB Ambient Air Quality Standards Designation Tool.[2]

TABLE 5.2-2 AIRPORT NONATTAINMENT AND MAINTENANCE DESIGNATIONS		
Levels	**Pollutant/Standard**	**Attainment Status**
NAAQS	Ozone (2008 standard)	Nonattainment – Extreme
	Ozone (2015 standard)	Nonattainment – Extreme
	CO	Maintenance – Serious
	NO2	Maintenance

2 CARB. "Ambient Air Quality Standards Designation Tool." https://ww2.arb.ca.gov/aaqs-designation-tool, zip code 91761. Accessed November 2022.

TABLE 5.2-2
AIRPORT NONATTAINMENT AND MAINTENANCE DESIGNATIONS

Levels	Pollutant/Standard	Attainment Status
	PM2.5 (2006 standard)	Nonattainment – Serious
	PM2.5 (2012 standard)	Nonattainment – Moderate
	PM10	Maintenance – Serious
CAAQS	Ozone	Nonattainment
	PM2.5	Nonattainment
	PM10	Nonattainment

Source: CARB. "Ambient Air Quality Standards Designation Tool." https://ww2.arb.ca.gov/aaqs-designation-tool. Zip code 91761. Accessed November 2022.

Elevated concentrations of certain air pollutants in the atmosphere have been recognized to cause notable health problems and consequential damage to the environment, either directly or in reaction with other pollutants. In the United States, such pollutants have been identified and are regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The pollutants discussed below are regulated by the USEPA and are subject to emissions control requirements adopted by federal, State, and local regulatory agencies. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted pertaining to them.

The USEPA established the National Ambient Air Quality Standards (NAAQS) to "provide public health protection, including protecting the health of 'sensitive' populations such as asthmatics, children, and the elderly," allowing "an adequate margin of safety." California Ambient Air Quality Standards (CAAQS) were "established to protect the health of the most sensitive groups in our communities" and "defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without any harmful effects on people or the environment."[3] The characteristics of each criteria pollutant and their health effects are briefly described below.

3 California Air Resources Board (CARB). "California Ambient Air Quality Standards." https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed November 2022.

Ozone (O_3)

O_3 is a highly reactive and unstable gas that is formed when reactive organic gases (ROGs), sometimes referred to as VOCs and NO_X, byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

According to USEPA, O_3 can cause the muscles in the airways to constrict, potentially leading to wheezing and shortness of breath. O_3 can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease.[4]

Long-term exposure to O_3 is linked to aggravation of asthma and is likely to be one of many causes of asthma development. Long-term exposures to higher concentrations of O_3 may also be linked to permanent lung damage, such as abnormal lung development in children.[5] According to CARB, inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms, and exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath.[6]

USEPA states that people most at risk from breathing air containing O_3 include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.[7] Children are at greatest risk from exposure to O_3 because their lungs are still developing and they are more likely to be active outdoors when O_3 levels are high, which increases their exposure.[8] According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to O_3 and other pollutants because they spend nearly twice as much time outdoors and engaged in

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4 US Environmental Protection Agency (USEPA). "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed November 2022.

5 USEPA, "Health Effects of Ozone Pollution."

6 USEPA, "Health Effects of Ozone Pollution."

7 USEPA, "Health Effects of Ozone Pollution."

8 USEPA, "Health Effects of Ozone Pollution."

vigorous activities compared to adults.[9] Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults, and are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults.

Carbon Monoxide (CO)

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

According to the USEPA, breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain and at very high levels, which are possible indoors or in other enclosed environments. CO can cause dizziness, confusion, unconsciousness, and death.[10] Very high levels of CO are not likely to occur outdoors; however, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease since these people already have a reduced ability for getting oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart, accompanied by chest pain which is also known as angina.

According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.[11] For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress; inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies, infants, elderly people, and people with anemia or with a

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9 USEPA, "Health Effects of Ozone Pollution."

10 USEPA. "Carbon Monoxide (CO) Pollution in Outdoor Air." https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution. Accessed November 2022.

11 CARB. "Carbon Monoxide & Health." https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health. Accessed November 2022.

history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO.

Nitrogen Dioxide (NO_2) and Nitrogen Oxides (NO_X)

NO_2 is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO), similar to O_3. NO_2 is also a byproduct of fuel combustion. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and there is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 ppm.

According to the USEPA, short-term exposures to NO_2 can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. According to CARB, controlled human exposure studies show that NO_2 exposure can intensify responses to allergens in allergic asthmatics.[12]

In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses.[13] Infants and children are particularly at risk from exposure to NO_2 because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration while in adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.

CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for NO_2 and there is only limited information for NO and NO_X, as well as large uncertainty in relating health effects to NO or NO_X exposure.[14]

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12 CARB. "Nitrogen Dioxide & Health." https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed November 2022.

13 CARB. "Nitrogen Dioxide & Health."

14 CARB. "Nitrogen Dioxide & Health."

Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$)

Particulate Matter (PM) consists of small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals, and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Sources of PM_{10} emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands.[15] Sources of $PM_{2.5}$ emissions include combustion of gasoline, oil, diesel fuel, or wood. PM_{10} and $PM_{2.5}$ may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO_2, NO_X, and certain organic compounds.

A consistent correlation between elevated ambient respirable and fine particulate matter (PM_{10} and $PM_{2.5}$) levels, and an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and the number of hospital admissions, has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and an increased mortality from lung cancer.

According to CARB, both PM_{10} and $PM_{2.5}$ can be inhaled, with some depositing throughout the airways; PM_{10} is more likely to deposit on the surfaces of the larger airways of the upper region of the lung, while $PM_{2.5}$ is more likely to travel into and deposit on the surface of the deeper parts of the lung, which can induce tissue damage and lung inflammation.[16] Short-term (up to 24 hours duration) exposure to PM_{10} has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits. The effects of long-term (months or years) exposure to PM_{10} are less clear, although studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer.

Short-term exposure to $PM_{2.5}$ has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. Long-term exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases,

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15 CARB. "Inhalable Particulate Matter and Health." (PM2.5 and PM10), https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm. Accessed November 2022.

16 CARB. "Inhalable Particulate Matter and Health."

and reduced lung function growth in children.[17] According to CARB, populations most likely to experience adverse health effects with exposure to PM_{10} and $PM_{2.5}$ include older adults with chronic heart or lung disease, children, and asthmatics. Children and infants are more susceptible to harm from inhaling pollutants such as PM_{10} and $PM_{2.5}$ compared to healthy adults because they inhale more air per pound of body weight than do adults, spend more time outdoors, and have developing immune systems.

While current PM regulations are focused on both PM_{10} and $PM_{2.5}$, there has been growing concern and research regarding the contribution of ultrafine particles (UFP) to the overall health impacts of PM. These very minute particles (less than 0.1 micron in diameter) have a different chemical composition than the larger PM fractions ($PM_{2.5}$ and PM_{10}). UFPs are emitted from almost every fuel combustion process, including diesel, gasoline, and jet engines. Although there are many sources of UFPs in the atmosphere, vehicle exhaust is the major contributor to UFP concentrations in urban areas, particularly in proximity to major roads. Toxicological studies have found that UFPs can be inhaled more deeply into the lung tissues and take a longer time to be cleared from the lungs compared to larger inhalable particles. Consequently, there is growing concern that people living in close proximity to roadways with high traffic volumes and other sources of combustion-related pollutants (e.g., airports, refineries, and railyards) may be exposed to high levels of UFPs.[18]

Sulfur Dioxide (SO_2) and Sulfur Oxides (SO_X)

Sulfur Dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, as well as from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X).

According to the USEPA, short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult.[19] According to CARB, health effects at levels near the State one-hour standard are those of asthma exacerbation, including bronchoconstriction, accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness,

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17 CARB. "Inhalable Particulate Matter and Health."

18 SCAQMD. *MATES V Final Report.* Appendix VII. http://www.aqmd.gov/docs/default-source/planning/mates-v/appendixvii_final.pdf?sfvrsn=4. Accessed November 2022.

19 USEPA. "Sulfur Dioxide (SO2) Pollution." https://www.epa.gov/so2-pollution/sulfur-dioxide-basics. Accessed November 2022.

especially during exercise or physical activity and exposure at elevated levels of SO_2 (above 1 parts per million [ppm]) which results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.[20] Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema), are most likely to experience the adverse effects of SO_2.[21,22]

Lead (Pb)

Lead (Pb) occurs in the atmosphere as particulate matter and is also considered a TAC. The combustion of leaded gasoline is the primary source of airborne lead in the Air Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles. However, because leaded gasoline was emitted in large amounts from vehicles when leaded gasoline was used for on-road motor vehicles, Pb is present in many urban soils and can be resuspended in the air. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary Pb smelters.

Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, as well as the cardiovascular system, and affects the oxygen carrying capacity of blood. The Pb effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage.[23] Excessive Pb exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain.

While the SCAQMD CEQA Air Quality Handbook contains numerical indicators of significance for Pb, project construction and operation would not include sources of Pb emissions and would not exceed the numerical indicators for Pb.

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20 CARB. "Sulfur Dioxide & Health." https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed November 2022.

21 CARB. "Sulfur Dioxide & Health."

22 USEPA. "Sulfur Dioxide (SO2) Pollution."

23 CARB. "Lead & Health." https://ww2.arb.ca.gov/resources/lead-and-health. Accessed November 2022.

Volatile Organic Compounds (VOCs)

VOCs include any compound of carbon, excluding CO, CO_2, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and, thus, a precursor of ozone formation. VOC emissions often result from the evaporation of solvents in architectural coatings. Reactive organic gases are any reactive compounds of carbon, excluding methane, CO, CO_2 carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. ROG emissions are generated from the exhaust of mobile sources.[24] Both VOCs and ROGs are precursors to ozone and the terms can be used interchangeably.[25]

Toxic Air Contaminants (TACs)

Toxic Air Contaminants (TACs), or hazardous air pollutants (HAPs), are defined by the USEPA as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. For consistency within this document, they will be referred to as TACs. TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. TACs may exist as PM_{10} and $PM_{2.5,}$ or as vapors (gases). TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources. The emission of a TAC does not automatically create a health hazard. Other factors, such as the amount of the TAC, its toxicity, how it is released into the air, the weather and the terrain, all influence whether the emission could be hazardous to human health. Emissions of TACs into the air can be damaging to human health and to the environment. Human exposure to TACs at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. TACs deposited onto soil or into lakes and streams affect ecological systems and eventually human health through consumption of contaminated food. The carcinogenic potential of TACs is a particular public

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24 SCAQMD. Appendix A: Calculation Details for CalEEMod (May 2021), http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6. Accessed November 2022.

25 Both VOC and ROGs are precursors to ozone so they are summed in the CalEEMod report under the header ROG. For the purposes of comparing the ROG value to a VOC significance threshold, the terms can be used interchangeably.

health concern because many scientists currently believe that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer.[26]

The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a State law requiring facilities to report emissions of TACs to air districts.[27] The program is designated to quantify the amounts of potential TACs released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks. The Air Toxics "Hotspots" Program (AB 2588) identified over 200 TACs, including the 188 TACs identified in the CAA.[28]

The USEPA has assessed this expansive list and identified 21 TACs as Mobile Source Air Toxics (MSATs).[29] MSATs are compounds emitted from highway vehicles and nonroad equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. USEPA also extracted a subset of these 21 MSAT compounds that it now labels as the nine priority MSATs: 1,3-butaidene, acetaldehyde, acrolein, benzene, diesel particulate matter (DPM)/diesel exhaust organic gases, ethylbenzene, naphthalene, and polycyclic organic matter (POM). While these nine MSATs are considered the priority transportation toxics, USEPA stresses that the lists are subject to change and may be adjusted in future rules.[30]

Diesel Exhaust

According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled engines (i.e., Diesel Particulate Matter (DPM)

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26 USEPA. "Hazardous Air Pollutants." https://www.epa.gov/haps. Accessed November 2022.

27 CARB. "General Information About 'Hot Spots'." https://ww2.arb.ca.gov/general-information-about-hot-spots. Accessed November 2022.

28 CARB. "AB 25188 Air Toxics 'Hot Spots' Program." https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots. Accessed November 2022.

29 USEPA. "Air Toxics Risk Assessment Reference Library." Volume 1 Technical Resource Manual. April 2004.

30 US Department of Transportation Federal Highway Administration. "Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents."

differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances).

Diesel exhaust is composed of two phases: gas and particle, and both phases contribute to the health risk. The gas phase is composed of many of the urban TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; on-road diesel engines of trucks, buses and cars, and off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

The most common exposure to DPM is breathing air that contains diesel exhaust. The fine and ultra-fine particles are respirable (similar to $PM_{2.5}$), which means that they can avoid many of the human respiratory defense mechanisms and enter deeply into the lungs. Exposure to DPM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere.

Diesel exhaust causes health effects from long-term chronic exposures. The type and severity of health effects depends upon several factors including the amount of chemical exposure and the duration of exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to only DPM, but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes chronic health effects as well as having cancer-causing potential.

DPM also contributes noncancer health effects in the same manner as $PM_{2.5}$ exposure. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to noncancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.[31]

31 CARB. "Overview: Diesel Exhaust & Health." https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed November 2022.

Gasoline Exhaust

Similar to diesel exhaust, gasoline is composed of two phases: gas and particle, and both phases contribute to the health risk. The gas phase is composed of the same TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Gasoline exhaust is primarily emitted from light-duty passenger vehicles. The compounds in the gas and particles phases can cause health effects from short- and long-term exposures similar to those described under the TAC and particulate matter discussions above.

Jet Fuel Exhaust

CO_2 is the largest component of aircraft emissions, accounting for approximately 70 percent of the exhaust.[32] Water vapor is also a product of jet fuel consumption, making up about 30 percent of the exhaust.[33] All the remaining emissions, which include NO_x emissions that chemically react with VOCs to form O_3, make up less than one percent of the exhaust plume.[34] Additional particles include hydrocarbons, soot, and sulfates. Aircraft ground and low altitude operations produce the same emissions described above, with an added impact on local air quality resulting from NO_x, SO_x, hydrocarbon, and soot particulates.

Sustainable Aviation Fuel

Sustainable Aviation Fuel (SAF)[35] is jet fuel made from renewable materials, such as waste biomass or food scraps. SAF has the potential to significantly reduce CO_2 emissions compared to traditional jet fuel. Other major benefits include local air quality improvements because of lower sulfur content and reductions in soot pollution. San Francisco International Airport (SFO)

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32 FAA. Office of Environment and Energy. *Aviation Emissions, Impacts & Mitigation: A Primer*. January 2015. www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/primer_jan2015.pdf. Accessed November 2022.

33 FAA. *Aviation Emissions, Impacts & Mitigation: A Primer*.

34 FAA. *Aviation Emissions, Impacts & Mitigation: A Primer*.

35 San Francisco International Airport. "Sustainable Aviation Fuel." https://www.flysfo.com/about/sustainability/reducing-carbon-emissions/sustainable-aviation-fuel. Accessed November 2022.

is taking the lead in making widespread use of SAF a reality, on its own campus, throughout California, and across North America.

SFO has sought to expand SAF use but found the infrastructure and supply chain logistics to be a significant barrier. As a result, SFO brought together ten partner airlines and fuel producers to sign the industry's first voluntary Memorandum of Understanding (MOU), committing their partnership further to delivering an Infrastructure, Logistics, Supply Chain, and Financing Study to identify the key strategies that SFO can deploy to increase SAF volumes at the Airport. The airline signatories to SFO's SAF MOU together represent over 66 percent of all flights at SFO.

Visibility Reducing Particles

Visibility-reducing particles are any particles in the atmosphere that obstruct the range of visibility by creating haze.[36] These particles vary in shape, size, and chemical composition, and come from a variety of natural and manmade sources including windblown metals, soil, dust, salt, and soot. Other haze-causing particles are formed in the air from gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles), which are the major constituents of fine PM, such as $PM_{2.5}$ and PM_{10}, and are caused from the combustion of fuel. CARB's standard for visibility reducing particles is not based on health effects, but rather on welfare effects, such as reduced visibility and damage to materials, plants, forests, and ecosystems. The health impacts associated with $PM_{2.5}$ and PM_{10} are discussed above under Particulate Matter.

5.2.2.2 Existing Conditions

Regional Setting

The Southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Air Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential.

36 CARB. "Visibility Reducing Particles and Health." https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed November 2022.

The greatest air pollution throughout the Air Basin occurs from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. O_3 concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. However, as discussed earlier, the Air Basin fails to meet the national standards for O_3 and $PM_{2.5}$, as well as the State standards for O_3, PM_{10}, and $PM_{2.5}$.

As shown, the Air Basin is designated under federal or State ambient air quality standards as nonattainment for O_3, PM_{10}, and $PM_{2.5}$. O_3, NO_X, VOC, and CO concentrations have been decreasing in the Air Basin since 1975 and are projected to continue to decrease through 2031.[37] These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the Air Basin continue to increase, air pollutant concentrations are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles.

In 1984, as a result of public concern for exposure to airborne carcinogens, CARB adopted regulations to reduce the amount of TAC emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article,[38] which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

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37 SCAQMD. *Final 2016 Air Quality Management Plan.* http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=11. Accessed November 2022.

38 Ralph Propper, Patrick Wong, Son Bui, Jeff Austin, William Vance, Alvaro Alvarado, Bart Croes, and Dongmin Luo. *Ambient and Emission Trends of Toxic Air Contaminants in California.* American Chemical Society: Environmental Science & Technology, 2015.

SCAQMD has prepared an Air Basin-wide air toxics study, the Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V).[39] MATES V field measurements were conducted at ten fixed sites (the same sites selected for MATES III and IV) to assess trends in air toxics levels. MATES V also included measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in SCAQMD's programs such as permitting, Air Toxics Hot Spots (AB 2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic non-cancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic non-cancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazard Assessment (OEHHA), CalEPA risk assessment methodologies, and modern statistical methods to examine the trends over time.

According to the MATES V Data Visualization Tool, the area around the Airport has a cumulative cancer risk of 600 in 1 million.[40] The closest MATES V monitoring station to the Airport is the Inland Valley San Bernardino station located at 1436 Arrow Route in Fontana.[41] As shown in **Figure 5.2-1: Trend in Average Cancer Risk at MATES Monitoring Sites**, cancer risks at the Inland Valley San Bernardino station have decreased compared to past MATES data.

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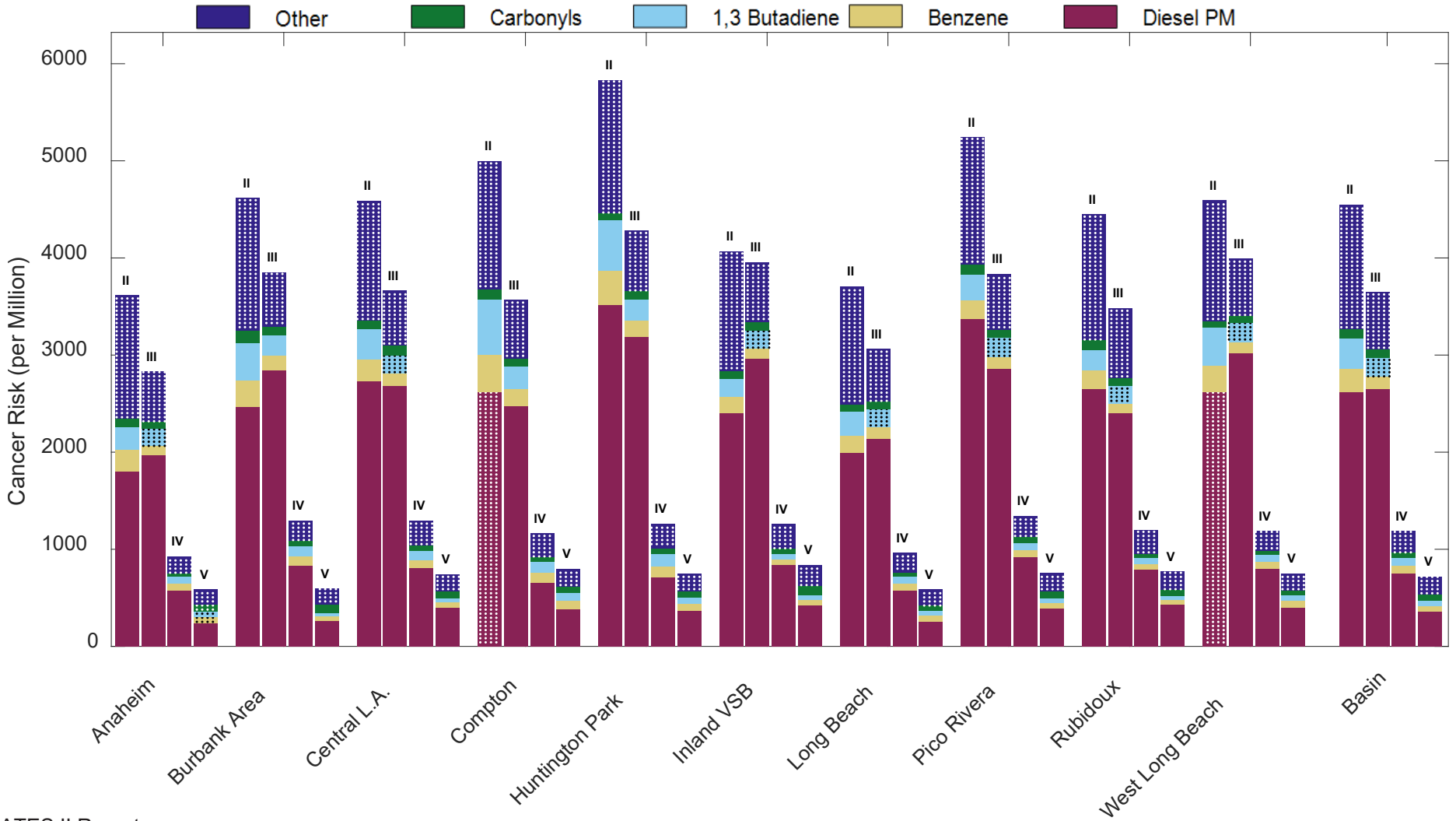
39 SCAQMD. *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report*. https://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report-9-24-21.pdf?sfvrsn=6. Accessed November 2022.

40 SCAQMD. "MATES V Data Visualization Tool." https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=view_38. Accessed November 2022.

41 SCAQMD. "Map of MATES V Air Monitoring Stations." http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v/mates-v-air-monitoring-dashboard. Accessed November 2022.



SOURCE: SCAQMD, MATES V Final Report, August 2021.

FIGURE **5.2-1**

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Trend in Average Cancer Risk at MATES Monitoring Sites

332-001-21

Local Setting

Existing Pollutant Levels at Nearby Monitoring Stations

The SCAQMD has divided its jurisdictional territory of the Air Basin into 38 source receptor areas (SRAs), most of which have monitoring stations that collect air quality data. These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area. These geographical areas include urbanized regions, interior valleys, coastal areas, and mountains.

The nearest air monitoring station that measures O_3, CO, NO_2, and PM_{10} is located at 1350 San Bernardino Road in Upland (Northwest San Bernardino Valley, Station # 5175), four miles to the north of the Project site. The nearest air monitoring station that measures SO_2 and $PM_{2.5}$ is located at 14360 Arrow Boulevard in Fontana (Central San Bernardino Valley 1, Station # 5197), seven miles to the northeast of the Project site.

Table 5.2-3: Air Quality Data Summary summarizes the most recent three years of data (2018 through 2020) from the nearby air monitoring stations; reported in parts per million (ppm) or micrograms per cubic meter (µg/m3). The ozone standard was exceeded in 2018, 2019, and 2020. The State 24-hour and annual PM_{10} standards were exceeded in 2018, 2019, and 2020. The State 24-hour and annual $PM_{2.5}$ standards were not exceeded in 2018, 2019, and 2020. The CO and NO_2 standards were not exceeded during 2018, 2019, and 2020.

Surrounding Uses

The Project site is surrounded by the following land uses:

- North. Taxiway 'S' runs along the northern perimeter of the Project site. It is the main parallel taxiway on the south side of the airfield. Taxiway S has a 400-foot runway separation from Runway 8R-26L, the southern runway at the Airport. Beyond Taxiway 'S,' the former Southern Pacific Railroad tracks, airport terminals, parking lots, prime flight aviation services, airline cargo hangars, and commercial facilities are also located to the north. Car rental businesses and commercial facilities are located to the northeast on the southwest corner of South Haven Avenue and East Airport Drive.

TABLE 5.2-3
AIR QUALITY DATA SUMMARY

Pollutant	Standard	Monitoring Data by Year 2018	2019	2020
Ozone (Station No. 5175)				
Highest 1-Hour Average (ppm)	0.09	**0.141**	**0.131**	**0.158**
Days over State Standard	—	**38**	**41**	**82**
Highest 8-Hour Average (ppm)	0.070	**0.111**	**0.109**	**0.123**
Fourth Highest 8-Hour Average (ppm)	0.070	**0.106**	**0.097**	**0.116**
Days over State/National Standard	—	**52**	**67**	**114**
Nitrogen Dioxide (Station No. 5175)				
Highest 1-Hour Average (ppm)	0.180	0.063	0.076	0.066
98th Percentile 1-Hour Average (ppm)	0.100	0.056	0.058	0.058
Days over State Standard	—	0	0	0
Annual Average (ppm)	0.030/0.053	0.018	0.017	0.019
Carbon Monoxide (Station No. 5175)				
Highest 1-Hour Average (ppm)	20.0	1.9	2.7	1.5
Days over State Standard	—	0	0	0
Highest 8-Hour Average (ppm)	9.0	1.2	1.1	1.1
Days over State Standard	—	0	0	0
Particulate Matter (PM10) (Station No. 5175)				
Highest 24-Hour Average (µg/m^3)	50/150	**73**	**125**	**63**
Days over State Standard	—	**14**	**7**	**12**
Days over National Standard		0	0	0
State Annual Average (µg/m^3)	20	**34.1**	**34.8**	**30.5**
Particulate Matter (PM2.5) (Station No. 5197)				
Highest 24-Hour Average (µg/m^3)		29.2	46.5	46.1
98th Percentile 24-Hour Average (µg/m^3)	35	26.8	29.7	27.4

TABLE 5.2-3
AIR QUALITY DATA SUMMARY

Pollutant	Standard	Monitoring Data by Year		
		2018	2019	2020
Days over National Standard	—	0	0	0
State Annual Average (µg/m^3)	12	11.13	10.84	11.95

*Notes: Values in **bold** are in excess of at least one applicable standard.*
Generally, State and national standards are not to be exceeded more than once per year.
ppm = parts per million; µg/m^3 = micrograms per cubic meter.
PM_{10} is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.

Source: South Coast Air Quality Management District, "Annual Air Quality Summaries," http://www.aqmd.gov/home/air-quality/air- quality-data-studies/historical-data-by-year. Accessed November 2022.

- **East.** The Cucamonga Channel is adjacent to the eastern perimeter of the Project site. The segment of the channel, adjacent to the site, is an open concrete lined box-culvert and flows from north to south. Immediately east of the channel at the service road is the Airport's fire station and the FAA Air Traffic Control Tower on the west side of Tower Drive. Across Tower Drive is a vacant lot, industrial and commercial facilities, and large warehouses.

- **South.** South of East Avion Street and west of South Hellman Avenue is the Airport's Maintenance facility. The area south of the National Guard facility, at the southeast corner of the Project site, contains vacant buildings formerly occupied by General Electric. Farther south is the Union Pacific Railroad/Metrolink right-of-way and Mission Boulevard, beyond which are industrial uses. An open drainage channel is located directly south of the Project site along the Airport boundary.

- **West**. Airport related buildings and hangars, the intersection of East Avion Street at South Vineyard Avenue, and the new Guardian Jet hangar, are west of the Project site. Industrial and commercial uses are located farther west.

Sensitive Receptors

Some receptors are considered more sensitive to air pollutants than others because of preexisting health problems, proximity to the emissions source, or duration of exposure to air pollutants. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality related health

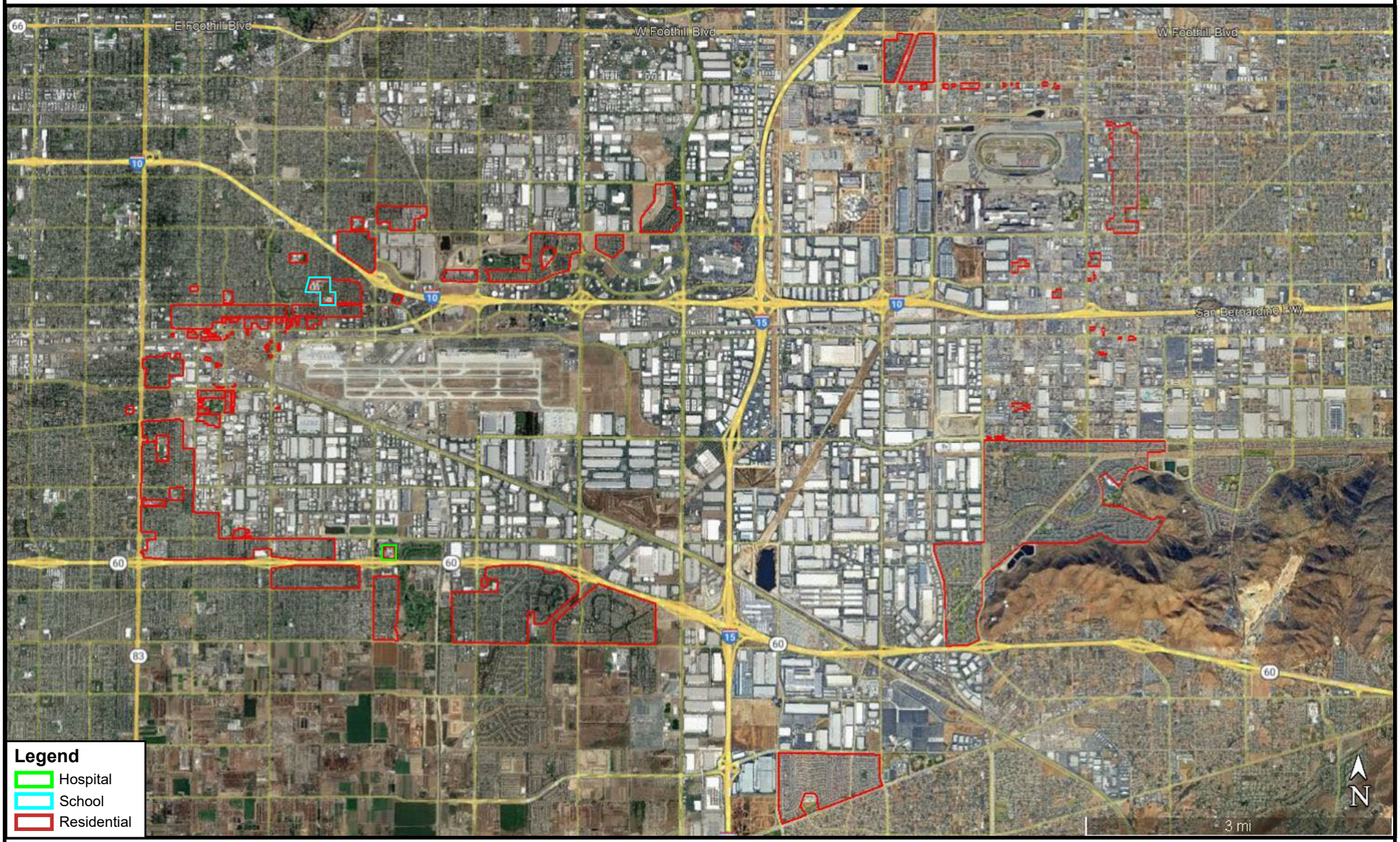
problems than the general public. Residential areas are also considered sensitive to poor air quality because people in residential areas are often at home for extended periods. Recreational land uses are moderately sensitive to air pollution because vigorous exercise associated with recreation places having a high demand on respiratory system function. CARB has identified the following people as most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases.

As described above, the Project site is primarily surrounded by airport and industrial uses. Distances from the Airport boundary to residential zoned areas are approximately 1,200 feet (0.23 miles) to the northwest, 1,300 feet (0.25 miles) to the southwest, 2,800 feet (0.53 miles) to the north, 3,600 feet (0.68 miles) to the west, and 6,500 feet (1.2 miles) to the south. However, there also are some residences located within the industrial/ commercial areas to the west and south. The closest existing sensitive receptor to the project is a single-family residence on South Grove Avenue, approximately 200 feet north of the Airport boundary (approximately 2,000 feet northwest of Runway 8L – 26R). The closest school is the Mariposa Elementary School, approximately 2,000 feet (0.38 miles) north of the Airport boundary. The closest hospital is the Kaiser Permanente Ontario Vineyard hospital, approximately 5,300 feet (one mile) south of the Airport boundary. The nearest sensitive receptors to the Airport are shown in **Figure 5.2-2: Map of Sensitive Receptors**.

5.2.2.3 Baseline Conditions

In this EIR, the term "Baseline Conditions" is used when discussing the hybrid 2019/2020 base year condition, as it relates to the air quality, GHG, and noise environments. Per CEQA Guidelines Section 15125(a)(1), "where necessary to provide the most accurate picture practically possible of the proposed Project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence." Due to the COVID-19 pandemic, existing conditions in 2021 at the time of the EIR's Notice of Preparation issuance do not represent activity levels that have been, or will be, typical of the Airport or that are reasonably expected to exist during the timeframe for proposed Project implementation.

Specifically, the FAA advised, as part of their annual Terminal Area Forecast (TAF), "In 2020 there was a major decrease in passenger enplanements and commercial operations as a result of the COVID-19 pandemic.



SOURCE: Air Quality Technical Report for the Ontario International Airport Cargo Development Project, RCH Group, January 2023

FIGURE **5.2-2**

Meridian Consultants

Map of Sensitive Receptors

There is uncertainty associated with the forecasts because of the uncertainty regarding the path of the pandemic and its economic impacts."[42] FAA estimated that medium hub airports (the Airport is a medium hub airport) would have an aggregate recovery to 2019 levels of aircraft operations and enplanements by 2025; however, the projections for the Airport indicate operations will exceed 2019 levels by 2023.[43] The FAA's estimates were developed prior to the extensive uptake in passenger activity in mid to late 2021 and are thus likely under representative of the recovery expected at the Airport. Notably, the recovery estimated by FAA in their TAF released in May of 2021 does not incorporate the additional cargo activity that occurred in 2020 in response to the world's reliance on cargo carriers during the COVID-19 pandemic. Airports Council International-North America (ACI-NA) reported an increase of approximately 17 percent in cargo operations between 2019 and 2020 and the Airport ranked 10th in North American airports for cargo activity, growing approximately 21 percent in total cargo when compared to 2019.

Thus, to more accurately represent historically consistent conditions at the Airport and to avoid a potentially misleading comparison of project impacts, this EIR considers the impacts to three resource categories (noise, air quality, and GHGs) by using a hybrid of 2019 and 2020 operation levels at the Airport. The existing/base year aircraft fleet mix is a hybrid of 2019 and 2020 operations and was based on the Airport Noise & Operations Monitoring System (ANOMS) radar data from 2019 and 2020, FAA Traffic Flow Traffic Flow Management System Count (TFMSC), and Operations Network (OSPNET). Specifically, passenger air carriers, air taxi, and General Aviation (GA) operations were obtained from the 2019 ANOMS data and the all-cargo operations were obtained from the 2020 ANOMS data. The military operations were obtained from the FAA TFMSC data. This approach serves to normalize operations to represent Baseline Conditions recognizing that the temporary reduction in passenger air carrier and air taxi operations, due to the COVID-19 pandemic, is not indicative of baseline/existing conditions at the Airport.

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42 Federal Aviation Administration (FAA). 2021. "Terminal Area Forecast Executive Summary Fiscal Years 2020-2045." Retrieved from https://www.faa.gov/data_research/aviation/taf/. Accessed November 2022.

43 FAA. "Terminal Area Forecast Executive Summary Fiscal Years 2020-2045."

5.2.2.4 Regulatory Background

Federal

National Environmental Policy Act

President Nixon signed the National Environmental Policy Act (NEPA) into law on January 1,1970. Congress enacted NEPA to establish a national policy for the environment, provide for the establishment of the Council on Environmental Quality (CEQ), and for other purposes. NEPA was the first major environmental law in the United States and is often called the "Magna Carta" of Federal environmental laws. NEPA requires Federal agencies to assess the environmental effects of proposed major Federal actions prior to making decisions.

Section 101 of NEPA sets forth a national policy "to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." Section 102 of NEPA establishes procedural requirements, applying that national policy to proposals for major Federal actions significantly affecting the quality of the human environment by requiring Federal agencies to prepare a detailed statement on: (1) the environmental impact of the proposed action; (2) any adverse effects that cannot be avoided; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources that would be involved in the proposed action.[44]

NEPA ensures agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making. Countries and non-governmental organizations all over the globe have created their own environmental impact assessment programs, modeled upon NEPA, making NEPA an international catalyst in the field of environmental protection.

General Conformity

General Conformity ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain national standards for air quality. Established under the CAA, the General Conformity rule plays an important role in helping states and tribes improve air

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44 USEPA. "National Environmental Policy Act." https://www.epa.gov/nepa. Accessed January 2023.

quality in those areas that do not meet the NAAQS. Under the General Conformity rule, federal agencies must work with state, tribal and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plans established in the applicable state or tribal implementation plan. As part of the separate environmental review being conducted in conformance with NEPA, the FAA will make a General Conformity determination for the proposed Project.

Clean Air Act

The USEPA is responsible for the implementation of portions of the CAA[45] of 1970, which regulates certain stationary and mobile sources of air emissions and other requirements. Charged with handling global, international, national, and interstate air pollution issues and policies, the USEPA sets national vehicle and stationary source emission standards, oversees the approval of all State Implementation Plans,[46] provides research and guidance for air pollution programs, and sets NAAQS.[47] NAAQS for the six common air pollutants (O_3, PM_{10} and $PM_{2.5}$, NO_2, CO, Pb, and SO_2) are identified in the CAA.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA that are most applicable to the Air Basin include Title I, Nonattainment Provisions, and Title II, Mobile Source Provisions. Federal Aviation Administration Airport Improvement Program.

USEPA establishes standards for the control of air pollution from aircraft and aircraft engines (40 CFR 87). USEPA consults with FAA, as FAA sets aircraft engine fuel venting and exhaust emissions certification requirements (14 CFR Part 34) to enforce compliance with USEPA emission regulations.

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45 42 U.S.C Section 7401, et seq.

46 A State Implementation Plan (SIP) is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards (NAAQS).

47 The NAAQS were established to protect public health, including that of sensitive individuals; for this reason, the standards continue to change as more medical research becomes available regarding the health effects of the criteria pollutants. The primary NAAQS define the air quality considered necessary, with an adequate margin of safety, to protect the public health.

FAA encourages airports to reduce emissions through federal programs, including providing Airport Improvement Program (AIP) grants for airports to develop sustainability plans, as well as FAA programs that provide funding for use of low or zero emission technologies, such as the Voluntary Airport Low Emissions (VALE) program,[48] the Airport Zero Emissions Vehicle, and Infrastructure Pilot Program.[49]

Federal Aviation Administration Aviation Emissions and Air Quality Handbook

Air quality assessments for proposed Federal actions are required to achieve compliance with the National Environmental Policy Act (NEPA), the Clean Air Act, and other environment-related regulations and directives. The FAA's Aviation Emissions and Air Quality Handbook[50] is a comprehensive guide intended to assist the air quality analyst/environmental specialist in assessing the air quality impact of FAA actions at airports. It provides guidance, procedures and methodologies for use in carrying out such assessments. The Version 3 Update was created in January of 2015. It includes simplified diagrams, aligns with the latest FAA orders and policies, and contains new material covering hazardous air pollutants (HAPs) and greenhouse gasses. Furthermore, the updated handbook emphasizes that there is no single, universal criterion for determining what type of analysis is appropriate for FAA-supported projects or actions. Instead, the handbook provides guidance for determining appropriate types of analysis.

Federal Aviation Administration 1050.1F Desk Reference

FAA's Desk Reference[51] provides explanatory guidance for environmental impact analysis performed to comply with Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (CEQ Regulations) (40 Code of Federal Regulations CFR) parts 1500-1508), U.S. Department of Transportation (DOT) Order

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48 FAA. "Voluntary Airport Low Emissions Program (VALE)." https://www.faa.gov/airports/environmental/vale/. Accessed November 2022.

49 FAA. "Airport Zero Emissions Vehicle and Infrastructure Pilot Program." https://www.faa.gov/airports/environmental/zero_emissions_vehicles/. Accessed November 2022.

50 FAA. *Aviation Emissions and Air Quality Handbook Version 3 Update 1*. January 2015. https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/. Accessed November 2022.

51 FAA. "1050.1F Desk Reference." https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/policy/faa_nepa_order/desk_ref. Accessed November 2022.

5610.1C, Procedures for Considering Environmental Impacts, and Federal Aviation Administration (FAA) Order 1050.1F Environmental Impacts: Policies and Procedures. In addition, FAA Order 1050.1F outlines the requirements under the FAA's NEPA implementing procedures.

State

California Clean Air Act

The California CAA, signed into law in 1988, requires all areas of the State to achieve and maintain the California AAQS by the earliest practicable date. CARB, a part of the CalEPA, is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets State AAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions and the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. The CAAQS include more stringent standards than the NAAQS.

California Air Toxics Program

The California Air Toxics Program was established in 1983 when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and the OEHHA determine if a substance should be formally identified, or "listed," as a TAC. Since inception of the program, a number of such substances have been listed. In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs. In 1999, CARB completed the final staff report, *Update to the Toxic Air Contaminant List*. The list represented the priorities for identifying and regulating substances as directed by State law. The report described the process followed by CARB in reviewing and revising the TAC List and presented changes to the list.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs (see below for additional information).

Air Toxics "Hot Spots" Program (AB 2588)

AB 2588 was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The Air Toxics Program's goals include collecting emission data, identifying facilities having localized impacts, ascertaining health risks, notifying nearby residents of significant risks, and reducing those significant risks to acceptable levels. The Air Toxics Program provides direction and criteria to facilities on how to compile and submit air toxic emission data required by the "Hot Spots" Program, and requires the local air district to prioritize facilities to determine which facilities must perform a health risk assessment. Facilities identified as high risk are required to reduce their toxic emissions to acceptable levels as determined by the local air district.[52]

Air Quality and Land Use Handbook

CARB published the *Air Quality and Land Use Handbook*[53] on April 28, 2005, to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions.

Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural road with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 50 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

California Code of Regulations

The California Code of Regulations (CCR) includes regulations that pertain to air quality emissions. Specifically, Title 13, CCR, Section 2485 limits idling of all diesel-fueled commercial

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52 CARB. "AB 2588 Air Toxics 'Hot Spots' Program." https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots. Accessed November 2022.

53 CARB. *Air Quality and Land Use Handbook: A Community Health Perspective (April 2005).* https://www.arb.ca.gov/ch/handbook.pdf. Accessed November 2022.

vehicles (weighing over 10,000 pounds) during construction to 5 minutes at any location. Additionally, Title 17 CCR, Section 93115 requires operation of any stationary, diesel-fueled, compression-ignition engines meet specified fuel and fuel additive requirements and emission standards.

California Motor Vehicle Code

The vehicle programs are a critical component in the SIP for achieving national ambient air quality standards in the Air Basin.[54] They are also integral in CARB's Scoping Plan[55] to achieve the greenhouse gas (GHG) emission reduction goals that were established through the California legislation and Executive Orders.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, CCR, Section 2485)

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling[56] measure includes regulations that pertain to air quality emissions. Specifically, Section 2485 states that the idling of all diesel-fueled commercial vehicles weighing more than 10,000 pounds shall be limited to five minutes at any location. In addition, Section 93115 in Title 17 of the CCR[57] states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

CARB 2020 Mobile Source Strategy

CARB staff developed the 2020 Mobile Source Strategy[58] to take an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's air quality and GHG targets. The actions contained in the Mobile Source

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54 CARB. *California State Implementation Plans* (last reviewed September 21, 2018). https://ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans. Accessed November 2022.

55 CARB. *AB 32 Scoping Plan.* January 8, 2018. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan. Accessed November 2022.

56 CARB. "Section 2485 in Title 13 of the CCR." https://ww2.arb.ca.gov/sites/default/files/classic/msprog/truck-idling/13ccr2485_09022016.pdf. Accessed November 2022.

57 CARB. "Section 93115 in Title 17 of the CCR." https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/finalreg2011.pdf. Accessed November 2022.

58 CARB. "2020 Mobile Source Strategy." https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed November 2022.

Strategy will deliver broad environmental and public health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector.

The 2020 Mobile Source Strategy was heard by the Board on October 28, 2021, and will be forwarded to the appropriate policy and fiscal committees of the California Legislature as required by California Senate Bill 44. Moving forward, the programs and concepts in the 2020 Mobile Source Strategy will be incorporated in other planning efforts, including the State Implementation Plans (SIP), the 2022 Climate Change Scoping Plan Update, and community emissions reduction plans developed as a part of Assembly Bill 617's Community Air Protection Program. This strategy would improve emissions of mobile sources associated with the proposed Project including cars, trucks, and other on-road vehicles and off-road equipment.

CARB Zero-Emission Airport Ground Support Equipment

Airport GSE perform a wide variety of functions, including providing power to aircraft, transporting cargo, baggage, and passengers to and from aircraft, and providing aircraft maintenance and fueling. The Zero-Emission Airport Ground Support Equipment Measure is intended to act as a catalyst to further adoption of zero-emission equipment in the off-road sector, facilitate the transfer of technology to suitable heavier duty-cycle applications, and expand use of zero-emission infrastructure.[59]

CARB Advanced Clean Cars II

The Advanced Clean Cars II program[60] is designed to take the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augment them to meet more aggressive tailpipe emissions standards and ramp up to 100 percent zero-emission vehicles. Additionally, the program will rapidly scale down light-duty passenger car, truck and SUV emissions starting with the 2026 model year through 2035.

First, the Advanced Clean Cars II program amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on advanced vehicle

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59 CARB. "Zero-Emission Airport Ground Support Equipment." https://ww2.arb.ca.gov/our-work/programs/zero-emission-airport-ground-support-equipment. Accessed November 2022.

60 CARB. "Proposed Advanced Clean Cars II Regulations: All New Passenger Vehicles Sold in California to be Zero Emissions by 2035." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii. Accessed November 2022.

technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. Second, the program amends the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions while the sector transitions toward 100 percent electrification by 2035.[61]

CARB Advanced Clean Fleets

CARB is developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications.[62] The initial focus would be on high-priority fleets with vehicles that are suitable for early electrification, their subhaulers, and entities that hire them. The goal of this effort is to accelerate the number of medium and heavy-duty zero-emission vehicle purchases to achieve a full transition to zero-emission vehicles in California as soon as possible. Final approval of this regulation has not been reached yet.[63]

CARB In-Use Off-Road Diesel-Fueled Fleets Regulation

The goal of the In-Use Off-Road Diesel-Fueled Fleets Regulation[64] is to reduce particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation covers a wide scope of vehicle types used in (but not limited to) industries as diverse as construction, air travel, manufacturing, landscaping, and ski resorts. Final approval of this regulation has not been reached yet.[65]

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61 CARB. "Advanced Clean Cars II." https://ww2.arb.ca.gov/rulemaking/2022/advanced-clean-cars-ii. Accessed November 2022.

62 CARB. "Advanced Clean Fleets." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about. Accessed November 2022.

63 CARB. "Advanced Clean Fleets."

64 CARB. "In-Use Off-Road Diesel-Fueled Fleets Regulation." https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about. Accessed November 2022.

65 CARB. "In-Use Off-Road Diesel-Fueled Fleets Regulation."

CARB Rule 2449, General Requirements for In-Use Off-Road Diesel-Fueled Fleets

CARB Rule 2449 requires off-road diesel vehicles to limit nonessential idling to no more than five consecutive minutes.[66]

CARB Advanced Clean Trucks

In June 2020, CARB adopted the Advanced Clean Trucks regulation which requires truck manufacturers to sell zero-emission vehicles in California and a one-time requirement for company and fleet reporting. The regulation aims to accelerate the transition of zero-emission medium and heavy-duty vehicles from Class 2b to Class 8, requiring manufacturers to sell zero-emission trucks at an increasing percentage of annual sales from 2024 to 2035. By 2035, zero-emission truck sales would need to be 55 percent of Class 2b-3 sales, 75 percent of Class 4-8 sales and 40 percent of truck tractor sales.[67]

California Building Standards Code

California Energy Code

California's Energy Efficiency Standards for Residential and Nonresidential Buildings.[68] were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 requires the design of building shells and components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December of that year, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit

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66 CARB. "Final Regulation Order: Regulation For In-Use Off-Road Diesel-Fueled Fleets." https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation. Accessed November 2022.

67 CARB. "Advanced Clean Trucks." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed November 2022.

68 California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed November 2022.

applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.[69]

California Green Building Code

The California Green Building Standards Code, which is Part 11 of the CCR, is commonly referred to as the CALGreen Code.[70] The most current version of the CALGreen building code, the 2022 CALGreen code, went into effect January 1, 2023. The purpose is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, outdoor lighting standards, use and occupancy, location, and maintenance of all building and structures within its jurisdiction.

Regional

South Coast Air Quality Management District

The Project site lies within the jurisdiction of the SCAQMD, and compliance with SCAQMD rules and guidelines is required. SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD, in coordination with the Southern California Association of Governments (SCAG), is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the Air Basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as "nonattainment" of the national and/or California AAQS. The term "nonattainment area" is used to refer to an air basin in which one or more AAQS are exceeded.

The SCAQMD approved a Final 2016 AQMP on March 3, 2017. The 2016 AQMP includes transportation control measures developed by SCAG from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), as well as the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour

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69 CEC. "2022 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed November 2022.

70 California Buildings Standards Commission. California Green Building Standards Code (Cal. Code Regs., Title 24, Part 11). http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed November 2022.

and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards. The strategies within the 2016 AQMP are utilized within the most recent State SIP.[71]

The SCAQMD approved its 2022 AQMP on December 2, 2022.[72] The 2022 AQMP includes transportation control measures developed by SCAG from the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), as well as the integrated strategies and measures needed to meet the NAAQS. The 2022 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS, as well as the latest 24-hour and annual $PM_{2.5}$ standards.

The 2022 AQMP notes that SCAQMD does not have the authority to regulate aircraft operations or emissions from aircraft engines[73] and, for this reason, the control strategies in the AQMP focus on sources subject to SCAQMD's regulatory authority. With regard to NO_x emissions, the AQMP states that NO_x emissions from federally regulated sources alone will exceed the amount of NO_x needed to reach attainment by 42 percent. Without substantial action by the federal government, the region will be unable to attain the federal ambient air quality standard. Accordingly, meeting the standard will require that the USEPA addresses sources within its authority, such as aircraft, ships, trains, and trucks.

The AQMP states the only viable pathway to achieve the required NO_x reductions is through widespread adoption of zero emission technologies across all stationary and mobile sources. Meeting the standard requires widespread adoption of zero emissions technologies where feasible, and the lowest emitting technologies where zero emission technologies are not feasible, across all emission sectors.

The 2022 AQMP control strategies include a variety of implementation approaches such as regulation, accelerated deployment of available cleaner technologies, best management practices, co-benefits from existing programs (e.g., climate, energy efficiency), incentives, and CAA section 182(e)(5) "black box" measures. Additional demonstration and commercialization

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71 CARB. *Revised Proposed 2016 State Strategy for the State Implementation Plan*. https://ww2.arb.ca.gov/sites/default/files/classic/planning/sip/2016sip/rev2016statesip.pdf. Accessed January 2023.

72 SCAQMD. *Final 2022 AQMP*. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/draft-final-2022-aqmp/dfaqmp.pdf?sfvrsn=13. Accessed December 2022.

73 Section 233 of the federal Clean Air Act exclusively vests the authority to promulgate emission standards for aircraft and aircraft engines with the USEPA; states and other municipalities are preempted from adopting or enforcing any standard with respect to aircraft engine emissions unless such standard is identical to USEPA standards.

projects are also identified as being crucial to help deploy and reduce costs for zero emission and low NOx technologies. A key element of AQMP implementation will be private and public funding from several sources to help further the development and deployment of these advanced technologies. Many of the same technologies will address both air quality and climate goals, such as increased energy efficiency and a transition to cleaner fuels. The total required emission reductions, technology readiness, cost-effectiveness, and economic impacts are critical considerations in developing a comprehensive and integrated control strategy.

The 2022 AQMP relies on the development of new, zero emission and on ultra-low NO_x technologies where advanced zero emission control technologies are not yet available or feasible as allowed by the CAA. Specifically, CAA section 182(e)(5) provides for reliance on emission reductions from developing advanced technologies. These emission reductions are known as "black box" measures because the specific technologies or controls to achieve the emission reductions are not yet known. The rationale for allowing "black box" measures is that "extreme" ozone nonattainment areas have 20 years to attain the standard and, in that time, advanced technologies to achieve further emission reductions are presumed to become available. Control measures that rely on the development of new zero emission or low NOx technologies would utilize the flexibility provided by the Clean Air Act section 182(e)(5).

Future measures to reduce aviation emissions reductions from aircraft and aircraft related activities are discussed in the 2022 AQMP. The identified emission sources for the aviation sector are main aircraft engines, auxiliary power units (APU), and airport ground transportation with emission reductions to be achieved by pursuing incentive and regulatory measures.

Under the Federal CAA, SCAQMD has adopted federal attainment plans for O_3 and PM_{10}. The SCAQMD reviews projects to ensure that they would not (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay the timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

The SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the Air Basin by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board. These rules and regulations limit the emissions that can be generated by various uses or activities and identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the federal and State criteria pollutants, but also toxic air contaminants and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the proposed Project are Rule 212 (Standards for Approving Permits and Issuing Public Notice), Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), Rule 1401 (New Source Review of Toxic Air Contaminants), Rule 2305 (WAIRE), and Regulation XIII (New Source Review). Rule 212 states that the Executive Officer has the power to deny a Permit to Construct or Permit to Operate based on standard operating procedures and required notifications. Rule 403 requires the use of stringent best available control measures to minimize PM emissions during grading and construction activities. Rule 1113 requires reductions in the VOC content of coatings, with a substantial reduction in the VOC content limit for specified types of coatings. Rule 1401 requires limits for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants. Rule 2305 facilitates local and regional emission reductions associated with warehouses and the mobile sources attracted to warehouses. Regulation XIII requires new on-site facility nitrogen dioxide emissions to be minimized through the use of emission control measures (e.g., use of best available control technology for new combustion such as boilers, emergency generators, and water heaters). The project design has not advanced to a level of detail that identifies specific equipment that would be subject to SCAQMD permitting. Regardless, all equipment subject to Rule 1401 and Regulation XIII will conform to all applicable requirements.

CEQA Air Quality Handbook

In 1993, the SCAQMD prepared its *CEQA Air Quality Handbook* (CEQA Handbook) to assist local government agencies and consultants in preparing environmental documents for projects subject to CEQA.[74] The SCAQMD is in the process of developing its *Air Quality Analysis Guidance Handbook* (Guidance Handbook) to replace the CEQA Handbook. The CEQA Handbook and the Guidance Handbook describe the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental documents. Although the Guidance Handbook is still being prepared, the Guidance Handbook provides the most up-to-date recommended thresholds of significance in order to determine if a project will have a significant adverse environmental impact.[75] SCAQMD provides additional supplementation information including methodologies for estimating project emissions and mitigation measures that can be implemented to avoid or reduce air quality impacts on the Guidance Handbook website. Although the Governing Board of the SCAQMD has adopted the CEQA Handbook and is in the

74 SCAQMD. *Air Quality Analysis Handbook*. http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed November 2022.

75 SCAQMD. *Air Quality Analysis Handbook.*

process of developing the Guidance Handbook, the SCAQMD does not, nor intends to, supersede a local jurisdiction's CEQA procedures.[76]

Southern California Association of Governments

SCAG is the metropolitan planning organization (MPO) for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and serves as a forum for the discussion of regional issues related to transportation, the economy, community development, and the environment. As the federally-designated MPO for the Southern California region, SCAG is mandated by the federal government to research and develop plans for transportation, hazardous waste management, and air quality. Pursuant to California Health and Safety Code Section 40460(b),[77] SCAG has the responsibility for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is also responsible under the CAA for determining conformity of transportation projects, plans, and programs with applicable air quality plans.

With regard to air quality planning, SCAG has prepared and adopted the 2020–2045 RTP/SCS,[78] which includes a SCS that addresses regional development and growth forecasts. The SCAG 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level. Although the RTP/SCS is not technically an air quality plan, consistency with the RTP/SCS has air quality implications, including the reduction of VMT which reduces air quality emissions.

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76 SCAQMD. "Frequently Asked CEQA Questions." http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/frequently-asked-questions. Accessed November 2022.

77 California Health and Safety Code. Division 26. Air Resources, PART 3. Air Pollution Control Districts, Chapter 5.5. South Coast Air Quality Management District. ARTICLE 5. Plan, Section 40460(b). https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=40460.&lawCode=HSC. Accessed November 2022.

78 Southern California Association of Governments (SCAG). *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft*. https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx. Accessed November 2022.

Local

Local jurisdictions, such as the City of Ontario, have the authority and responsibility to reduce air pollution through their police power and decision-making authority. With respect to land use decisions, the City is responsible for the assessment of potential air quality impacts and the identification of feasible mitigation measures related to air emissions associated with proposed projects.

The Ontario Plan

The Ontario Plan[79] (serves as the City's General Plan) states long-term goals, principles and policies for achieving Ontario's Vision. It guides growth and development to achieve optimum results from the City's physical, economic, environmental, and human resources. The Environmental Resources Element of the Ontario Plan defines the ethic to guide management of the City's environmental resources, establishes goals for environmental infrastructure, and establishes policies that support system integration, resource conservation and regeneration, and energy independence. The Environmental Resources Element includes the following goal and policies related to air quality:

Goal ER4: Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.

- **Policy ER4-1**: Land Use. Reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.
- **Policy ER4-2**: Sensitive Land Uses. Prohibit the future siting of sensitive land uses, within the distances defined by the California Air Resources Board for specific source categories, without sufficient mitigation.
- **Policy ER4-3**: Greenhouse Gases (GHG) Emissions Reductions. Reduce GHG emissions in accordance with regional, state and federal regulations.
- **Policy ER4-4**: Indoor Air Quality. Comply with State Green Building Codes relative to indoor air quality.

79 City of Ontario. *The Ontario Plan*. "Policy Plan." https://www.ontarioplan.org/policy-plan/. Accessed November 2022.

Policy ER4-5: Transportation. Promote mass transit and non-motorized mobility options (e.g., walking, biking) to reduce air pollutant emissions.

Policy ER4-6: Particulate Matter. Support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.

Policy ER4-7: Other Agency Collaboration. Collaborate with other agencies within the South Coast Air Basin to improve regional air quality at the emission source.

Policy ER4-8: Tree Planting. Protect healthy trees within the City and plant new trees to increase carbon sequestration and help the regional/local air quality.

In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses the SCAQMD CEQA Air Quality Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

Air Quality Improvement Plan

In 2019, the Airport developed a voluntary Air Quality Improvement Plan (AQIP)[80] as part of a collaborative effort between SCAQMD and other airports in the South Coast Air Basin to minimize and reduce emissions from mobile source activities at the Airport. The AQIP was developed to address a measure presented in the previous 2016 AQMP, Facility- Based Measure for Mobile Sources Measure for the Emissions Reductions at Commercial Airports (MOB-04). This measure was also carried over into the current 2022 AQMP. MOB-04 requires Basin airports to reduce non-aircraft emission sources at their facilities. The Airport's AQIP identifies efforts related to MOB-04 and programs to address air quality at the Airport. As it relates to construction projects, the AQIP includes a Construction Equipment Policy (RM7), which requires contractors under contract with OIAA to utilize Tier 4 Final construction equipment. Use of Tier 4 Final construction equipment would result in a reduction on NOx and PM emissions from construction activities. As it relates to operation, the AQIP includes a GSE Policy (RM1), which requires the Airport to implement a GSE policy that promotes the use of newer, cleaner equipment for

80 Alta Environmental. *Air Quality Improvement Plan*, *Ontario International Airport*. September 17, 2019.

ground operations. The goal of the GSE Policy is to achieve a reduction in the overall fleet average NOx emissions.

In December 2019, SCAQMD and the Airport signed a Memorandum of Understanding (MOU) which outlines how the Airport will quantify NOx emission reductions through implementation measures outlined in the Airport's AQIP.

5.2.2.5 Applicable Regulations

As discussed previously, SCAQMD adopts rules and regulations to implement portions of the AQMP. For the Proposed Project, the relevant SCAQMD rules and regulations include:

- **Rules 201 and 203 (Permits to Construct and Operate**): These rules require that owners of applicable construction or operation equipment obtain written permits from the SCAQMD prior to construction and operation.

- **Rule 402 (Nuisance):** This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- **Rule 403 (Fugitive Dust):** This rule requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. A fugitive dust control program pursuant to the provisions of SCAQMD Rules 402 and 403 shall be implemented. This program shall include, but not be limited to the following:
  - Prior to start of the initial on-site construction, the City Engineer shall confirm that the proposed construction plan follows SCAQMD Rule 403, and fugitive dust shall be controlled by the applicable best available control measures listed in Table 1 of Rule 403.
  - Water or a stabilizing agent shall be applied at least three times daily, preferably in the mid-morning, afternoon, and after work is done for the day, to exposed surfaces including graded and disturbed areas in enough quantity to prevent generation of dust plumes.

- Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday. The contractor shall use a gravel apron, 25 feet long by road width, or a pipe-grid track-out control device to reduce mud/dirt track-out from active operations and unpaved truck exit routes.
- A wheel washing system shall be installed and used to remove bulk material from tires and vehicle undercarriages before vehicles exit the project alignment.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered (e.g., with fabric tarps or other enclosures that would reduce fugitive dust emissions) and maintain a freeboard height of 12 inches, in accordance with California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Traffic speeds on unpaved roads shall be limited to 15 miles per hour.
- Operations on unpaved surfaces shall be suspended when winds exceed 25 miles per hour.
- On-site stockpiles shall be covered or watered at least twice per day.
- A publicly visible sign shall be posted with the telephone number and person to contact at the City of Ontario regarding dust complaints. This person shall respond and take corrective action within 24 hours. The SCAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

- **Rule 1110.2 (Emissions from Gaseous- and Liquid-Fueled Engines):** This rule was adopted to reduce NO_x, VOC, and CO emissions from stationary and portable engines over 50 horsepower, including standby generators. All standby generators used for Project operations would be selected from the SCAQMD certified generators list and meet applicable federal standards for diesel emissions. For after-treatment of engine exhaust air, a diesel particulate filter shall be provided to meet the emission level requirements of SCAQMD.

- **Rule 1113 (Architectural Coatings):** This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce volatile organic compounds (VOC) emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories. Per Rule 1113 no person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in Rule 1113. All paints

shall be applied using either high-volume low-pressure spray equipment or by hand application.

- Rule 2202 (Employee Commute Reduction Program Guidelines): This rule is designed to assist employers in understanding the development and implementation requirements of the Employee Commute Reduction Program (ECRP) at their worksites. The ECRP focuses on reducing work related vehicle trips and vehicle miles traveled to a worksite with the purpose of achieving and maintaining the employers' designated average vehicle ridership targets.

- Rule 2305 (Warehouse Indirect Source Rule): In May of 2021, SCAQMD adopted Rule 2305 to reduce emissions associated with warehouses and mobile sources attracted to warehouses. This rule applies to all existing and proposed warehouses over 100,000 square feet located in SCAQMD. Rule 2305 requires warehouse operators to track annual vehicle miles traveled associated with truck trips to and from the warehouse. These trip miles are used to calculate the warehouses' WAIRE (Warehouse Actions and Investments to Reduce Emissions) Points Compliance Obligation. WAIRE Points are earned based on emission reduction measures and warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. Reduction strategies listed in the WAIRE menu include acquire zero emission (ZE) or near zero emission (NZE) trucks; require ZE/NZE truck visits; require ZE yard trucks; install on-site ZE charging/fueling infrastructure; install on-site energy systems; and install filtration systems in residences, schools, and other buildings in the adjacent community. Warehouse operators that do not earn enough WAIRE points to satisfy the WAIRE Points Compliance Obligation are required to pay a mitigation fee. This Proposed Project would comply with the adopted Rule 2305 (Warehouse Indirect Source Rule).

- The Applicant shall also require construction contractors to implement the following regulatory compliance measures during construction to reduce exhaust emissions:
  - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
  - All construction equipment must be properly tuned and maintained in accordance with the manufacturer's specifications and documentation demonstrating proper maintenance, in accordance with the manufacturer's specifications, shall be

maintained on site. Tampering with construction equipment to increase horsepower or to defeat emission control devices must be prohibited.[81]

- All streets located within the construction site area shall be swept at least once a day using SCAQMD Rule 1186 certified street sweepers if visible soil materials are carried to adjacent streets.

- The Applicant would require construction contractors to recycle or salvage a minimum of 65 percent of the non-hazardous construction and demolition waste generated directly from construction and demolition of the Project per CalGreen Construction Waste Management Requirements.

5.2.3 ENVIRONMENTAL IMPACT ANALYSIS

5.2.3.1 Thresholds of Significance

The potential for the proposed Project to result in impacts associated with air quality is based on Appendix G of the CEQA Guidelines and the thresholds used in this analysis are as follows:

Would the project:

AQ-1: **Conflict with or obstruct implementation of the applicable air quality plan?**

AQ-2: **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?**

AQ-3: **Expose sensitive receptors to substantial pollutant concentrations?**

AQ-4: **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

The following criteria were used to evaluate air quality impacts:

SCAQMD's CEQA Air Quality Handbook

81 Code of Federal Regulations. Part 1068 – General Compliance Provisions for Highway, Stationary, and Nonroad Programs. https://www.ecfr.gov/current/title-40/chapter-I/subchapter-U/part-1068. Accessed January 2023.

Because of the SCAQMD's regulatory role in the Air Basin, the significance thresholds and analysis methodologies in the SCAQMD's CEQA Air Quality Handbook[82] are used in evaluating project impacts for construction, operations, and air toxics.[83]

Daily Emissions Thresholds

SCAQMD has identified thresholds to determine the significance of regional air quality emissions for construction activities and project operation, as shown in **Table 5.2-4: Mass Daily Emissions Thresholds.**[84]

TABLE 5.2-4
MASS DAILY EMISSIONS THRESHOLDS

	Construction	Operation
Pollutant	Significance Threshold (pounds/day)	
Volatile organic compounds (VOCs)	75	55
Nitrogen dioxide (NO2)	100	55
Carbon monoxide (CO)	550	550
Sulfur dioxide (SO2)	150	150
Respirable particulate matter (PM10)	150	150
Fine particulate matter (PM2.5)	55	55

Construction Emissions

In addition to the mass daily thresholds, a project is considered to result in a significant construction air quality impact if the project exceeds the concentration significance thresholds set forth in **Table 5.2-5: Ambient Air Quality Significance Thresholds for Criteria Pollutants.** Per SCAQMD guidance, the evaluated concentrations of CO, NO_2, and SO_2 includes both the project contribution plus background concentrations. The total concentration is then compared to the significance thresholds. For CO, NO_2, and SO_2, these significance thresholds are reflective of the CAAQS and NAAQS. Background concentrations were based on existing air monitoring

82 SCAQMD. *Air Quality Analysis Handbook.*

83 SCAQMD. *South Coast AQMD Air Quality Significance Thresholds.* http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed November 2022.

84 SCAQMD. *South Coast AQMD Air Quality Significance Thresholds.*

stations near the Project site and represent existing air emissions sources within the Air Basin. Per SCAQMD guidance, the proposed Project's contribution of PM_{10} and $PM_{2.5}$ is compared to the significance thresholds without adding background concentrations.[85]

TABLE 5.2-5
AMBIENT AIR QUALITY SIGNIFICANCE THRESHOLDS FOR CRITERIA POLLUTANTS

Pollutant	Averaging Period	Pollutant Concentration Threshold
CO	1-hour /8-hour	SCAQMD is in attainment (State) and maintenance (Federal); project is significant if it causes or contributes to an exceedance of the attainment standards of 20 ppm (1-hour) and 9 ppm (8-hour)
NO_2	1-hour	SCAQMD is in attainment (Federal and State); project is significant if it causes or contributes to an exceedance of the following attainment standard 0.18 ppm (State)
	Annual	0.03 ppm (State) and 0.0534 ppm (federal)
PM_{10}	24-hour	10.4 µg/m^3 (construction) and 2.5 µg/m^3 (operation)
	Annual	1.0 µg/m^3 (construction and operation)
$PM_{2.5}$	24-hour	10.4 µg/m^3 (construction) and 2.5 µg/m^3 (operation)
SO_2	1-hour	0.25 ppm (State) and 0.075 ppm (federal)
	24-hour	0.04 ppm (State)
Lead	30-day Average	1.5 µg/m^3 (State)
	Rolling 3-month Average	0.15 µg/m^3 (Federal)

Source: SCAQMD. *Air Quality Significance Thresholds*. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds. Accessed November 2022.

Operational Emissions

In addition to the mass daily thresholds above, a project would normally have a significant impact on air quality from project operations if any of the following would occur:

85 SCAQMD. "South Coast AQMD Modeling Guidance for AERMOD." http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance#Background. Accessed November 2022.

- Either of the following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:
  - The project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively; or
  - The incremental increase due to the project is equal to or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.
- The project creates an objectionable odor at the nearest sensitive receptor.

Consistency with Applicable Plans and Policies

Section 15125 of the State CEQA Guidelines requires the EIR to identify any inconsistencies with applicable governmental plans and policies. The consistency analysis addresses consistency with the SCAQMD's 2016 AQMP and 2022 AQMP,[86] the 2020-2045 SCAG RTP/SCS,[87] and policies included within the Ontario Plan.[88]

Health Risk Assessment (Toxic Air Contaminants)

Per the SCAQMD, a project would result in a significant health impact if the carcinogenic or toxic air contaminants individually or cumulatively are equal to or exceed the maximum individual cancer risk of ten in one million persons or a chronic and acute hazard index of 1.0, or the cancer burden of 0.5 excess cancer cases (in areas greater than or equal to one in one million).

5.2.3.2 Methodology

Emissions Inventory Modeling

Development of the proposed Project would generate air pollutants from a number of individual sources during both construction and operational use. Intermittent, short-term construction emissions that occur from activities such as demolition, site-grading, concrete construction, and other activities are evaluated. Emissions from operation of the proposed Project are also evaluated. Regulatory models used to estimate air quality and health impacts include:

86 SCAQMD. *2016 Final Air Quality Management Plan*.

87 SCAG. *Connect SoCal.*

88 City of Ontario. *The Ontario Plan*. "Policy Plan."

- California Air Pollution Officers Association (CAPCOA) CalEEMod (California Emissions Estimator Model Version 2020.4.0)[89] land use emissions model estimates emissions due to demolition and construction activities and operations for land use development. CalEEMod Version 2020 was used for the air quality analysis, as it was the available model version on issue of the Notice of Preparation.

- California Air Resources Board's (CARB) EMFAC[90]emissions inventory model. EMFAC is the latest emission inventory model that calculates emission inventories and emission rates for motor vehicles operating on roads in California. This model reflects CARB's current understanding of how vehicles travel and how much they emit. EMFAC can be used to show how California motor vehicle emissions have changed over time and are projected to change in the future.

- CARB OFFROAD[91] emissions inventory model. OFFROAD is the latest emission inventory model that calculates emission inventories and emission rates for off-road equipment such as loaders, excavators, and off-road haul trucks operating in California. This model reflects CARB's current understanding of how equipment operates and how much they emit. OFFROAD can be used to show how California off-road equipment emissions have changed over time and are projected to change in the future.

- FAA's Aviation Environmental Design Tool (AEDT, Version 3d) was used to prepare airport operational emission estimates for aircraft, auxiliary power units (APU), ground support equipment (GSE), and stationary sources.[92,93] Since the Notice of Preparation, the FAA released an updated version of AEDT (Version 3e, released May 9 of 2022). A review of the new features of Version 3e indicates that the updated model would not provide aircraft air quality results that would differ greatly from those derived using

89 California Air Pollution Officers Association. *California Emissions Estimator Model User's Guide*. May 2021, http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6. Accessed November 2022.

90 CARB. *EMFAC2021 User's Guide.* January 15, 2021, https://ww2.arb.ca.gov/sites/default/files/2021-01/EMFAC202x_Users_Guide_01112021_final.pdf. Accessed November 2022.

91 CARB. "MSEI – Off-Road Documentation." https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation-0. Accessed November 2022.

92 FAA. *Aviation Environmental Design Tool (AEDT) Users Guide.* September 2017, https://aedt.faa.gov/Documents/AEDT3d_UserManual.pdf. Accessed November 2022.

93 FAA. *Aviation Environmental Design Tool (AEDT) Version 3d Technical Manual*.

Version 3d. AEDT uses airport-specific information and aircraft fleet databases. The aircraft fleet database contains more than 3,000 aircraft (airframe and engine combinations).

- American Meteorological Society/USEPA Regulatory Model (AERMOD). AERMOD (Version 21112, released April 22 of 2021) is an atmospheric dispersion model which can simulate point, area, volume, and line emissions sources and has the capability to include simple, intermediate, and complex terrain along with meteorological conditions and multiple receptor locations.[94,95] AERMOD is commonly executed to yield 1-hour maximum and annual average concentrations (in parts per million or ppm and micrograms per cubic meter or $\mu g/m^3$) at each receptor. AERMOD is used to estimate air concentrations at nearby receptors resulting from the activities associated with an air emission source. Plot files from AERMOD using unitized emissions (one gram per second) for each air toxics source category were imported into CARB's Hotspots Analysis and Reporting Program (HARP), Risk Assessment Standalone Tool (RAST, Version 22118). Using the AERMOD plot files and the emissions inventory, the RAST calculates health impacts based on ground-level concentrations of air toxics.[96]

Construction

Intermittent (short-term construction emissions that occur from activities, such as site-grading, paving, and building construction) air quality impacts related to the construction of the proposed Project were evaluated. The air quality analysis focuses on daily emissions from construction (mobile, area, stationary, and fugitive sources) activities. CalEEMod was used to quantify construction-related emissions. The emissions generated from these construction activities include:

94 USEPA. Support Center for Regulatory Atmospheric Modeling (SCRAM). "AERMOD Modeling System." https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models#aermod. Accessed November 2022.

95 Title 40 CFR Part 51. *Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions*. Final Rule.

96 CARB. "HARP Risk Assessment Standalone Tool." Released April 28, 2022, https://ww2.arb.ca.gov/resources/documents/harp-risk-assessment-standalone-tool. Accessed November 2022.

- Dust (including PM_{10} and $PM_{2.5}$) primarily from "fugitive" sources (i.e., emissions released through means other than through a stack or tailpipe) such as material handling for demolition and soil movement and travel on unpaved surfaces; and

- Combustion exhaust emissions of criteria air pollutants and their precursors (ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$) primarily from operation of heavy off-road construction equipment, haul trucks, (primarily diesel-operated), and construction worker automobile trips (primarily gasoline-operated).

- VOC as ROG primarily from "fugitive" sources such as architectural coating and paving.

Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. High winds (greater than 10 miles per hour) occur infrequently in the area, less than two percent of the time. In the absence of mitigation, construction activities may result in significant quantities of dust, and as a result, local visibility and PM_{10} concentrations may be adversely affected on a temporary and intermittent basis during construction. In addition, the fugitive dust generated by construction would include not only PM_{10}, but also larger particles, which would fall out of the atmosphere within several hundred feet of the Project site and could result in nuisance-type impacts.

Erosion control measures and water programs are typically undertaken to minimize these fugitive dust and particulate emissions. A dust control efficiency of over 50 percent due to daily watering and other measures (e.g., limiting vehicle speed to 15 mph, management of stockpiles, screening process controls, etc.) was used. Based on CalEEMod, one water application per day reduces fugitive dust by 34 percent, two water applications per day reduces fugitive dust by 55 percent, and three water applications per day reduces fugitive dust by 61 percent.

Construction worker trips were modeled using the light-duty auto/truck classification. Construction worker trips are a composite of gasoline and diesel vehicles. Construction worker vehicles were assumed to be 14.7 miles per one-way trip per CalEEMod. Haul trucks were modeled as diesel combination long-haul trucks, which is a heavy-heavy duty truck emission factor for public vehicles. Distance traveled was assumed to be 20 miles per one-way trip for construction haul trucks per CalEEMod. The particulate emissions include paved road dust, brake wear, and tire wear particulate emissions. For haul trucks, exhaust particulate emissions are approximately 15 percent of the total particulate emissions.

An on-site asphalt/concrete recycling operation is proposed on the south side of East Avion Street on a partially paved and flat parcel that is flanked by East Mission Boulevard (and railroad tracks) to the south and industrial abandoned (industrial) uses on either side (which is within the

project site). The recycling operations would reduce the total vehicle miles traveled needed for asphalt/concrete delivery trucks but would require delivery of some raw materials (i.e., asphalt, Portland cement, and aggregate) to mix the materials on-site. The construction emissions inventory includes an analysis of fugitive dust emissions associated with the asphalt/concrete recycling operation (i.e., cold milling machine for asphalt and crushing processing equipment for concrete), as well as the exhaust emissions associated with the equipment engines (approximately 170 horsepower) and haul trucks (approximately 20 miles per trip). The asphalt/concrete recycling operation would contain various crusher, conveyors, and screens. These emissions were summed with the construction emissions developed in CalEEMod to represent the total construction emissions for the Proposed Project.

During Phases 1 and 2, the on-site asphalt/concrete recycling operation would have a capacity rating of 650 tons per hour (325 cubic yards per hour) with asphalt recycling at 200 cubic yards per hour and concrete recycling at 125 cubic yards per hour.

The following provides details regarding the construction schedule assumed in the modeling analysis.

During Phase 1, construction activities are estimated to begin in of the third quarter of 2023 and after Material Handling Equipment (MHE) testing, would become operational in of the third quarter of 2025. **Table 5.2-6: Estimated Construction Schedule – Phase 1** provides the estimated construction schedule during Phase 1. Typically, construction activities would occur between 5 AM and 3 PM (ten hours per day), Monday through Friday.

TABLE 5.2-6
ESTIMATED CONSTRUCTION SCHEDULE – PHASE 1[a]

Phase	Start	End	Working Days
Demolition	03/01/2023	06/29/2023	87
Site Preparation	05/26/2023	11/13/2023	122
Garage Construction	07/03/2023	02/01/2024	154
Building Construction	09/01/2023	09/04/2024	264
Apron Paving	11/15/2023	06/18/2024	155
MHE Installation	03/15/2024	12/31/2024	208

[a] *As discussed in **Section 3.0, Project Description**, the construction schedule for Phase 1 is between third quarter 2023 and third quarter 2025. The construction schedule in this table and analyzed in the Air Quality Technical Report, this section, **Section 5.5, Energy**, and **Section 5.7 Greenhouse Gas Emissions** show Phase 1 construction starting in March 2023 and being completed in December 2024, which is the most conservative analysis as emissions would be higher in earlier years.*

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

Demolition would involve removal of approximately 192,484 square feet of buildings requiring approximately 875 haul truck trips (or approximately ten haul truck trips per day) per CalEEMod. Demolition would also involve removal of approximately 2,047,320 square feet of asphalt/concrete, which would be recycled within the Project site and not require offsite haul truck trips (thereby avoiding 2,616 haul truck trips).[97] Site preparation would consist of land clearing and grading resulting in approximately 107,000 cubic yards of import materials requiring approximately 13,375 haul truck trips (or approximately 102 haul truck trips per day) based on a haul truck capacity of eight cubic yards. Phase 1 would require a maximum of 280 construction employee trips and 100 vender trips per day during building construction and less trips during the other phases.

The estimated construction equipment associated with the proposed Project along with the number of pieces of diesel equipment, daily hours of operation, horsepower (hp), and load factor (i.e., percent of full throttle) are shown in **Table 5.2-7: Estimated Construction Equipment Usage – Phase 1**. Phase 1 would include construction of the following component details of the proposed Project:

- 508,675 square feet within Air Cargo Sort Building
- 26,000 square feet within Aviation Line Maintenance Garage
- 101,500 square feet within Air Cargo Sort Building Office
- 2,047,320 million square feet of aircraft apron
- 932 parking spaces and 271,000 square feet within parking structure
- 29 parking spaces and 15,300 square feet within surface parking lot
- Project area of 62 acres (including parking structure of four acres)

97 Assuming asphalt depth of four inches and concrete depth of eight inches; resulting in 30,510 cubic yards and based on eight cubic yards of haul truck capacity per CalEEMod.

TABLE 5.2-7
ESTIMATED CONSTRUCTION EQUIPMENT USAGE – PHASE 1

Phase	Equipment	Amount	Daily Hours	HP	Load Factor
Demolition	Excavators	3	8	450	0.38
Demolition	Other Construction Equipment	3	8	425	0.42
Demolition	Rubber Tired Dozers	2	8	247	0.40
Demolition	Other Material Handling Equipment	2	8	168	0.40
Site Preparation	Excavators	3	8	425	0.38
Site Preparation	Off-Highway Trucks	3	8	300	0.38
Site Preparation	Plate Compactors	2	8	250	0.43
Site Preparation	Rollers	2	8	120	0.38
Site Preparation	Rubber Tired Dozers	2	8	250	0.40
Site Preparation	Skid Steer Loaders	2	8	225	0.37
Garage Construction	Cranes	2	7	231	0.29
Garage Construction	Pumps	1	8	200	0.74
Garage Construction	Tractors/Loaders/Backhoes	2	8	120	0.37
Building Construction	Aerial Lifts	5	8	75	0.31
Building Construction	Cranes	2	7	231	0.29
Building Construction	Generator Sets	1	8	84	0.74
Building Construction	Pumps	1	8	200	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8	120	0.37
Building Construction	Welders	1	8	46	0.45
Apron Paving	Graders	1	8	200	0.41
Apron Paving	Other Construction Equipment	1	8	385	0.42
Apron Paving	Pavers	2	8	350	0.42
Apron Paving	Paving Equipment	2	8	132	0.36
Apron Paving	Rollers	2	8	120	0.38

TABLE 5.2-7
ESTIMATED CONSTRUCTION EQUIPMENT USAGE – PHASE 1

Phase	Equipment	Amount	Daily Hours	HP	Load Factor
MHE Installation	Aerial Lifts	3	8	75	0.31
MHE Installation	Forklifts	3	8	50	0.20
MHE Installation	Tractors/Loaders/Backhoes	1	8	120	0.37
MHE Installation	Welders	2	8	10	0.45

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

After completion of Phase 1, relocation of existing uses and facilities in the Phase 2 area would occur, followed by the demolition of existing structures and site improvements in the Phase 2 area including site preparation and grading. Construction of the remaining improvements, including the expansion of the Air Cargo Sort Building and aircraft apron improvements, would begin in the third quarter of 2027, after site preparation activities, and be completed by 2029. **Table 5.2-8: Estimated Construction Schedule – Phase 2** provides the estimated construction schedule during Phase 2. Typically, construction activities would occur between 5 AM and 3 PM (ten hours per day), on Monday through Friday.

TABLE 5.2-8
ESTIMATED CONSTRUCTION SCHEDULE – PHASE 2

Phase	Start	End[a]	Working Days
Demolition	09/14/2025	01/13/2026	87
Site Preparation	12/06/2026	05/25/2027	122
Building Construction	08/08/2027	08/10/2028	264
Apron Paving	10/25/2027	05/26/2028	155
MHE Installation	02/20/2028	12/06/2028	208

Notes:

[a] *Construction of Phase 2 would be completed by 2029. It is possible the construction period could be completed by end of 2028. Notably, project delays that affect the corresponding time period in which construction of Phase 1 and Phase 2 would occur would result in lower emission factors due to regulatory requirements and greater engine efficiencies, and thus, lower emission estimates. As such, a shorter construction period, with construction complete by end of 2028, would result in higher daily emissions and more daily trips. Therefore, the Air Quality Technical Report (**Appendix 5.2-1**) and this section assumed a construction completion date of end of 2028 for a conservative air quality impact analysis related to construction.*

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

Demolition would involve removal of approximately 432,295 square feet of buildings requiring approximately 1,966 haul truck trips (or approximately 23 haul truck trips per day). Demolition

would also involve removal of approximately 1,045,440 square feet of asphalt/concrete, which would be recycled within the Project site and not require offsite haul truck trips (thereby avoiding 910 haul truck trips).[98] Site preparation would consist of land clearing and grading resulting in approximately 50,000 cubic yards of import materials requiring approximately 6,250 haul truck trips (or approximately 51 haul truck trips per day) based on a haul truck capacity of eight cubic yards. Phase 2 would require a maximum of 240 construction employee trips and 100 vender trips per day during building construction and less trips during the other phases.

The estimated construction equipment associated with the proposed Project along with the number of pieces of diesel equipment, daily hours of operation, horsepower (hp), and load factor (i.e., percent of full throttle) are shown in **Table 5.2-9: Estimated Construction Equipment Usage – Phase 2**. Phase 2 would include construction of the following elements of the proposed Project:

- 246,825 square feet within Air Cargo Sort Building
- 26,000 square feet within GSE Maintenance Building
- 1,045,440 square feet of aircraft apron
- Project area of 35 acres

TABLE 5.2-9
ESTIMATED CONSTRUCTION EQUIPMENT USAGE – PHASE 2

Phase	Equipment	Amount	Daily Hours	HP	Load Factor
Demolition	Excavators	3	8	450	0.38
Demolition	Other Construction Equipment	3	8	425	0.42
Demolition	Rubber Tired Dozers	2	8	247	0.40
Demolition	Other Material Handling Equipment	2	8	168	0.40
Site Preparation	Excavators	3	8	425	0.38
Site Preparation	Off-Highway Trucks	3	8	300	0.38
Site Preparation	Plate Compactors	2	8	250	0.43
Site Preparation	Rollers	2	8	120	0.38
Site Preparation	Rubber Tired Dozers	2	8	250	0.40

98 Assuming asphalt depth of four inches and concrete depth of eight inches; resulting in 12,800 cubic yards and based on eight cubic yards of haul truck capacity per CalEEMod.

TABLE 5.2-9
ESTIMATED CONSTRUCTION EQUIPMENT USAGE – PHASE 2

Phase	Equipment	Amount	Daily Hours	HP	Load Factor
Site Preparation	Skid Steer Loaders	2	8	225	0.37
Building Construction	Aerial Lifts	5	8	75	0.31
Building Construction	Cranes	2	7	231	0.29
Building Construction	Generator Sets	1	8	84	0.74
Building Construction	Pumps	1	8	200	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8	120	0.37
Building Construction	Welders	1	8	46	0.45
Apron Paving	Graders	1	8	200	0.41
Apron Paving	Other Construction Equipment	1	8	385	0.42
Apron Paving	Pavers	2	8	350	0.42
Apron Paving	Paving Equipment	2	8	132	0.36
Apron Paving	Rollers	2	8	120	0.38
MHE Installation	Aerial Lifts	3	8	75	0.31
MHE Installation	Forklifts	3	8	50	0.20
MHE Installation	Tractors/Loaders/Backhoes	1	8	120	0.37
MHE Installation	Welders	2	8	10	0.45

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

Operation

The sources of airport-related air pollutant emissions are aircraft, auxiliary power units (APU), ground support equipment (GSE), stationary sources such as emergency generators, and motor vehicles (employee and deliveries), as well as area sources (consumer products and landscaping), and energy usage (natural gas and electrical). For aircraft, APU, and GSE, the operational emission inventories were prepared using Version 3d of the Federal Aviation Administration's

(FAA's) Aviation Environmental Design Tool (AEDT).[99] For employee vehicles and delivery trucks, the operational emission inventories were prepared using CARB's EMFAC emissions model. The air quality analysis of operations includes a review of criteria pollutant emissions such as CO, NO_x, SO_x, VOC as ROG, coarse particulate or PM_{10}, and fine particulate or $PM_{2.5}$. The following describes each emission source associated with the proposed Project:

- **Aircraft** – Exhaust gases from aircraft engines are predominantly comprised of nitrogen, oxygen, and water vapor, compounds not normally considered air pollutants. Aircraft also emit CO, VOC, NO_x, SO_x, PM_{10}, and $PM_{2.5}$. The amount of pollutant emitted depends on factors such as engine type, aircraft type, and operational mode (i.e., taxi/idle, approach, climb-out, or takeoff).

The aircraft activities comprising a landing/take-off cycle produce ground-based emissions (i.e., emissions in aircraft taxi/idle mode) and emissions that occur above ground level (i.e., during aircraft modes of approach, climb-out, and takeoff). While the taxi/idle mode and portions of the approach and climb-out modes occur within the immediate area—for the purpose of estimating the level of emissions that could impact air pollutants—extends beyond the area described up to the atmospheric mixing height (i.e., the height above ground in which a pollutant disperses). In the Ontario area, the atmospheric mixing height is 2,402 feet above ground level.[100] To be at this altitude, arriving aircraft would be approximately six miles from the Airport (i.e., the evaluation includes all aircraft activity occurring approximately six miles from the end of any of the airport's runways).

The number of annual aircraft operations and the aircraft fleet mix for the Baseline and future conditions was used in the air quality analysis.[101] AEDT default emission factors were used to estimate aircraft emissions for all aircraft. The factors are provided by aircraft engine type and

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99 FAA. *Aviation Environmental Design Tool (AEDT) Version 3d Technical Manual*. https://aedt.faa.gov/3d_information.aspx. Accessed November 2022.Accessed November 2022

100 SCAQMD. *Draft Aircraft Emissions Inventory for South Coast Air Quality Management District*. August 2016, http://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/aircraft-emissions-inventory-for-the-south-coast-air-quality-management-district.pdf. Accessed November 2022.

101 Aircraft operations which are not directly part of the Project are included in the analysis because the Project aircraft results in changes in taxi movements and speeds for all airport aircraft (passenger and other cargo operations).

operational mode (i.e., take-off, climbout, approach, and taxi/idle).[102] Aircraft emissions are described within several operational modes: engine startup, taxi in and taxi out, climb (aboveground within takeoff and climb-out) and descend (aboveground within approach and landing). AEDT default times were used for each mode except for ground taxi/delay movements. Times in mode for taxi-in (for arrivals) and taxi-out (for departures) were based on airfield simulation modeling using AirTOP.[103] Of note, the proposed Project anticipates some operation of electric cargo aircraft.[104]

- Notably, the proposed Project would increase the taxi-in times and taxi-out times associated with non-project aircraft operations. This is a result of the greater number of aircraft operations which decreases airfield taxi efficiency. Therefore, the air quality analysis includes the impacts due to project-related and non-project related aircraft operations.

Based on FAA's AEDT and when comparing the proposed Project to Baseline, the estimated aircraft fuel usage for Phase 1 is 6,437,288 gallons and for Phase 2 is 10,642,404 gallons.

- APU – APU are small turbine engines on an aircraft that are used to start the main engines, provide electrical power to aircraft radios, lights, and other equipment, and power the onboard air conditioning (heating and cooling) system.

Use of a ground power unit (GPU) or gate connections eliminates the need for aircraft to use their own power at the gate except for short periods of time during engine start-up and shut-down. Terminal gates without preconditioned air (PCA)/ground power typically assume an APU operating time of 26 minutes (13 minutes during taxi in and 13 minutes during taxi out). Terminal gates with PCA/ground power typically assume an APU operating time of seven minutes (3.5

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102 For the purposes of the emissions inventories, a landing and take-off cycle is comprised of the following AEDT operational mode categories: 1) Descend Below Mixing Height: The modes in this category are associated with an aircraft's arrival, beginning at the atmospheric mixing height, and including descend emissions below 1,000 feet, the landing ground roll, and arrival taxi (i.e., taxi-in) emissions; and 2) Climb Below Mixing Height: The modes in this category are associated with an aircraft's departure, beginning with startup and including climb taxi (i.e., taxi-out), takeoff ground roll, climb below 1,000 feet and climb to the atmospheric mixing height.

103 Transoft Solutions. "AirTOP." https://www.airtop-software.com/. Accessed November 2022.

104 Eviation. "ALICE." https://www.eviation.co/aircraft/. Accessed November 2022.

minutes during taxi in and 3.5 minutes during taxi out).[105] All of the passenger terminal gates at Ontario International Airport provide PCA and gate power to aircraft.[106] The proposed Project also would provide aircraft parking position power within the Project site, which would reduce APU operating times for the cargo aircraft from 26 to 7 minutes.

- GSE – GSE are equipment used to service aircraft between flights (e.g., cargo loaders, baggage tugs, tow tugs, belt loaders).[107] GSE emissions depend on the level of fuel consumption and distance traveled/operating time. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron.[108] For the preparation of emissions for GSE, default AEDT emission factors were used and default AEDT operating times were used. The estimated annual fuel usage for the GSE is approximately 8,000 gallons of diesel during Phase 1, while no fuel is used for GSE in Phase 2 as GSE would be all electric. The following provides a list of expected GSE associated with the proposed Project:

Ground Support Equipment	Fuel Type	Number of Units
Loaders (Commander 30)	Electric	12
Belt Loaders	Electric	8
Ground Power Units	Electric	8
Push back Tugs	Electric	5
Stairs (B737)	None	3
Stairs (B747/B767)	None	8
Tugs	Electric	25
Dollies	None	450
Tow bars	None	15
Ramp Support (Vans/Carts)	Electric	5
Large Dollies	None	10
Forklifts	Electric	27

105 FAA. *Aviation Emissions and Air Quality Handbook. Version 3 Update 1*. January 2015. https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/. Accessed November 2022.

106 APU/GSE associated with passenger, FedEx and UPS aircraft and other similar activities are not affected by the Project and therefore, were not included in the analysis.

107 APU/GSE associated with passenger, FedEx and UPS aircraft and other similar activities are not affected by the Project and therefore, were not included in the analysis.

108 Diesel-powered fuel trucks would be used during Phase 1 and replaced with electric hydrant carts within Phase 2.

- **Stationary sources** – Airports have a variety of stationary sources, including heating and refrigeration plants, boilers, generators, aircraft engine testing, and fuel storage/transfer facilities. Emission levels from some stationary sources are regulated through regulatory permits. The proposed Project includes seven 2.0-megawatt (MW) diesel-engine driven emergency generators; five generators during Phase 1 and an additional two generators within Phase 2.[109] The Applicant shall comply with SCAQMD Rules 201 and 203 (Authority to Construct and Permit to Operate), which require that owners of applicable construction or operation equipment obtain air quality permits from the SCAQMD prior to construction and operation. The estimated annual fuel usage, assuming each emergency generator operates 50 hours per year (2 hours per day), is approximately 34,760 gallons of diesel fuel during Phase 1 and 48,660 gallons of diesel fuel during Phase 2.[110]

  Phase 1 of the proposed Project would require approximately 8.5 MW of power. Phase 2 of the proposed Project which would require approximately 2.85 MW of power at buildout. An additional 10 percent of other miscellaneous loads is needed for the proposed Project. At full development, the Proposed Project would require approximately 12.4 MW of power. The proposed Project would include a 1.5-MW Solar PV Panel system on the rooftop of the Cargo Sorting Building and Parking Structure.

- **Motor vehicles** – Project-related motor vehicle activity includes employees and delivery trucks.[111] Emissions factors for these sources were obtained from the EMFAC model. For the proposed Project, electric charging stations would be provided in the employee and visitor parking lots and truckyard. The motor vehicle fleet mix and fuel type were based on information within EMFAC.

- As detailed within the Traffic Study (**Appendix 5.12-1**), the proposed Project would generate VMT from employee and delivery trucks. Specifically, the proposed Project would generate daily VMT estimates of 45,291 during Phase 1 operation and 50,163 during Phase 2 operation. As discussed further in **Chapter 5.5: Energy** of this Draft EIR,

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109 Passenger terminal (as well as FedEx and UPS) boilers, generators, and other stationary sources are not affected by the proposed project and therefore, were not included in the analysis.

110 CAT. Electric Power Systems. "Vendor Specifications for Standby Generator." https://www.cat.com/en_US/products/new/power-systems/electric-power.html. Accessed November 2022.

111 Airport passenger associated motor vehicles, terminal deliveries, FedEx and UPS delivery trucks, and other similar activities are not affected by the Project and therefore, were not included in the analysis.

these VMT estimates would result in annual petroleum fuel usage of 588,450 gallons during Phase 1 operation and 609,990 gallons during Phase 2 operation.

- The employee vehicles and delivery trucks would use approximately 437,890 gallons of gasoline and 150,560 gallons of diesel during Phase 1, respectively. The employee vehicles and delivery trucks would use approximately 406,610 gallons of gasoline and 203,380 gallons of diesel during Phase 2, respectively.

Health Risk Assessment

A health risk assessment (HRA) estimates the health impacts to be expected from a project's TAC emissions. The proposed Project would constitute a new emission source of diesel particulate matter (DPM) due to its construction activities and haul trucks. Studies have demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. Secondly, various air toxics would be emitted by the aircraft and delivery trucks during operations.[112] The HRA focuses on impacts on existing residences, offsite workers, and other sensitive populations (including onsite workers within the passenger terminal and other areas within the Airport).

Health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Individual cancer risk is the likelihood that a person exposed to air toxic concentrations over a 30-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The maximally exposed individual (MEI) represents the worst–case risk estimate, based on a theoretical person continuously exposed for a lifetime at the point of highest compound concentration in the air. This is a highly conservative assumption since most people do not remain at home all day and on average residents change residences every 11 to 12 years. In addition, this assumption assumes that residents are experiencing outdoor concentrations for the entire exposure period.

112 Toxic air contaminants are a broad class of compounds known to cause morbidity or mortality. TAC are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., gasoline service stations, dry cleaners). TAC are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TAC are regulated at the regional, state, and federal level.

The HRA was conducted following methodologies in OEHHA's Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments[113] and SCAQMD's Risk Assessment Procedures for Rule 1401, 1401.1 and 212.[114] This was accomplished by applying the estimated concentrations at the receptors analyzed to the established cancer risk estimates and acceptable reference concentrations for noncancer health effects.

CARB and OEHHA have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. For health risk assessments, the health impacts are analyzed for individual residents assumed to be standing in their primary outdoor spaces closest to the source of air toxics and for individual offsite workers assumed to be standing outside of a commercial or industrial building.

Appendix 5.2-1 provides additional methodologies and assumptions used within the HRA.

5.2.3.3 Project Design Features

Construction

The following project design features (PDFs) would be implemented during construction activities to reduce emissions and are quantified within the air quality analysis:

PDF AQ-1: The Applicant shall use equipment that meets the USEPA's Tier 4 emissions standards for offroad diesel-powered construction equipment with 50 horsepower (hp) or greater, for all phases of construction activity. To ensure that Tier 4 or the cleanest construction equipment available would be used during the Project's construction, the OIAA shall confirm that the Applicant includes this requirement

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113 Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. February 2015. https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0. Accessed November 2022.

114 SCAQMD. *Risk Assessment Procedures for Rule 1401, 1401.1 and 212*. September 1, 2017, http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf?sfvrsn=12. Accessed November 2022.

in applicable bid documents, purchase orders, and contracts. Additionally, the OIAA shall confirm that the Applicant also requires periodic reporting and provision of written construction documents by construction contractor(s) and conducts regular inspections to the maximum extent feasible to ensure and enforce compliance.

This PDF results in the avoidance of 1.5 tons of VOC, 16.3 tons of NO_x, 0.8 tons of PM_{10}, and 0.7 tons of $PM_{2.5}$ during the entire construction period.

PDF AQ-2: The Applicant shall conduct concrete/asphalt demolition on-site to reuse concrete/asphalt generated during construction. During Phase 1, demolition would involve removal of approximately 2,047,320 square feet of asphalt/concrete, which would be recycled within the project site and not require offsite haul truck trips (i.e., avoiding 2,616 haul truck trips). During Phase 2, demolition would involve removal of approximately 1,045,440 square feet of asphalt/concrete, which would be recycled within the project site and not require offsite haul truck trips (i.e., avoiding 910 haul truck trips).

This PDF results in the avoidance of 0.1 tons of CO and 0.2 tons of NO_x during the entire construction period.

Operation

Section 3.0: Project Description of this EIR includes a description of the sustainable project features included as part of the proposed Project (See **Section 3.4.4: Sustainable Project Features**).

The following PDFs would be implemented during operation to reduce emissions and are quantified within the air quality analysis:

PDF AQ-3: The Ground Support Equipment (GSE), including (but not limited to) aircraft tugs, baggage tugs, belt loaders, cargo loaders, forklifts, and ground power units, ramp support carts/vans, servicing aircrafts shall be electric by Phase 2.

This PDF results in the avoidance of 0.7 tons of VOC, 1.7 tons of CO, 1.6 tons of NO_x, and 0.1 tons of PM_{10} and $PM_{2.5}$ compared to the use of diesel fueled ground support equipment.

PDF AQ-4: A portion of the proposed Project's aircraft fleet shall include electric cargo aircraft. (See **Table 3.4** in **Section 3.0: Project Description**).

This PDF results in the avoidance of 3.8 tons of VOC, 23.0 tons of CO, 25.5 tons of NO_x, and 0.2 tons of PM_{10} and $PM_{2.5}$ compared to the use of jet-fueled aircraft similar to the project fleet.

PDF AQ-5: All new aircraft parking positions shall be equipped with ground power and pre-conditioned air, therefore reducing the need to operate auxiliary power units.

This PDF results in the avoidance of 0.2 tons of VOC, 2.7 tons of CO, 3.3 tons of NO_x, and 0.5 tons of PM_{10} and $PM_{2.5}$ compared to without the gate infrastructure.

PDF AQ-6: The Applicant shall conduct maintenance and/or testing on each of the seven standby generators on separate days to limit daily emissions from maintenance/testing activities.

This PDF results in the avoidance of 13.5 pounds of VOC, 185 pounds of CO, 35.5 pounds of NO_x, and 2.1 pounds of PM_{10} and $PM_{2.5}$ when compared to testing all seven generators on the same day.

Moreover, additional PDFs not quantified within the air quality analysis include:

PDF AQ-7: The Air Cargo Sort Building shall meet Leadership in Energy and Environmental Design (LEED) certification standards, shall include enhanced building automation systems, and shall utilize advanced low energy HVAC systems.

PDF AQ-8: The visitor parking lot shall include 29 parking stalls, 6 of which shall have access to electric charging points. The employee parking structure shall include 932 parking stalls, 300 of which shall have access to electric charging points.

5.2.3.4 Project Impacts

Would the Project:

AQ-1: Conflict with or obstruct implementation of the applicable air quality plan?

SCAQMD Air Quality Management Plans

As discussed above, SCAQMD has adopted a series of AQMPs to lead the Air Basin into compliance with several criteria air pollutant standards and other federal requirements, while

taking into account construction and operational emissions associated with population and economic growth projections provided by SCAG's RTP/SCS.[115]

The current AQMP is the Final 2022 Air Quality Management Plan (2022 AQMP)[116] and is the regional blueprint for achieving air quality standards in the South Coast Air Basin, an area that includes Orange County and the nondesert portions of Los Angeles, Riverside and San Bernardino counties. Although the Final 2022 AQMP is the most recently adopted AQMP, the current State SIP relies upon the strategies within the 2016 AQMP. As such, this analysis addresses both the 2016 AQMP and 2022 AQMP.

The AQMPs represent a thorough analysis of existing and potential regulatory control options, include available, proven, and cost-effective strategies, and seek to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The AQMPs recognize the critical importance of working with other agencies to develop funding and incentives that encourage the accelerated transition to cleaner vehicles, and the modernization of buildings and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy.

With regard to emissions, the 2016 AQMP notes that SCAQMD has limited authority over the mobile sources that contribute most of the air quality problems in the basin, such as locomotives, aircraft, and ships and, for this reason, attainment cannot be achieved without federal actions. The 2016 AQMP also notes that aircraft emission reductions are primarily under the jurisdiction of the USEPA. Similarly, the 2022 AQMP notes that NO_x emissions from federally regulated sources alone (locomotives, aircraft, and ships) will exceed the amount of NO_x needed to attain the federal standard by 42 percent. For this reason, the US EPA needs to address sources within their authority for the NO_x standard to be met.

In recognition of this, both the 2016 and 2022 AQMP include strategies for reducing NOx emissions associated with airports. Specifically, the 2016 AQMP introduced measure MOB-04 which requires Basin airports to reduce non-aircraft emission sources at their facilities. This measure has since been carried over to the 2022 AQMP. The Airport's AQIP, prepared to implement this measure, identifies efforts related to MOB-04 and programs to address air quality at the Airport. As it relates to construction projects, the AQIP includes a Construction Equipment

115 SCAG. *Connect SoCal*.

116 SCAQMD. *Final 2016 Air Quality Management Plan*.

Policy (RM7), which requires contractors under contract with OIAA to utilize Tier 4 Final construction equipment. Use of Tier 4 Final construction equipment would result in a reduction on NOx and PM emissions from construction activities. As it relates to operation, the AQIP includes a GSE Policy (RM1), which requires the Airport to implement a GSE policy that promotes the use of newer, cleaner equipment for ground operations. The AQMP discusses that other sources of emissions associated with airports, including aircraft, are subject to the regulatory authority of the USEPA. The AQMP discusses actions that would be taken by the CARB to address these sources of emissions, including the adoption of more stringent criteria pollutant and GHG standards for aircraft engines, use of cleaner aviation fuels, and reducing emissions from on-ground operations.

SCAQMD recommends that, when determining whether a project is consistent with the relevant AQMP, the lead agency should assess whether the project would directly obstruct implementation of the plans by impeding SCAQMD's efforts to achieve attainment with respect to any criteria air pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM_{10}, and $PM_{2.5}$) and whether it is consistent with the demographic and economic assumptions (typically land use related, such as employment and population/residential units) upon which the plan is based.[117] SCAQMD guidance indicates that projects whose growth is included in the projections used in the formulation of the applicable AQMP are considered to be consistent with the plan and would not interfere with its attainment.[118]

Construction

Control Strategies

During construction, the proposed Project would comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the ATCM to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time, and with SCAQMD's regulations, such as Rule 403[119] for controlling fugitive dust and Rule 1113[120] for controlling VOC emissions from architectural coatings. Furthermore, the proposed Project would

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117 SCAQMD. *Air Quality Analysis Handbook*.

118 SCAQMD. *CEQA Air Quality Handbook.* p. 12-1. November 1993.

119 SCAQMD. "Rule 403: Fugitive Dust." http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf. Accessed November 2022.

120 SCAQMD. "Rule 1113: Architectural Coatings." http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24. Accessed November 2022.

use vehicles from vendors that comply with fleet rules to reduce on-road truck emissions under CARB's Truck and Bus regulation.[121] Compliance with these measures and requirements would be consistent with and meet or exceed the 2016 AQMP and 2022 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

As discussed previously, measure MOB-04 requires Basin airports to reduce non-aircraft emission sources at their facilities. The Airport's AQIP identifies efforts related to MOB-04 and programs to address air quality at the Airport. As it relates to construction projects, the AQIP includes a Construction Equipment Policy (RM7), which requires contractors under contract with OIAA to utilize Tier 4 Final construction equipment. Use of Tier 4 Final construction equipment would result in a reduction on NOx and PM emissions from construction activities. In December 2019, SCAQMD and the Airport signed a Memorandum of Understanding (MOU) which outlines how the Airport will quantify NOx emission reductions through implementation measures outlined in the Airport's AQIP. The proposed Project would comply with the measures included in the AQIP including the use of Tier 4 equipment during construction. As such, the proposed Project would not conflict with applicable control strategies in the AQMPs.

Growth Strategies

The proposed Project would result in an increase in short-term employment compared to existing conditions. Although the proposed Project would generate construction jobs during the construction process, construction-related jobs generated would likely be filled by employees within the construction industry within the City and the greater San Bernardino County region. Construction industry jobs generally have no regular place of business, as construction workers commute to job sites throughout a given region, which may change several times a year. Moreover, these jobs would be temporary in nature. Therefore, the construction jobs generated by the proposed Project would not conflict with the long-term employment or population projections upon which the 2016 AQMP and 2022 AQMP are based.

For these reasons, construction of the Project will not conflict with or obstruct implementation of the 2016 and 2022 AQMPs.

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121 CARB. "Truck and Bus Regulation." https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about. Accessed November 2022.

Operations

Control Strategies

As discussed previously, the AQIP includes a GSE Policy (RM1), which requires the Airport to implement a GSE policy that promotes the use of newer, cleaner equipment for ground operations. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron. As such, operation of the proposed Project would be consistent with the AQIP which was developed to identify emissions reduction efforts as it relates to the AQMP. As such, the proposed project would not conflict with applicable control strategies in the AQMP.

Moreover, over time new technologies or systems will emerge, or will become more cost-effective or user-friendly, which will further reduce the reliance upon nonrenewable natural resources. For example, future implementation of the Clean Fuel Standard and the Renewable Portfolio Standard are expected to decrease the use of nonrenewable fossil fuels. Similarly, efforts made by the FAA and SFO to increase usage of alternative jet fuels are expected to occur during the lifetime of the proposed Project.

Growth Strategies

The 2016 and 2022 AQMPs include land use and transportation strategies from the SCAG RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects. The 2016 AQMP forecasts emissions inventories up to the year 2031 ''with growth'' through a detailed consultation process with SCAG.[122] Per the 2016 AQMP, the region is projected to see a 12 percent growth in population, 16 percent growth in housing units, 23 percent growth in employment, and 8 percent growth in vehicle miles traveled between 2012 and 2031. Similarly, 2022 AQMP forecasts emissions inventories up to the year 2037 ''with growth'' through a detailed consultation process with SCAG.[123] The region is projected to see a 12 percent growth in population, 17 percent growth in housing units, 11 percent growth in

122 SCAQMD. *Final 2016 Air Quality Management Plan*.

123 SCAQMD. *Final 2022 AQMP*.

employment, and 5 percent growth in vehicle miles traveled between 2018 and 2037. As such, aircraft operations within the region are also expected to increase.

The RTP/SCS includes an Aviation and Ground Access appendix.[124] The RTP/SCS notes that SCAG has no authority over airports or airport activity and that the FAA has this authority. SCAG is interested in how traffic going and coming from airports affects the roads, highways, and transit systems in the region. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts and SCAG modeling estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. The Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections.

As discussed above, the SCAQMD does not have regulatory authority over the aircraft or aircraft operations, which are the primary sources of air emissions associated with airports. The 2022 AQMP includes control strategy MOB:4 Emissions Reductions at Commercial Airports, which addresses the non-aviation mobile sources of emissions at commercial airports. This measure consists of Memorandums of Understanding between SCAQMD and five commercial airports, including Ontario Airport, to develop and implement air quality improvement plans (AQIPs). As discussed above, OIAA prepared and implements an AQIP to implement this measure and the Project will include use of all electric GSE, which is consistent with this measure. The growth associated with the Project is also consistent with the 2016 and 2022 AQMPs. For these reasons, operation of the Project will not conflict with or obstruct implementation of the 2016 and 2022 AQMPs.

AQ-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

A significant impact could occur if the proposed Project would add a considerable contribution to Federal or State nonattainment pollutants. In regard to determining the significance of the proposed Project's contribution, the SCAQMD significance thresholds determine if a project would contribute a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in nonattainment.

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124 SCAG. *Connect SoCal*.

Construction Impacts

Table 5.2-10: Maximum Daily Construction Emissions – Phase 1 shows the estimated maximum daily emissions for construction related activities (including combustion engine and fugitive dust emissions) for the proposed Project. The off-road equipment represents the largest contribution to the construction emissions. For Phase 1, the maximum daily construction emissions would not exceed the SCAQMD thresholds of significance.

TABLE 5.2-10
MAXIMUM DAILY CONSTRUCTION EMISSIONS – PHASE 1

Construction Year	VOC	CO	NO_x	PM_{10}	$PM_{2.5}$	SO_2
	(pounds/day)					
2023	4	114	30	36	8	<1
2024	4	97	18	7	2	<1
Significance Thresholds	75	550	100	150	55	150
Significant?	No	No	No	No	No	No

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

Table 5.2-11: Maximum Daily Construction Emissions – Phase 2 shows the estimated maximum daily emissions for construction related activities (including combustion engine and fugitive dust emissions) for the proposed Project. The off-road equipment represents the largest contribution to the total construction emissions. For Phase 2, the maximum daily construction emissions would not exceed the SCAQMD thresholds of significance.

TABLE 5.2-11
DAILY CONSTRUCTION EMISSIONS – PHASE 2

Construction Year	VOC	CO	NO_x	PM_{10}	$PM_{2.5}$	SO_2
	(pounds/day)					
2025	2	59	9	27	4	<1
2026	2	59	12	6	3	<1
2027	2	77	12	6	3	<1
2028	3	93	17	7	2	<1
Significance Thresholds	75	550	100	150	55	150
Significant?	No	No	No	No	No	No

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

As shown in **Table 5.2-10** and **Table 5.2-11**, construction emissions associated with the proposed Project would not exceed the SCAQMD's emission thresholds and would therefore not result in a cumulatively considerable net increase of any criteria pollutant. As such, construction impacts would be less than significant.

Operational Impacts

The sources of airport-related air pollutant emissions are aircraft, APU, GSE, stationary sources such as emergency generators, and motor vehicles (employee and deliveries), as well as area sources (consumer products and landscaping), and energy usage (electrical).

For the emissions inventory, in order to determine the Project-related operational impacts associated with air pollutant emissions, the total emissions associated with the proposed Project that would occur in Phase 1 and Phase 2, including other aircraft operations not associated with the Project, were compared to the Baseline Condition emissions. The difference between these two conditions was used to determine the significance of the proposed Project when compared to the SCAQMD thresholds.

- Phase 1 (2025) With Project operations compared to the Baseline Condition
- Phase 2 (2029) With Project operations compared to the Baseline Condition

Table 5.2-12: Estimated Daily Operational Emissions – Project Phase 1 Compared to Baseline presents the daily criteria air pollutant emissions when compared With Project to the Baseline Condition during Phase 1. As shown, the proposed Project operational emissions during Phase 1 would exceed SCAQMD significance thresholds for CO, VOC, and NO_x, primarily due to aircraft emissions, followed by employee vehicles, delivery trucks, and emergency generators.

TABLE 5.2-12
DAILY OPERATIONAL EMISSIONS – PROJECT PHASE 1 COMPARED TO BASELINE

Emission Source	CO	VOC	NO_x	SO_2	PM_{10}	PM_{10}
	(pounds/day)					
Aircraft	1,438	238	1,421	98	7	7
APU	13	1	15	2	2	2
GSE	<1	<1	<1	<1	<1	<1
Employee Motor Vehicles	61	1	5	<1	2	1
Delivery Trucks	29	1	2	<1	<1	<1
Emergency Generators	31	2	6	4	<1	<1
Area Sources	<1	16	<1	<1	<1	<1

TABLE 5.2-12 DAILY OPERATIONAL EMISSIONS – PROJECT PHASE 1 COMPARED TO BASELINE						
Emission Source	**CO**	**VOC**	**NO_x**	**SO_2**	**PM_{10}**	**PM_{10}**
	(pounds/day)					
Energy Sources	<1	<1	<1	<1	<1	<1
Grand Total	1,571	259	1,451	104	11	10
Significance Thresholds	550	55	55	150	150	55
Significant?	**Yes**	**Yes**	**Yes**	No	No	No

Values reflect rounding of totals.

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

Table 5.2-13: Estimated Daily Operational Emissions – Project Phase 2 Compared to Baseline presents the daily criteria air pollutant emissions when compared With Project to the Baseline Condition. As shown, the proposed Project operational emissions during Phase 2 would exceed SCAQMD significance thresholds for CO, VOC, NO_x, and SO_2 primarily due to aircraft emissions, followed by employee vehicles, delivery trucks, and emergency generators. Notably, Phase 2 operations would not require fuel trucks and thus, the GSE emissions would be zero.

TABLE 5.2-13 DAILY OPERATIONAL EMISSIONS – PROJECT PHASE 2 COMPARED TO BASELINE						
Emission Source	**CO**	**VOC**	**NO_x**	**SO_2**	**PM_{10}**	**PM_{10}**
	(pounds/day)					
Aircraft	2,097	346	2,529	165	11	11
APU	20	2	24	3	3	3
GSE	-	-	-	-	-	-
Employee Motor Vehicles	50	1	4	<1	2	<1
Delivery Trucks	26	<1	2	<1	1	<1
Emergency Generators	31	2	6	4	<1	<1
Area Sources	1	22	<1	<1	<1	<1
Energy Sources	<1	<1	0.54	<1	<1	<1
Grand Total	**2,223**	**373**	**2,565**	**173**	**17**	**16**
Significance Thresholds	550	55	55	150	150	55
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	No	No

Values reflect rounding of totals.

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

The above comparison of the Project to the Baseline is influenced by factors that are not attributable to the Project itself. Specifically, the comparison contains future aircraft operations from background growth that are projected to occur with or without the proposed Project. **Appendix 5.2-1** contains an evaluation of the Project's air quality impacts relative to "Without Project" conditions at the Airport. As shown therein, the Project is less impactful when compared to the Without Project conditions (rather than the Baseline Condition), as the former comparison eliminates growth in aircraft operations which is not related to the proposed Project. This comparison is provided in **Appendix 5.2-1** for informational purposes only and is not the comparison used for purposes of determining the significance of the proposed Project's impacts.

In closing, as shown in **Table 5.2-12** and **Table 5.2-13**, operational emissions associated with the proposed Project would exceed the SCAQMD's emission thresholds for CO, VOC, and NOx during Phase 1. And, during Phase 2, the proposed Project would exceed the SCAQMD's emission thresholds for CO, VOC, NOx, and SO_2. Therefore, the proposed Project would result in a cumulatively considerable net increase of criteria pollutants. As such, operational impacts would be significant.

AQ-3: Expose sensitive receptors to substantial pollutant concentrations?

Air Dispersion Analysis

Construction

An air quality analysis was conducted to determine the ambient concentrations at nearby receptors which would result from project construction activities. **Appendix 5.2-1** provides detailed information about the location of air quality receptors used in the dispersion modeling analysis of criteria pollutants (NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$). These receptors are designed to represent off-site locations where a person has access and can be situated for an hour or longer at a time (which is different from the HRA receptors which are designed to represent specific residences, schools, daycares, and offsite worker locations). The ambient air quality standards analysis results are presented for Phase 1 and 2. The maximum impacts due to construction activities occur near the Project site along the Airport boundary and dissipate moderately within 1,000 feet of the Project site. Phase 1 construction activities would occur between 2023 and 2025 while Phase 2 construction activities would occur from 2025 through 2029.

As shown in **Table 5.2-14: Estimated Concentration Impacts from Construction Activities – Phase 1**, for the air quality receptors during Project construction of Phase 1, the incremental 1-hour NO_2 impacts, including background concentrations, would be a maximum of 0.10 ppm, which is below the State threshold of 0.18 ppm. The maximum Project construction incremental annual NO_2 impacts, including background concentrations, would be 0.02 ppm, which is below

the thresholds of 0.03 ppm (state) and 0.053 ppm (federal). Moreover, the maximum incremental 24-hour and annual PM_{10} impacts would be 3.67 µg/m^3 and 0.09 µg/m^3, respectively; impacts would be below the 24-hour PM_{10} threshold of 10.4 µg/m^3 and below the annual PM_{10} threshold of 1.0 µg/m^3. The Project construction maximum incremental 24-hour $PM_{2.5}$ impacts would be 0.97 µg/m^3, which would be below the 24-hour $PM_{2.5}$ threshold of 10.4 µg/m^3. Additionally, the maximum incremental SO_2 and CO impacts including background concentrations would be well below the significance thresholds. Therefore, Phase 1 construction activities would not result in substantial pollutant concentrations and impacts would be less than significant. The PM_{10} and $PM_{2.5}$ concentrations include construction exhaust and fugitive dust.

As shown in **Table 5.2-15: Estimated Concentration Impacts from Construction Activities – Phase 2**, for the air quality receptors during Project construction during Phase 2, the incremental 1-hour NO_2 impacts, including background concentrations, would be a maximum of 0.10 ppm, which is below the State threshold of 0.18 ppm. The maximum Project construction incremental annual NO_2 impacts, including background concentrations, would be 0.02 ppm, which is below the thresholds of 0.03 ppm (state) and 0.053 ppm (federal). Moreover, the maximum incremental 24-hour and annual PM_{10} impacts would be 3.66 µg/m^3 and 0.11 µg/m^3, respectively; impacts would be below the 24-hour PM_{10} threshold of 10.4 µg/m^3 and below the annual PM_{10} threshold of 1.0 µg/m^3. The Project construction maximum incremental 24-hour $PM_{2.5}$ impacts would be 0.65 µg/m^3, which would be below the 24-hour $PM_{2.5}$ threshold of 10.4 µg/m^3. Additionally, the maximum incremental SO_2 and CO impacts including background concentrations would be well below the significance thresholds. Therefore, Phase 2 construction activities would not result in substantial pollutant concentrations and impacts would be less than significant. The PM_{10} and $PM_{2.5}$ concentrations include construction exhaust and fugitive dust.

As discussed previously, the federal and State ambient air quality standards for criteria air pollutants have been set at levels considered safe to protect public health, including the health of "sensitive" populations, such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Based on the results shown in **Table 5.2-14** and **Table 5.2-15**, construction of the proposed Project is not likely to result in adverse health effects as a result of its criteria air pollutant emissions.

TABLE 5.2-14
ESTIMATED CONCENTRATION IMPACTS FROM CONSTRUCTION ACTIVITIES – PHASE 1

Criteria	CAAQS 1-Hour NO_2 (ppm)	CAAQS Annual NO_2 (ppm)	NAAQS Annual NO_2 (ppm)	24-Hour PM_{10} ($\mu g/m^3$)	Annual PM_{10} ($\mu g/m^3$)	24-Hour $PM_{2.5}$ ($\mu g/m^3$)	CAAQS 1-Hour SO_2 (ppm)	NAAQS 1-Hour SO_2 (ppm)	24-Hour SO_2 (ppm)	1-Hour CO (ppm)	8-Hour CO (ppm)
Phase 1 Project Increment	0.02	<0.01	<0.01	3.67	0.09	0.97	<0.01	<0.01	<0.01	0.12	0.01
Background Concentration	0.08	0.02	0.02				<0.01	<0.01	<0.01	2.70	1.20
Total Concentration	**0.10**	**0.02**	**0.02**	**3.67**	**0.09**	**0.97**	**<0.01**	**<0.01**	**<0.01**	**2.82**	**1.21**
Significance Threshold	0.18	0.03	0.053	10.4	1.00	10.4	0.25	0.075	0.04	20.0	9.00
Potentially Significant (Yes or No)?	No	No	No	No	No	No	No	No	No	No	No
Percent of Threshold	53	63	35	43	9	10	1	4	3	14	13

Total concentrations reflect rounding of values. Per SCAQMD guidance, PM10 and PM2.5 impacts do not include background concentrations.

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

TABLE 5.2-15
ESTIMATED CONCENTRATION IMPACTS FROM CONSTRUCTION ACTIVITIES – PHASE 2

Criteria	CAAQS 1-Hour NO_2 (ppm)	CAAQS Annual NO_2 (ppm)	NAAQS Annual NO_2 (ppm)	24-Hour PM_{10} ($\mu g/m^3$)	Annual PM_{10} ($\mu g/m^3$)	24-Hour $PM_{2.5}$ ($\mu g/m^3$)	CAAQS 1-Hour SO_2 (ppm)	NAAQS 1-Hour SO_2 (ppm)	24-Hour SO_2 (ppm)	1-Hour CO (ppm)	8-Hour CO (ppm)
Phase 2 Project Increment	0.02	<0.01	<0.01	3.66	0.11	0.65	<0.01	<0.01	<0.01	0.14	0.01
Background Concentration	0.08	0.02	0.02				<0.01	<0.01	<0.01	2.70	1.20
Total Concentration	**0.10**	**0.02**	**0.02**	**3.66**	**0.11**	**0.65**	**<0.01**	**<0.01**	**<0.01**	**2.84**	**1.21**
Significance Threshold	0.18	0.03	0.053	10.4	1.00	10.4	0.25	0.075	0.04	20.0	9.00
Potentially Significant (Yes or No)?	No	No	No	No	No	No	No	No	No	No	No
Percent of Threshold	51	63	35	49	10	8	1	4	3	14	13

Total concentrations reflect rounding of values. Per SCAQMD guidance, PM10 and PM2.5 impacts do not include background concentrations.

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

Operation

An air quality analysis was conducted to determine the ambient concentrations at nearby receptors which would result from project operations. The proposed Project includes the operation of aircraft, APU, GSE, stationary sources, and employee vehicles and delivery trucks.

As shown in **Table 5.2-16: Estimated Operational Concentration Impacts – Project Phase 1 Compared to Baseline**, for the air quality receptors during Project operations, the incremental 1-hour NO_2 impacts, including background concentrations, would be a maximum of 0.13 ppm, which is below the State threshold of 0.18 ppm. The maximum 1-hour NO_2 concentrations (i.e., 236 µg/m^3 or 0.13 ppm compared to the threshold of 0.18 ppm) occur to the southeast of the Airport and are mostly a result of aircraft departures. The maximum Project operation incremental annual NO_2 impacts, including background concentrations, would be 0.02 ppm, which is below the thresholds of 0.03 ppm (state) and 0.053 ppm (federal). Moreover, the maximum incremental 24-hour and annual PM_{10} impacts would be 0.64 µg/m^3 and 0.20 µg/m^3, respectively; impacts would be below the 24-hour PM_{10} threshold of 2.5 µg/m^3 and below the annual PM_{10} threshold of 1.0 µg/m^3. The Project operation maximum incremental 24-hour $PM_{2.5}$ impacts would be 0.39 µg/m^3, which would be below the 24-hour $PM_{2.5}$ threshold of 2.5 µg/m^3. Additionally, the maximum incremental SO_2 and CO impacts including background concentrations would be well below the significance thresholds. Therefore, Phase 1 operational emissions would not result in substantial pollutant concentrations and impacts would be less than significant.

As shown in **Table 5.2-17: Estimated Operational Concentration Impacts – Project Phase 2 Compared to Baseline**, for the air quality receptors during Project operations, the incremental 1-hour NO_2 impacts, including background concentrations, would be a maximum of 0.16 ppm, which is below the State threshold of 0.18 ppm. The maximum 1-hour NO_2 concentrations (291 µg/m^3 or 0.16 ppm compared to the threshold of 0.18 ppm) occur to the southeast of the Airport and are mostly a result of aircraft departures. The maximum Project operation incremental annual NO_2 impacts, including background concentrations, would be 0.02 ppm, which is below the thresholds of 0.03 ppm (state) and 0.053 ppm (federal). Moreover, the maximum incremental 24-hour and annual PM10 impacts would be 0.98 µg/m3 and 0.22 µg/m3, respectively; impacts would be below the 24-hour PM_{10} threshold of 2.5 µg/m3 and below the annual PM_{10} threshold of 1.0 µg/m3. The Project operation maximum incremental 24-hour $PM_{2.5}$ impacts would be 0.83 µg/m3, which would be below the 24-hour $PM_{2.5}$ threshold of 2.5 µg/m3. Additionally, the maximum incremental SO_2 and CO impacts including background concentrations would be well below the significance thresholds. Therefore, Phase 2 operational emissions would not result in substantial pollutant concentrations and impacts would be less than significant.

TABLE 5.2-16
ESTIMATED CONCENTRATION IMPACTS FROM OPERATIONAL ACTIVITIES – PROJECT PHASE 1 COMPARED TO BASELINE

Criteria	CAAQS 1-Hour NO_2 (ppm)	CAAQS Annual NO_2 (ppm)	NAAQS Annual NO_2 (ppm)	24-Hour PM_{10} ($\mu g/m^3$)	Annual PM_{10} ($\mu g/m^3$)	24-Hour $PM_{2.5}$ ($\mu g/m^3$)	CAAQS 1-Hour SO_2 (ppm)	NAAQS 1-Hour SO_2 (ppm)	24-Hour SO_2 (ppm)	1-Hour CO (ppm)	8-Hour CO (ppm)
Project Increment Phase 1		<0.01	<0.01	0.64	0.20	0.39	<0.01	<0.01	<0.01	0.18	0.05
Background Concentration		0.02	0.02				<0.01	<0.01	<0.01	2.70	1.20
Total Concentration	**0.13**	**0.02**	**0.02**	**0.64**	**0.20**	**0.39**	**<0.01**	**<0.01**	**<0.01**	**2.88**	**1.25**
Significance Threshold	0.18	0.03	0.0534	2.5	1.0	2.5	0.25	0.075	0.04	20.0	9.00
Potentially Significant (Yes or No)?	No	No	No	No	No	No	No	No	No	No	No
Percent of Threshold	70	69	39	12	7	10	3	10	2	14	14

The incremental peak concentration was determined by calculating the difference between the With Project and the Baseline Condition at each receptor, then selecting the maximum value across all receptors. Total concentrations reflect rounding of values. Per SCAQMD guidance, PM_{10} and $PM_{2.5}$ impacts do not include background concentrations. Background NO_2 concentrations were included in the AERMOD (as seasonal/temporal values); thus, AERMOD directly calculated the total Project plus background.

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (Appendix 5.2-1).

TABLE 5.2-17
ESTIMATED CONCENTRATION IMPACTS FROM OPERATIONAL ACTIVITIES – PROJECT PHASE 2 COMPARED TO BASELINE

Criteria	CAAQS 1-Hour NO_2 (ppm)	CAAQS Annual NO_2 (ppm)	NAAQS Annual NO_2 (ppm)	24-Hour PM_{10} ($\mu g/m^3$)	Annual PM_{10} ($\mu g/m^3$)	24-Hour $PM_{2.5}$ ($\mu g/m^3$)	CAAQS 1-Hour SO_2 (ppm)	NAAQS 1-Hour SO_2 (ppm)	24-Hour SO_2 (ppm)	1-Hour CO (ppm)	8-Hour CO (ppm)
Project Increment Phase 2		<0.01	<0.01	0.98	0.22	0.83	<0.01	<0.01	<0.01	0.21	0.08
Background Concentration		0.02	0.02				<0.01	<0.01	<0.01	2.70	1.20
Total Concentration	**0.16**	**0.02**	**0.02**	**0.98**	**0.22**	**0.83**	**<0.01**	**<0.01**	**<0.01**	**2.91**	**1.28**
Significance Threshold	0.18	0.03	0.0534	2.5	1.0	2.5	0.25	0.075	0.04	20.0	9.00
Potentially Significant (Yes or No)?	No	No	No	No	No	No	No	No	No	No	No
Percent of Threshold	86	74	42	30	12	17	3	9	3	14	14

The incremental peak concentration was determined by calculating the difference between the With Project and the Baseline Condition at each receptor, then selecting the maximum value across all receptors. Total concentrations reflect rounding of values. Per SCAQMD guidance, PM_{10} and $PM_{2.5}$ impacts do not include background concentrations. Background NO_2 concentrations were included in the AERMOD (as seasonal/temporal values); thus, AERMOD directly calculated the total Project plus background.

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (Appendix 5.2-1).

As previously stated, the comparison of the Project and the Baseline Condition contains future aircraft operations from background growth that are projected to occur with or without the proposed Project. Appendix 5.2-1 contains an evaluation of the Project's air quality impacts relative to "Without Project" conditions at the Airport. As shown therein, the Project is less impactful when compared to the Without Project conditions (rather than the Baseline Condition), as the former comparison eliminates growth in aircraft operations which is not related to the proposed Project. This comparison is provided in Appendix 5.2-1 for informational purposes only and is not the comparison used for purposes of determining the significance of the proposed Project's impacts.

Ambient Air Quality Concentrations Associated with Roadway Intersections

Localized CO concentrations associated with motor vehicle travel on area roadways were evaluated using a screening method based on the California Line Source Dispersion Model (CALINE-4) microscale dispersion model, developed by Caltrans, in combination with EMFAC 2021 emission factors. In traffic studies, the term "level of service" (LOS) describes traffic performance at roadway intersections and is generally expressed as a letter grade (A through F, with an F grade reflecting highly congested traffic conditions).

To establish a more accurate record of baseline CO concentrations affecting the Air Basin, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The SCAQMD 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.[125] Additionally, the SCAQMD also recommends an evaluation of potential localized CO impacts when a project causes the LOS at a study intersection to worsen from C to D, or if a project increases the V/C ratio at any intersection rated D or worse by 2 percent or more.

None of the proposed Project's studied intersections would exceed 400,000 vehicles per day. Additionally, none of the proposed Project's studied intersections worsen from C to D or increase the V/C ratio at any intersection rated D or worse by two percent or more. As such, the proposed

125 SCAQMD. *2003 AQMP.* "Appendix V." August 2003.

Project would not produce the volume of traffic required to generate a CO hot spot in the context of the 2003 AQMP hot spot study.

To further support this conclusion, CO concentration levels were forecasted at the proposed Project's three most potentially impacted intersections using the CALINE-4 dispersion model developed by Caltrans, peak-hour traffic volumes, and conservative meteorological assumptions. The following intersections were evaluated because the proposed Project's transportation study found that they would operate below LOS standards (i.e., LOS E/F):

1. Euclid Avenue/SR-83 at Mission Boulevard
2. Bon View Avenue at Mission Boulevard
3. Airport Drive at Haven Avenue

Project-generated traffic volumes are forecasted to have a negligible effect on the projected 1-hour and 8-hour CO concentrations at each of the three intersection locations analyzed. The results of this analysis are shown in **Table 5.2-18: Localized Carbon Monoxide Dispersion Analysis**. As shown, the proposed Project would not exceed the 1-hour or 8-hour CO thresholds. Thus, the proposed Project would not cause any new or exacerbate any existing CO hot spots, and, as a result, health impacts related to localized mobile-source CO emissions would not be considered significant.

Appendix 5.2-1 contains a memorandum concerning the CO intersection analysis and detailed results.

Summary of Air Quality Concentration Assessment Results

The following concluding statements can be made about the ambient air quality analysis results:

- The maximum concentrations of the 1-hour and annual NO_2 impacts, including background concentrations, would not exceed the significance threshold. Therefore, the proposed Project would result in a less than significant impact for all off-site receptors due to construction and operational activities during Phase 1 and 2.

- The maximum concentrations of 24-hour and annual PM_{10} and 24-hour $PM_{2.5}$ would not exceed the significance threshold. Therefore, the proposed Project would result in a less than significant impact for all off-site receptors due to construction and operational activities during Phase 1 and 2.

TABLE 5.2-18
LOCALIZED CARBON MONOXIDE DISPERSION ANALYSIS

Intersection	Peak Period[a]	Maximum 1-Hour Future without Project concentration[b]	Maximum 1-Hour Future with Project concentration[c]	Significant 1-Hour Impact?[d] (>20 ppm)	Maximum 8-Hour Future without Project concentration[e]	Maximum 8-Hour Future with Project concentration[f]	Significant 8-Hour Impact?[d] (>9.0 ppm)
Euclid Ave (SR-83)/Mission Blvd	AM	2.8	2.8	No	1.3	1.3	No
	PM	2.8	2.8	No	1.3	1.3	No
Bon View Ave/Mission Blvd	AM	2.8	2.8	No	1.3	1.3	No
	PM	2.8	2.8	No	1.3	1.3	No
Airport Dr/Haven Ave	AM	2.8	2.8	No	1.3	1.3	No
	PM	2.9	2.9	No	1.4	1.4	No

[a] *Project contribution to local CO impacts were calculated based on peak hour trip generation rates provided in the Ontario International Airport South Airport Cargo Center Draft Transportation Impact Study for both the future and future plus Project AM and PM peak hours.*

[b] *SCAQMD 1-hour ambient background concentration (2.7 ppm) + 2040 Future No Project Conditions.*

[c] *SCAQMD 1-hour ambient background concentration (2.7 ppm) + 2040 Future Plus Phase 1 and Phase 2 Project Conditions.*

[d] *The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.*

[e] *SCAQMD 8-hour ambient background concentration (1.2 ppm) + 2040 Future No Project Conditions.*

[f] *SCAQMD 8-hour ambient background concentration (1.2 ppm) + 2040 Future Plus Phase 1 and Phase 2 Project Conditions.*

Note: ppm = parts per million.

- The maximum concentrations of SO_2 and CO including background concentrations would be well below the significance thresholds. Therefore, the proposed Project would result in a less than significant impact of SO_2 and CO on all nearby receptors due to construction and operational activities during Phase 1 and 2.

Sensitive receptors would not be exposed to substantial pollutant concentrations and the proposed Project's impacts would be less than significant for construction and operation.

Health Risk Assessment

An HRA was conducted for the proposed Project to address the potential for human health impacts associated with construction of the proposed Project. The SCAQMD thresholds of significance applied to assess project-level health impacts are the exposure of persons to substantial levels of air toxics resulting in: (a) a cancer risk level greater than 10 per one million persons; (b) a noncancerous risk (chronic or acute) hazard index greater than 1; and/or, (c) a cancer burden of greater than 0.5 excess cancer cases.[126] For this threshold, sensitive receptors include residential uses, schools, daycare centers, nursing homes, medical centers, and off-site workers.

Construction

Table 5.2-19: Estimated Health Impacts from Construction Activities provides the proposed Project's health impacts from construction activities for nearby sensitive receptors (i.e., on-site workers, off-site workers and residence at Hofer Ranch). Most of the health impacts are due to off-road construction equipment operating within the Project site with a minimal contribution from off-site construction truck travel along nearby roadways.

TABLE 5.2-19
ESTIMATED HEALTH IMPACTS FROM CONSTRUCTION ACTIVITIES

Criteria	Cancer Risk	Chronic Impact
Off-site Worker	0.06	<0.1
On-Site Worker	0.58	0.01
Residence	0.06	<0.1
Significance Threshold	10	1.0
Potentially Significant (Yes or No)?	No	No

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

126 Basically, cancer burden is the total cancer risk for all receptors divided by the estimated population within the modeling domain.

As shown in **Table 5.2-19**, the maximum cancer risk from proposed Project construction emissions would be less than 0.1 per one million persons. Thus, the cancer risk for offsite worker receptors due to construction activities would be below the SCAQMD threshold of 10 per one million persons. The maximum chronic health impact modeled would be less than 0.1. Thus, the chronic health impact due to construction activities would be below the Project-level threshold of 1. As such, health risk impacts from construction would be less than significant.

Operation

The HRA focuses on impacts on existing residences, off-site workers, and other sensitive populations (including on-site workers within the passenger terminal and other areas within the Airport) from emissions of air toxics during aircraft operations. Typically, aircraft HAP emissions include formaldehyde in the greatest amount, followed by acetaldehyde, acrolein, benzene, methyl alcohol, and 1,3-butadiene. **Appendix 5.2-1** contains further information on the development of the aircraft HAP emissions inventory.

As with the previous air quality dispersion modeling analyses, the project-related health impacts were compared to the SCAQMD significance thresholds:

- Phase 1 With Project operations compared to the Baseline Condition
- Phase 2 With Project operations compared to the Baseline Condition

As previously discussed, this comparison of the Project to the Baseline is influenced by factors that are not attributable to the Project itself. Specifically, the comparison contains future aircraft operations from background growth that are projected to occur with or without the Project.

Table 5.2-20: Estimated Health Impacts from Operational Activities Compared to Baseline provides the proposed Project's health impacts from operational activities for nearby sensitive receptors. As shown, the maximum cancer risk from Project (Phase 1) operations for residence, off-site worker (such as office buildings, retail centers, hotels, hospitals), on-site worker, and school would be 2.5, 0.2, 2.0, and 0.3 per one million persons, respectively. The maximum cancer risk from Project (Phase 2) operations for residence, offsite worker, on-site worker, and school would be 4.7, 0.4, 3.2, and 0.6 per one million persons, respectively. Thus, the cancer risk for sensitive receptors due to operational activities of the proposed Project would be below the SCAQMD threshold of 10 per one million persons.

The maximum acute health impact (Phase 1) modeled to occur at a residence, off-site worker, on-site worker, and school would be less than 0.4. The maximum acute health impact (Phase 1) modeled to occur at a residence, off-site worker, on-site worker, and school would be less than

0.7. The maximum chronic health impact (Phase 1) modeled to occur at a residence, off-site worker, on-site worker, and school would be less than 0.2. The maximum chronic health impact (Phase 2) modeled to occur at a residence, offsite worker receptor (such as office buildings, retail centers, hotels, hospitals), onsite worker terminal receptor, and onsite non-terminal worker receptor would be less than 0.3. Thus, the acute and chronic health impact due to operational activities at all sensitive receptors would be below the project-level threshold of 1. Notably, a portion of the health impacts, especially associated with the on-site terminal worker receptor, are attributed to airport growth which would occur with or without the Project. The cancer burden due to operations would be 0.02 (Phase 1) and 0.22 (Phase 2) and below the SCAQMD threshold of 0.5 excess cancer cases.

As such, health risk impacts from operation of the proposed Project would be less than significant.

TABLE 5.2-20
ESTIMATED HEALTH IMPACTS FROM OPERATIONAL ACTIVITIES — COMPARED TO BASELINE

Criteria	Cancer Risk	Acute Impact	Chronic Impact
Phase 1			
Residence	2.52	0.30	0.02
Off-site Worker	0.24	0.25	0.02
On-site Worker (non-Terminal)	1.98	0.40	0.19
On-site Worker (Terminal)	0.86	0.24	0.08
School	0.33	0.05	<0.01
Significance Threshold	**10**	**1.0**	**1.0**
Potentially Significant (Yes or No)?	No	No	No
Phase 2			
Residence	4.66	0.22	0.03
Offsite Worker	0.43	0.27	0.04
Onsite Worker (non-Terminal)	3.22	0.66	0.31
On-site Worker (Terminal)	0.91	0.21	0.09
School	0.57	0.03	0.01
Significance Threshold	**10**	**1.0**	**1.0**
Potentially Significant (Yes or No)?	No	No	No

Source: *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*, RCH Group, February 2023. (**Appendix 5.2-1**).

As previously stated, the comparison of the Project and the Baseline Condition contains future aircraft operations from background growth that are projected to occur with or without the proposed Project. Appendix 5.2-1 contains an evaluation of the Project's air quality impacts relative to "Without Project" conditions at the Airport. As shown therein, the Project is less impactful when compared to the Without Project conditions (rather than the Baseline Condition), as the former comparison eliminates growth in aircraft operations which is not related to the proposed Project. This comparison is provided in Appendix 5.2-1 for informational purposes only and is not the comparison used for purposes of determining the significance of the proposed Project's impacts.

Summary of Health Risk Assessment Results

The following concluding statements can be made about the health risk assessment results:

- The cancer risk for off-site worker receptors due to construction activities would be below the SCAQMD threshold of 10 per one million persons. Therefore, the proposed Project would result in less than significant health impacts for all off-site worker receptors due to construction activities.

- The cancer risk for all sensitive receptors due to operational activities would be below the SCAQMD threshold of 10 per one million persons. Therefore, the proposed Project would result in less than significant health impacts for all residence, off-site worker, on-site worker, and school receptors due to operational activities.

- The acute and chronic health impacts for off-site worker receptors due to construction activities would be below the SCAQMD threshold of 1. Therefore, the proposed Project would result in less than significant health impacts for all off-site worker receptors due to construction activities.

- The acute and chronic health impacts for all sensitive receptors due to operational activities would be below the SCAQMD threshold of 1. Therefore, the proposed Project would result in less than significant health impacts for all sensitive receptors due to operational activities.

Health impacts from the proposed Project would be less than significant for construction and operation.

AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The potential for the proposed 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 proposed Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, the proposed Project construction and operations would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people and impacts would be less than significant.

5.2.4 CUMULATIVE IMPACTS

The Airport serves an important role in Southern California's supply chain network. The Airport has been modernizing and implementing infrastructure upgrades to meet local and regional demands. The related projects currently proposed at the Airport are discussed in **Section 4.0: Environmental Setting** and included as Projects A-H in the list of related projects in **Table 4.2**, and **Figure 4.6: Related Cumulative Projects**.

The SCAQMD CEQA Air Quality Handbook states: "[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds established by the District." According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants.

The OIAA recently approved a Final Supplemental EIR for the rehabilitation of the Airport's Runway 8R-26L and associated airfield improvements. These improvements are proposed so that

the airfield meets current FAA standards, safety is improved, and the efficiency of the airfield is enhanced. To implement the improvements, temporary runway closures would be required and the only change in the use of the airfield would result from FAA Air Traffic Control imposed restrictions on the use of Contra Flow operations during nighttime hours (10:00 PM to 7:00 AM). The Runway 8R-26L runway rehabilitation/reconstruction project is scheduled to begin in 2023 and end in 2025, one of the same years for which the proposed Project was evaluated. The Runway 8R-26L runway rehabilitation/reconstruction project would not increase operational activities at the Airport and would result in a less than significant impact from construction emissions.

Generally, cumulative air quality conditions in the Air Basin are considered significant, as the Air Basin is in nonattainment with certain federal and state ambient air quality standards. SCAQMD has provided guidance on an acceptable approach to addressing the cumulative impacts issue for air quality. This guidance states as follows: "As a lead agency, the SCAQMD uses the same significance thresholds for project-specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report … Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable … Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."[127]

During construction, the proposed Project's daily criteria pollutant emissions would not exceed SCAQMD thresholds. Implementation of mitigation measures would further reduce potential daily emissions from construction activities. As such, air quality impacts from the construction of the proposed Project would be less than significant and would not result in a cumulatively considerable increase of air emissions during the construction period. Construction activities also would not exceed the ambient air quality standards at nearby receptors and cumulative impacts would be less than significant.

During operations, the proposed Project's daily criteria pollutant emissions would exceed SCAQMD thresholds for CO, VOC, and NO_x in Phase 1, and CO, VOC, NO_x, and SO_2 in Phase 2. Operations would not exceed the ambient air quality standards at nearby receptors. Impacts from the proposed Project would be significant and unavoidable and would result in a cumulatively considerable increase of air emissions during operations.

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127 SCAQMD. "White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution." Appendices. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed September 2022.

The maximum cancer risk from construction and operations for existing sensitive receptors would be less than the SCAQMD threshold of 10 per one million persons and cumulative impacts would be less than significant.

Based on SCAQMD methodology, the proposed Project's operational emissions would represent a cumulatively considerable contribution, and thus the Project would also result in a cumulatively significant impact.

5.2.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

During construction, the proposed Project would result in less than significant impacts to regional emissions, ambient air quality standards, and cancer risks. Moreover, construction emissions would not conflict with an applicable air quality plan or result in a cumulatively considerable impact. During operation, the proposed Project would result in less than significant impacts to ambient air quality standards and cancer risks. However, the proposed Project's operational emissions would exceed regional SCAQMD thresholds for CO, VOC, NOx, and SO_2. Without mitigation, operational emissions would result in a potentially significant impact and result in a cumulatively considerable impact.

5.2.6 MITIGATION MEASURES

As discussed above, air quality emissions from construction of the Project would not result in significant impacts. The proposed Project operational emissions during Phase 1 and Phase 2 would exceed SCAQMD significance thresholds for CO, VOC, NOx and SO_2 (Phase 2 only), with the majority of these emissions generated by the aircraft operations associated with the Project, followed by employee vehicles, delivery trucks, and emergency generators. As discussed above, neither SCAQMD nor OIAA have the authority to regulate aircraft operations. For these reasons, there are no feasible mitigation measures that would reduce operational emissions to below significance thresholds. However, the proposed Project would incorporate the following mitigation measures as well as mitigation measures **TRANS-1** through **TRANS-5** in Section 5.12, Transportation of this Draft EIR to reduce air quality emissions to fullest extent feasible.

Construction

While not quantifiable, the following mitigation measures would reduce air quality emissions during construction.

MM AQ-1: The Applicant shall require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export with a gross vehicle weight rating of at least 14,001

pounds), that meet CARB's 2010 engine emissions standards or newer, cleaner trucks. The OIAA shall confirm that the Applicant includes this requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards and make the records available for inspection.

MM AQ-2: The Applicant shall require that construction equipment such as concrete/industrial saws, pumps, aerial lifts, light stands, air compressors, and forklifts be electric or alternative-fueled (i.e., non-diesel), where feasible. Pole power shall be utilized at the earliest feasible point in time and shall be used to the maximum extent feasible in lieu of generators.

MM AQ-3: The Applicant shall support and encourage ridesharing and transit incentives for the construction crew by providing crews with the resources needed to organize rideshares, such as bulletin boards or email announcements. The Applicant shall also partially subsidize transit fares or passes for the construction crew members who can feasibly use transit. The Applicant shall set a goal to achieve ten percent total construction worker participation in ridesharing programs and transit use.

Operation

While not quantifiable, the following mitigation measures as well as mitigation measures TRANS-1 through TRANS-5 in Section 5.12, Transportation of this Draft EIR would reduce air quality emissions during operation.

MM AQ-4: The Applicant shall require, in addition to the GSE noted within PDF AQ-3, all other on-site cargo-handling equipment, such as yard trucks, holsters, yard goats, pallet jacks, and similar equipment, to be electric, with the necessary electrical charging stations provided.

MM AQ-5: The Applicant shall require, where feasible, the use of zero-emission Project-related delivery trucks as part of business operations beginning in 2025 (within at least 25 percent of the Project fleet).

The Applicant also shall require, where feasible, the use of zero-emission Project-related delivery trucks as part of the business operations beginning in 2029 (within at least 50 percent of the Project fleet).

MM AQ-6: The Applicant shall include in the design requirements for the Project that a cool roof be installed at the parking structure to reduce energy use and urban heat

island effects. This requirement shall not apply if solar panels are installed on the parking structure.

MM AQ-7: The Applicant shall encourage the use of single engine taxi operations for Project aircraft.

5.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

As discussed above, there are no feasible mitigation measures that would reduce the proposed Project's operational impacts to below SCAQMD thresholds because neither SCAQMD or OIAA have the authority to regulate aircraft operations or emissions from aircraft engines, and the majority of the emissions estimated for operation of the Project are from aircraft operations. For these reasons, there are no additional feasible mitigation measures that would reduce operational emissions to below significance thresholds and the proposed Project's operational air quality emissions at the project-specific and cumulative levels would remain significant and unavoidable.

5.2.8 REFERENCES

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5.3 BIOLOGICAL RESOURCES

5.3.1 INTRODUCTION

This section of the Draft EIR evaluates the Project's potential impacts to biological resources. The analysis in this section is based in part on the following technical report:

- ELMT Consulting, Inc. *Ontario International Airport South Airport Cargo Center Biological Resources Assessment*. October 2022. (DEIR **Appendix 5.3-1**).

5.3.2 ENVIRONMENTAL SETTING

5.3.2.1 Existing Conditions

Project Setting

Project Site

The Project site is in the southwest portion of the Ontario International Airport (Airport). As shown in **Figure 3.2: Project Site Location**, the Project site is developed with concrete and asphalt pavement, aviation-related buildings, surface parking facilities, and landscaped areas. The eastern portion of the Project site supports an area that is undeveloped but heavily disturbed and routinely subject to weed abatement activities. Prior to development of the Ontario International Airport, the Project site was primarily used for agricultural purposes.

The Project site slopes slightly from northwest to southeast. Surface elevation on the Project site ranges from approximately 890 to 920 feet above mean sea level. Due to existing development, the Project site is relatively flat. The site is underlain by Tujunga loamy sand, which can be characterized as very deep, excessively drained soils found on alluvial fans and floodplains, including in urban areas. The soils on the Project site have been heavily disturbed and compacted by existing development.

Surrounding Uses

Airport-related development surrounds the Project site on all sides. The Airport airfield forms the northern boundary and the Cucamonga Channel, an open concrete lined box-culvert that borders the eastern boundary. Pavement, Airport-operated buildings, and hangars are west and south of the Project site. Farther south is the Union Pacific Railroad/Metrolink right-of-way, Mission Boulevard, and industrial uses.

Land Cover Types and Plant Species

The majority of the Project site contains no native habitat or soil. There are no plant communities on the Project site besides unpaved areas covered with low grass and landscape areas managed by the Airport. As shown in **Figure 5.3-1: Land Cover Types**, the Project site comprises of either disturbed or developed land cover. Note, neither land cover is classified as a plant community.

Disturbed

Disturbed areas are generally unpaved but have been subject to a high level of human disturbance from anthropogenic activities. They support minimal vegetation and no longer comprise native plant communities. Disturbed areas occur on the eastern portion of the Project site. These areas are routinely subject to management activities, including mowing and weed abatement, and are used as storage for aircraft cargo containers.

Plant species occurring in these disturbed areas are comprised of a mix of non-native and early successional plant species. Plants observed within the disturbed areas of the Project site include cheeseweed (*Malva parviflora*), ragweed *(Ambrosia psilostachya*), doveweed (*Croton setigerus*), Russian thistle (*Salsolus tragus*), golden crownbeard (*Verbesina encelioides*), puncture vine (*Tribulus terrestris*), short-podded mustard (*Hirschfeldia incana*), red brome (*Bromus rubens*), Mediterranean grass (*Schismus barbatus*), Spanish lotus (*Acmispon americanus*), and prickly lettuce (*Lactuca serriola*).

Developed

Developed areas encompass all buildings, structures, ornamental landscaping, and other impervious surfaces. This type of land cover dominates the Project site. The developed areas of the Project site are generally devoid of vegetation beyond landscaped areas.

Plant species in the developed areas of the Project site are ornamental landscaping, including liquid amber (*Liquidamber styraciflua*), silk oak (*Grevillea robusta*), jacaranda (*Jacaranda mimosifolia*), eucalyptus (*Eucalyptus sp.*), pine (*Pinus sp.*), and planted western sycamore (*Platanus racemosa*).

Wildlife Species

Species detected during the field survey, or identified based on literature review, that are expected to occur within the Project site are described below. Detections are based on calls, songs, scat, tracks, burrows, and direct observation.

SOURCE: ELMT Consulting - 2021

FIGURE **5.3-1**

Meridian Consultants

Land Cover Types

332-001-21

Fish and Amphibians

No fish, amphibians, or hydrogeomorphic features such as perennial creeks, ponds, lakes, or reservoirs that would provide a suitable habitat for fish and amphibians, were observed on the Project site or within the vicinity of the Project site. The adjacent Cucamonga Channel contained stormwater runoff, though water is not always present in the Channel. Therefore, no fish or amphibians are expected to occur and they are presumed absent from the Project site.

Reptiles

The disturbed areas on the eastern portion of the Project site have the potential to provide suitable foraging and cover habitat for a variety of reptilian species adapted to urban conditions. No reptiles were observed during the field investigation. However, based on literature review, common reptilian species that may occur on the Project site include common side-blotched lizard (*Uta stansburiana elegans*), San Diego alligator lizard (*Elgaria multicarinata webbii*), and Great Basin fence lizard (*Sceloporus occidentalis longipes*).[1]

Birds

The disturbed areas on the eastern portion of the Project site have the potential to provide suitable foraging and nesting habitat for a variety of resident and migrant bird species adapted to human disturbance. Avian species observed during the field investigation include house finch (*Haemorhous mexicanus*), Anna's hummingbird (*Calypte anna*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), American kestrel (*Falco sparverius*), lesser goldfinch (*Spinus pstalria*), Say's phoebe (*Sayornis saya*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), Eurasian collared-dove (*Streptopelia decaocto*), common raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), and Cassin's kingbird (*Tyrannus vociferans*).[2]

Mammals

The disturbed areas on the eastern portion of the Project site have the potential to provide suitable foraging and denning habitat for mammalian species adapted to urban disturbance. Most mammal species are nocturnal and are difficult to observe during the day. The only

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1 ELMT Consulting, Inc. *Ontario International Airport South Airport Cargo Center Biological Resources Assessment*. October 2022 (see **Appendix 5.3-1**).

2 ELMT Consulting, Inc. *Biological Resources Assessment*. (See **Appendix 5.3-1**).

mammalian species observed during the field investigation were cottontail (*Sylvilagus audubonii*) and California ground squirrel (*Otospermophilus beecheyi*).[3]

Common mammalian species that have potential to occur on-site include opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and coyote (*Canis latrans*). Structures and ornamental tree species may provide suitable roosting opportunities for local common bat species, i.e. California myotis (*Myotis californicus*), Mexican free-tailed bat (*Tadarida brasiliensis*), and little brown bat (*Myotis lucifugus*). However, the degree and frequency of routine disturbance from airport activities is likely to preclude them from roosting on-site.[4]

Jurisdictional Waters

During the field survey, the Project site was assessed for the presence of depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter, and debris. Suspected jurisdictional areas were checked for the presence of definable channels, soils, and hydrology. No jurisdictional wetland, hydrogeomorphic features such as perennial creeks, or water features were identified on the site.

The USFWS National Wetlands Inventory (NWI) and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented within or immediately surrounding the Project site. One riverine resource was identified along the eastern boundary of the project site, the Cucamonga Channel. The segment of Cucamonga Channel adjacent to the Project site is an open concrete box culvert oriented from north to south.

5.3.2.2 Regulatory Background

Federal

Federal Endangered Species Act

The federal Endangered Species Act (ESA) of 1973,[5] as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service. This legislation is intended to provide a means to conserve

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3 ELMT Consulting, Inc. *Biological Resources Assessment*. (See **Appendix 5.3-1**).

4 ELMT Consulting, Inc. *Biological Resources Assessment*. (See **Appendix 5.3-1**).

5 *Endangered Species Act of 1973* (ESA), 16 USC sec. 1531 et seq.

the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. The federal ESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under the provisions of Section 9(a)(1)(B) of the ESA, it is unlawful to "take" any listed species.[6] A Final Rule published in the Federal Register on November 8, 1999, further defines "harm" as any act that kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns (e.g., nesting or reproduction) of fish or wildlife.[7] Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to or death of species, which therefore are defined as forms of take. These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species.

When a property owner seeks permission from a federal agency for an action that could affect a federally listed plant or wildlife species, the property owner and agency are required to consult with USFWS.

Take prohibitions in Section 9 of the ESA[8] do not expressly encompass all plants. Property owners may take listed plant species without violating the take prohibition if:

- The proposed development is private and does not require federal authorization or permit.
- There are no special federal regulations under Section 4(d) that prohibit take of the plant species.
- There are no State laws prohibiting take of the plant species.

Section 9(a)(2) of the ESA addresses the protections afforded to listed plants. Unlike the California ESA discussed below, the federal ESA provides protection to invertebrate species by listing them as threatened or endangered.

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6 "Take," as defined under the ESA, means to "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct."

7 64 Code of Federal Regulations (CFR). Sections 60727–60731.

8 *ESA of 1973*, 16 USC sec. 1531 et seq.

The ESA prohibits the transportation of endangered plants across State lines or engaging in trade in any listed species, but it does not prohibit the destruction of endangered plants unless they are present on federal land or the plant species is protected by State law.

Issuance of an incidental take permit by the USFWS or National Marine Fisheries Service is a federal action that is subject to Section 7 of the ESA. Section 7 stipulates that any federal agency action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat.[9] A biological opinion issued by the USFWS at the conclusion of the consultation may include authorization for incidental take of a listed species.

In the absence of federal agency involvement, habitat conservation plans under Section 10(a)(1)(B) of the ESA are required as part of the incidental take permit.

Migratory Bird Treaty Act

Enacted in 1918, the Migratory Bird Treaty Act (MBTA)[10] is the domestic law that affirms or implements the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations.

As with the federal ESA, the MBTA also authorizes the Secretary of the Interior to issue permits for take. The procedures for securing such permits are found in Title 50 of the Code of Federal Regulations, together with a list of the migratory birds covered by the act. This law is generally protective of migratory birds but does not specify the type of protection required. The USFWS administers permits to take migratory birds in accordance with the regulations promulgated by the MBTA. Nesting raptors, such as red-tailed hawks and burrowing owls, are protected under the MBTA. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

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9 16 USC Section 1536(a)(2).

10 *US Migratory Bird Treaty Act* (MBTA), 16 USC Section 703 et seq.

State

California Fish and Game Code (CFGC)

CFGC Sections 3500, et seq.,[11] regulate the taking of migratory birds and their nests, including eggs and feathers. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) may violate these sections, as well as the federal law protecting migratory birds.

According to Sections 3511 and 4700 of the CFGC, which regulate birds and mammals, respectively, a "fully protected" species may not be taken or possessed without a permit from the Fish and Game Commission, and "incidental takes" of these species are not authorized.[12]

According to Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Finally, Section 3513 states that is unlawful to take or possess any migratory nongame bird, as designated in the MBTA, or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

For the purposes of these State regulations, California Department of Fish and Wildlife (CDFW) currently defines an active nest as one that is under construction or in use and includes existing nests that are being modified. For example, if a hawk is adding to or maintaining an existing stick nest in a transmission tower, it would be considered to be active and covered under these Fish and Game Code Sections.

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11 California Fish and Game Code (CFGC), sec. 3500–3516, div. 4, Birds and Mammals, pt. 2, Birds, ch. 1, General Provisions.

12 California Department of Fish and Game (CDFG), sec. 3511, 4700, 5050, and 5515.

California Native Plant Protection Act

The California Native Plant Protection Act (NPPA)[13] was enacted in 1977 and codified in CFGC Section 1900. It includes measures to preserve, protect, and enhance endangered and rare native plants.[14] The list of native plants afforded protected by NPPA includes those listed as endangered and threatened under California Endangered Species Act (CESA), and the NPPA definitions of endangered and rare differ from those contained in CESA. NPPA specifies that no person shall import into the State, or take, possess, or sell within this State, any endangered or rare native plant, except in compliance with provisions of NPPA. Even where exceptions apply, individual landowners who have been notified by CDFW of the presence of a rare or endangered plant are required to notify CDFW at least 10 days before changing land uses to allow CDFW to salvage any endangered or rare native plant material.

California Endangered Species Act

The State enacted California Endangered Species Act (CESA) in 1984.[15] CESA expands upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the CFGC. To align with ESA, CESA created categories of "threatened" and "endangered" species.

CESA prohibits the taking, importation, or sale of State-listed endangered or threatened species, except in compliance with permits or conditions specified in CESA. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered

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13 The *Native Plant Protection Act* (NPPA) *of 1977* (Fish and Game Code Sections 1900–1913) directed the California Department of Fish and Game (CDFG; now CDFW) to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protected endangered and rare plants from take.

14 CFGC. Sec. 1900, et seq.

15 CFGC. Sec. 2050, et seq. *California Endangered Species Act*.

if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

CESA authorizes the CDFW to issue permits for incidental take of endangered or threatened species by general development activities, provided that (1) a proposed Project will not jeopardize the continued existence of such species; and (2) any of the project's negative effects on those species will be minimized and fully mitigated. CESA also authorizes CDFW to enter into a memorandum of understanding with individual or organizations to import, export, take, or possess species for scientific, educational, or management purposes.

California Native Plant Society Rare and Endangered Plant Species

In addition to State and federal special status designations, the California Native Plant Society (CNPS) assigns a California Rare Plant Rank (CRPR) to designate the degree of concern for and rarity of plant taxa in California. Special-status plants are assigned to one of six CRPR categories:

- **CRPR 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere.
- **CRPR 1B:** Plants rare, threatened, or endangered in California and elsewhere.
- **CRPR 2A:** Plants extirpated in California, but common elsewhere.
- **CRPR 2B:** Plants rare, threatened, or endangered in California, but more common elsewhere.
- **CRPR 3:** Needs review.
- **CRPR 4:** Plants of limited distribution (a watch list).

In addition to the CRPR, CNPS assigns threat categories to the lists as follows:

0.1 — Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat) (e.g., 1B.1 would be a plant rare, threatened, or endangered in California and elsewhere, and more than 80 percent of the occurrences threatened or with a high degree of threat).

0.2 — Moderately threatened in California (20 percent to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

0.3 — Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

The CNPS rarely assigns a threat category of 0.1 to CRPR 4 plants because they generally have large enough populations to not be significantly threatened in California.

Local

Ontario International Airport (ONT) Wildlife Hazard Management Plan

The ONT Wildlife Hazard Management Plan (WHMP) (with link to the WHMP at *Section 5.3.8* of this DEIR), dated May 2016 and approved by the FAA on March 31, 2020, identifies the approach to abate wildlife hazards within the airfield environment that could jeopardize the safety of air traffic operating into and out of the Airport. The Plan outlines procedures for monitoring, documenting, and reporting potential wildlife hazards and strikes at the Airport. Protocols for responding to hazardous wildlife situations and control procedures for wildlife, including birds and mammals, are presented in the Plan. The WHMP emphasizes the elimination of conditions that create a habitat attracting bird populations at the Airport.

Ontario International Airport (ONT) Rules and Regulations

Section 2.18, *Bird Hazard Reduction – Wildlife Hazard Management* (with link to the WHMP at *Section 5.3.8* of this DEIR), of the ONT Rules and Regulations, dated May 2020, identifies the ONT Airside Operations as the entity responsible for implementing the ONT WHMP and the specific procedures required to report and discourage wildlife, including birds from flocking and nesting at the Airport. Section 2.18 also states that no person shall: feed, provide habitat, introduce, encourage, or attract the introduction of wildlife on the Airport.

Ontario International Airport (ONT) USFWS Depredation Permit

The USFWS issued Permit No. MBPER0037939 (USFWS Permit) for the Airport, which allows the trapping and relocation of certain birds at the Airport, including the Burrowing Owl (BUOW), "to resolve or prevent threats to human safety and/or aircraft safety" at the Airport.

5.3.3 ENVIRONMENTAL IMPACTS ANALYSIS

5.3.3.1 Thresholds of Significance

The potential for the Project to result in impacts associated with biological resources is based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.3.3.2 Methodology

Literature Review

A literature review of species and habitat information was conducted prior to a field survey conducted on September 29, 2021. Databases for the Guasti and Ontario USGS 7.5-minute quadrangles were reviewed to identify species and habitats known to occur locally. The two quadrangles were queried due to the proximity of the Project site to quadrangle boundaries, surrounding development, and regional topography.

The literature review provided a baseline from which to inventory biological resources potentially occurring on the Project site. Database information was used in conjunction with ArcGIS software to locate the nearest recorded occurrences of special-status species to determine if focus field surveys on those species and habitats would be required on or adjacent to the Project site.

The literature review sources included:

- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay.
- USFWS Designated Critical Habitat Maps.
- California Natural Diversity Database (CNDDB) Rarefind 5.
- International Union for Conservation of Naturae (IUCN).
- CNDDB Biogeographic Information and Observation System (BIOS).
- California Native Plant Society Electronic Inventory (CNPSEI) database.
- Calflora Database.
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey.
- USFWS National Wetland Inventory.
- Environmental Protection Agency (EPA) Water Program "My Waters" data layers.
- Google Earth Pro historic aerial imagery (1985-2021).
- San Bernardino County General Plan.
- USFWS Critical Habitat designations for Threatened and Endangered Species.
- USFWS National Wetlands Inventory (NWI).

- 2019 Burrowing Owl Survey Report for Potential Development of the Ontario International Airports Group 1, 2 and 3 Parcels. Report by Helix Environmental Planning dated September 16, 2019.
- Final Supplemental Environmental Impact Report, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements at Ontario International Airport, June 2022.
- Final Supplemental Environmental Impact Report, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements at Ontario International Airport, Attachment 2 (Biological Technical Report), Exhibit E, June 2022.

Field Survey

The field survey investigation, conducted on September 29, 2021, evaluated the entire Project site to determine site conditions and the potential for sensitive habitat. Vacant areas were given special attention for species and habitats known to occur regionally. All vacant areas were identified in the field by walking meandering transects. The vacant areas were evaluated for their potential to support special-status plant and wildlife species. Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), and delineated on an aerial photograph, then digitized into ArcGIS. ArcGIS was used to compute the area of each plant community in acres.

Flora and Fauna

During the field survey, common plant species were observed and identified by visual characteristics and morphology, and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature followed the 2012 Jepson Manual (Hickman 2012). During the field survey, wildlife species were detected by sight, calls, tracks, scat, or other signs, and were recorded during the survey in a field notebook. Field guides used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Additionally, field staff took note of potential natural corridors and linkages that may support the movement of wildlife through the area.

Soil Series Assessment

Project site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for San Bernardino County, Southwestern Part. In addition, the local geological

conditions and historical aerial photographs were reviewed to assess the ecological changes that the Project site has undergone.

Jurisdictional Drainages and Wetlands

Prior to conducting the field investigation, current and historic aerial photography were reviewed to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the USACE, Regional Board, and/or CDFW.

The USFWS National Wetlands Inventory (NWI) and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented within or immediately surrounding the Project site. NWI resources are graphic representations of potential water features that are mapped at high altitudes based on the imagery that was used. Based on this review, one riverine resource was identified along the eastern boundary of the Project site. The mapped riverine resource corresponds with Cucamonga Channel, which is an open concrete box culvert along this reach of the Channel, adjacent to the Project site, and does not support riparian habitat or other sensitive natural plant communities.

The field survey assessed for depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and the presence of litter and debris. Suspected jurisdictional areas were checked for the presence of definable channels, soils, and hydrology.

5.3.3.3 Project Impacts

BIO-1: **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less Than Significant with Mitigation Incorporated.

Special-Status Plant Communities

According to the CNDDB, one special-status plant community has been recorded as observed in the Guasti and Ontario quadrangles: Riversidean Alluvial Fan Sage Scrub. As described in **Table 5.3-1, Special-Status Plant Communities**, Riversidean Alluvial Fan Sage Scrub occurs in

sandy alluvial drainages. As the majority of the Project site contains no native habitat or soil, and since neither Riversidean Alluvial Fan Sage Scrub nor other special-status plant communities were observed at the Project site, it is highly unlikely that Project implementation would impact the Riversidean Alluvial Fan Sage Scrub or any other special-status plant community.

TABLE 5.3-1
SPECIAL-STATUS PLANT COMMUNITIES

Common Name	Status	Habitat	Potential to Occur
Riversidian Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occur within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods.	Absent

Special-Status Plant Species

According to the CNDDB and CNPS, 20 special status plant species have been recorded in the Guasti and Ontario quadrangles. As shown in **Table 5.3-2, Special-Status Plant Species**, none of these species were observed during the field survey. Although the survey was conducted outside of the blooming period for most of these special-status plant species, the Project site and surrounding area have not supported natural plant communities for decades. Historic agricultural use, the Project site's developed state, and its continued disturbance with airport-related operations have eliminated its ability to provide suitable habitat for special-status plant species and seed sources for special-status plant species known to occur in the area. Based on habitat requirements for the identified special-status species, the Project site does not have the potential to support any of the special-status plant species known to occur within the vicinity of the site. The proposed Project would be confined to existing developed areas. Therefore, no impact to special-status plant species would occur.

Special-Status Wildlife Species

According to the CNDDB and listed in **Table 5.3-3, Special-Status Wildlife Species**, 57 special-status wildlife species have been recorded as observed in the Guasti and Ontario quadrangles. None of the species were observed during the field survey. Based on review of the habitat

requirements for these species, the type of soils underlaying the Project site as seen in **Figure 5.3-2: Soils**, and the availability and quality of potential habitat on the Project site, the Project site could support the following four special-status wildlife species:

- Cooper's hawk (*Accipiter cooperii*), a CDFW Watch List Species, moderate potential to support.
- Burrowing owl (*Athene cunicularia*), a CDFW Species of Special Concern, low potential to support.
- California horned lark (*Eremophila alpestris actia*), a CDFW Watch List Species, moderate potential to support.
- California gull (*Larus californicus*), a CDFW Watch List Species, moderate potential to support.

These four species are not federally- or State-listed as endangered or threatened. Cooper's Hawk, California horned lark, and California gull are CDFW Watch List Species.[16] The burrowing owl, however, is a California Species of Special Concern and has been documented approximately 900 feet east of the Project site, in a large vacant area south of the airport runway (Helix 2019), as seen in **Figure 5.3-3: 2018-2020 Burrowing Owl Survey Results**.[17]

No burrowing owls or recent signs (i.e., pellets, feathers, castings, or whitewash) were observed at the Project site. Portions of the Project site—primarily the vacant areas on the eastern end—is unvegetated and/or vegetated with a variety of low-growing plant species that allow for line-of-sight observation favored by burrowing owls. However, no suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities were observed. Additionally, the Project site supports and is surrounded by tall structures, light poles, and fences that offer perching opportunities for larger raptor species (i.e., red-tailed hawk) that prey on burrowing owls. Due to the predominance of vacant land in the immediate vicinity of the Project site, the site is isolated from suitable habitats. Further, the intensity and frequency of routine human disturbance associated with onsite weed abatement activities (i.e., mowing) and Airport-related uses (i.e., cargo storage) precludes burrowing owls from occurring onsite.

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16 ELMT Consulting, Inc. *Biological Resources Assessment*. (See **Appendix 5.3-1**).

17 *Final Supplemental Environmental Impact Report*, *Rehabilitation of Runway 8R-26L and Associated Airfield Improvements at Ontario International Airport*, Attachment 2 (Biological Technical Report), Exhibit E, Figure 7, June 2022.

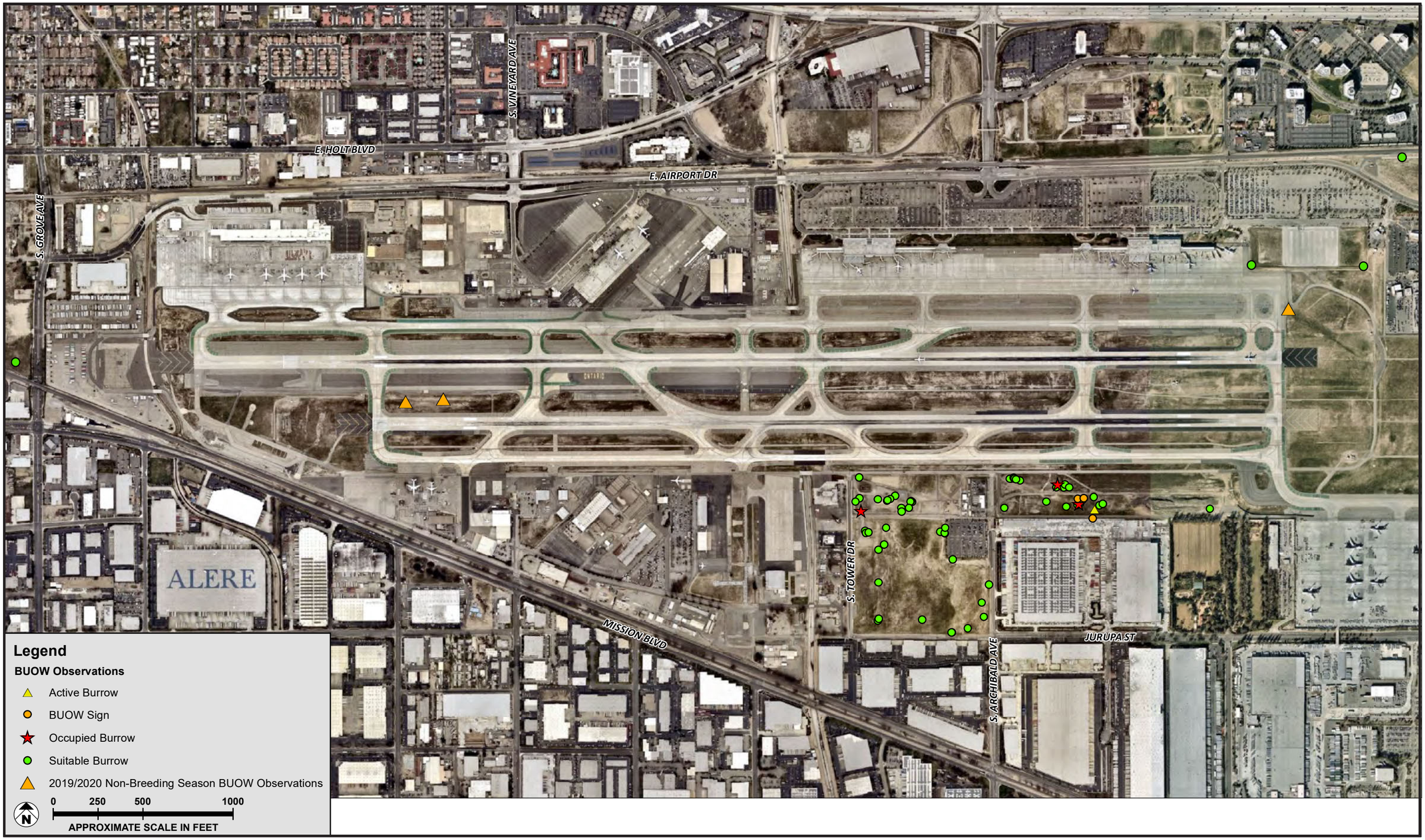
SOURCE: ELMT Consulting - 2022; ESRI Aerial Imagery, Soil Survey Geographic Database, San Bernardino County

FIGURE **5.3-2**

Meridian Consultants

Soils

332-001-21



SOURCE: Helix Environmental Planning - 2022; Biological Technical Report for ONT Rehabilitation of Runway 8R-26L and Associated Improvements, April 2022: Google Earth - 2022

FIGURE **5.3-3**

Meridian Consultants

2018-2020 Burrowing Owl Survey Results

332-001-21

The Project site has a low potential to support burrowing owls and for this reason, focused surveys for burrowing owl were not warranted. Nevertheless, the vacant grassy area in the southeast corner of the Project site may provide suitable foraging and cover habitat for the burrowing owl, and construction activities in this area could potentially impact burrowing owls. Potential impacts to burrowing owls during construction would be potentially significant. Therefore, to avoid potential impacts, **Mitigation Measure BIO-1** would require pre-construction surveys to determine the presence of burrowing owls to ensure that any burrowing owls potentially within this area are protected in accordance with CDFW recommendations for burrowing owls.[18] Implementation of this mitigation measure would reduce potential impacts to less than significant.

Structures and ornamental trees on the Project site could provide suitable roosting opportunities for local common bat species, i.e., California myotis (*Myotis californicus*), Mexican free-tailed bat (*Tadarida brasiliensis*), and little brown bat (*Myotis lucifugus*). These bats typically roost in caves, rock crevices, buildings, and sometimes dead trees. However, due to the degree and frequency of existing routine disturbance on the Project site, the likelihood of bats roosting on the site are low. Additionally, the plant species found in the Project area do not provide suitable long-term roosting or maternity habitat. Therefore, none of the special-status bat species known to occur in the area are expected to occur onsite and impacts to bat species are less than significant.

Nesting Birds

The Migratory Bird Treaty Act (MBTA) protects nesting birds and California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests, or eggs. No active nests or birds displaying nesting behavior were observed during the field survey. However, the Project site and surrounding areas contain ornamental vegetation that could provide minimal nesting habitat for year-round and seasonal avian residents, and for migrating songbirds that are adapted to urban environments. Construction activities, if conducted during bird breeding season, could impact nesting birds and impacts would be potentially significant. Implementation of **Mitigation Measure BIO-2**, which would require pre-construction Nesting Bird Surveys (NBS), would reduce potential impacts to migratory and nesting birds to less than significant.

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18 California Department of Fish and Wildlife (CDFW). 2012. *Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game*. March 7, 2012.

Critical Habitat

Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed, under the federal Endangered Species Act, and that includes the physical or biological features that are essential to the survival and eventual recovery of that species. Regardless of whether individuals or the species are present or not, maintenance of these physical and biological features requires special management considerations or protection. The Project site is not located within a federally designated Critical Habitat. The nearest Critical Habitat to the site occurs approximately 7.0 miles to the east for coastal California gnatcatcher (*Polioptila californica californica*), 7.0 miles to the north for San Bernardino kangaroo rat (*Dipodomys merriami parvus*), and approximately 7.5 miles southeast of the Project site for least Bell's vireo (*Vireo bellii pusillus*), Santa Ana sucker (*Catostomus santaanae*), and southwestern willow flycatcher (*Empidonax traillii extimus*). Therefore, no impact to federally designated Critical Habitat would occur from Project implementation.

BIO-2: **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

No Impact.

Surface drainage features, indicated as blueline streams on USGS maps (observed or expected to exhibit evidence of flow), are considered potential riparian/riverine habitat and could be subject to State and federal regulatory jurisdiction. There are no blue-line streams within the Project site. The Project site is developed with airport and cargo operations and does not support any identifiable drainage courses, inundated areas, wetland features, hydric soils, or hydrogeomorphic features such as perennial creeks. There are no riparian corridors, creeks, or natural areas existing within or connecting the Project site to natural, vacant areas.

The Cucamonga Channel adjacent to the eastern boundary of the Project site is identified as a riverine resource. However, the Cucamonga Channel is an open concrete box culvert and does not support riparian habitat or other sensitive natural plant communities. Therefore, no impact to sensitive natural communities would occur.

TABLE 5.3-2
SPECIAL-STATUS PLANT SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Ambrosia pumila	San Diego Ambrosia	Fed: **END** CA: CNPS: 1B.1	Occurs primarily on upper terraces of rivers and drainages, chaparral, Coastal scrub Valley and foothill grassland Vernal pools. Found at elevations ranging from 65 to 1,600 feet. Blooming period is from April to October.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Berberis nevinii	Nevin's barberry	Fed: **END** CA: **END** CNPS: 1B.1	Occurs on steep, north-facing slopes or in low-grade sandy washes in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found at elevations ranging from 951 to 5,167 feet. Blooming period is from March to June.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Calochortus catalinae	Catalina mariposa-lily	Fed: None CA: None CNPS: 4.2	Grows in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from March to June.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Calochortus plummerae	Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley and foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. From 328 to 5,577 feet in	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-2
SPECIAL-STATUS PLANT SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			elevation. Blooming period is from May to July.	
Calystegia felix	Lucky morning glory	Fed: None CA: None CNPS: 1B.1	Grows within meadows and seeps (sometimes alkaline) and riparian scrub (alluvial) habitats. Found at elevations ranging from 100 to 705 feet. Blooming period is from March to September.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Chorizanthe parryi var. parryi	Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Cladium californicum	California saw-grass	Fed: None CA: None CNPS: 2B.2	Found in meadows and seeps, marshes and alkaline swamps or freshwater habitats. Found at elevations ranging from 197 to 5,249 feet. Blooming period is from June to September.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Deinandra paniculata	paniculate tarplant	Fed: None CA: None CNPS: 4.2	Typically found in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grasslands, and vernal pools. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-2
SPECIAL-STATUS PLANT SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Dodecahema leptoceras	slender-horned spineflower	Fed: **END** CA: **END** CNPS: 1B.1	Chaparral, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes. Found at elevations ranging from 1,181 to 2,690 feet. Blooming period is from April to June.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Horkelia cuneata var. puberula	mesa horkelia	Fed: None CA: None CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Juglans californica	southern California black walnut	Fed: None CA: None CNPS: 4.2	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Juncus acutus ssp. Leopoldii	southwestern spiny rush	Fed: None CA: None CNPS: 4.2	Found in coastal dunes (mesic), meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 3,115 feet. Blooming period is from May to July.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-2
SPECIAL-STATUS PLANT SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Muhlenbergia californica	California muhly	Fed: None CA: None CNPS: 4.3	Found in mesic, seeps, and streambanks within chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps. Found at elevations ranging from 328 to 6,562 feet. Blooming period is from June to September.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Muhlenbergia utilis	aparego grass	Fed: None CA: None CNPS: 2B.2	Grows in wet habitats, including riverbanks and meadows, sometimes alkaline soils. Found at elevations ranging from 80 to 7,630 feet. Blooming period is from October to March.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Navarretia prostrata	prostrate vernal pool navarretia	Fed: None CA: None CNPS: 1B.2	Found in mesic soils in coastal scrub, meadows and seeps, valley and foothill grasslands (alkaline), and vernal pools. Found at elevations ranging from 65 to 2,100 feet. Blooming period is from April to July.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-2
SPECIAL-STATUS PLANT SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Phacelia stellaris	Brand's star phacelia	Fed: None CA: None CNPS: 1B.1	Occurs in coastal dunes and coastal sage scrub habitats. In western Riverside County this species is restricted to sandy beaches along the Santa Ana River. Grows in elevations ranging from 3 to 1,312 feet. Blooming period is from March to June.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Pseudognaphalium leucocephalum	white rabbit-tobacco	Fed: None CA: None CNPS: 2B.2	Grows in sandy, gravelly soils within chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 0 to 6,890 feet. Blooming period is from July to December.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Sidalcea neomexicana	salt spring checkerbloom	Fed: None CA: None CNPS: 2B.2	Habitat includes chaparral, coastal scrub, lower montane coniferous forest, plays, and mojavean desert scrub. Found at elevations ranging from 49 to 5,020 feet. Blooming period is from March to June.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Symphyotrichum defoliatum	San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Grows in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). Can be found growing near ditches, streams, and springs within	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-2
SPECIAL-STATUS PLANT SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			these habitats. Found at elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	
Thysanocarpus rigidus	rigid fringepod	Fed: None CA: None CNPS: 1B.2	Associated with chaparral, rocky slopes, canyons, oak woodlands and washes. Found at elevations ranging from 1,970 to 7,220 feet above msl. Blooming period is from February to May.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

California Native Plant Society (CNPS) California Rare Plant Rank

1A Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere.

1B Plants Rare, Threatened, or Endangered in California and Elsewhere.

2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere.

4 Plants of Limited Distribution – A Watch List.

Threat Ranks

0.1 – Seriously threatened in California

0.2 – Moderately threatened in California

0.3 – Not very threatened in California

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Amphibians				
Rana draytonii	California red-legged frog	Fed: **THR** CA: SSC	Inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Spea hammondii	western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Taricha torosa	coast range newt	Fed: None CA: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Birds				
Accipiter cooperii	Cooper's hawk	Fed: None CA: WL	Common yearlong resident of California. Typically forages in broken woodland and habitat edges with dense stands of coast live oak (Quercus agrifolia), riparian deciduous, or other forest habitat near water. Usually nests in dense riparian areas, usually near streams.	**Moderate:** The Project site provides minimal suitable foraging opportunities on the southern and eastern portions of the site, but no nesting opportunities are present. This species is adapted to urban

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
				environments and occurs commonly.
Agelaius tricolor	tricolored blackbird	Fed: None CA: THR/SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [Schoenoplectus sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (Artemisia californica), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Ardea alba	great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Ardea herodias	great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site
Artemisiospiza belli belli	Bell's sparrow	Fed: None CA: WL	Generally prefers semi-open habitats with evenly spaced shrubs 1 – 2 meters in height. Dry chaparral and coastal sage scrub. Less common in tall dense, old chaparral.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Athene cunicularia	burrowing owl	Fed: CA: None SSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	**Low:** The vacant areas on the eastern portion of the Project site provides minimal foraging opportunities, but no suitable burrows (>4 inches in diameter) were observed onsite. Further, previous focused surveys conducted at the airport have not identified burrowing owls on the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Buteo swainsoni	Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Calypte costae	Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills, and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Fed: None CA: SSC	The coastal population inhabits cactus scrub from southern Ventura County and southwestern San Bernardino County to northwestern Baja California.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Circus hudsonius	northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Egretta thula	snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Elanus leucurus	white-tailed kite	Fed: None CA: FP	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Eremophila alpestris actia	California horned lark	Fed: None CA: WL	Occurs in meadows, grasslands, open fields, prairie, and alkali flats. This subspecies is typically found in coastal regions.	**Moderate:** The Project site provides minimal suitable foraging opportunities on the southern and eastern portions of the site, but no nesting opportunities are present.
Falco columbarius	merlin	Fed: None CA: WL	Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Falco mexicanus	prairie falcon	Fed: Delisted CA: FP	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	
Falco peregrinus anatum	American peregrine falcon	Fed: None CA: SSC	Very uncommon breeding resident, and uncommon as a migrant. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Icteria virens	yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Lanius ludovicianus	loggerhead shrike	Fed: None CA: SSC	Common yearlong resident of California. Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			Requires suitable perches including trees, posts, fences, utility lines, or other perches.	
Larus californicus	California gull	Fed: None CA: WL	Require isolated islands in rivers, reservoirs, and natural lakes for nesting, where predations pressures from terrestrial mammals are diminished. Uses both fresh and saline aquatic habitats at variable elevations and degrees of aridity for nesting and for opportunistic foraging.	**Moderate:** The Project site provides minimal suitable foraging opportunities on the southern and eastern portions of the site, but no nesting opportunities are present. This species is adapted to urban environments.
Laterallus jamaicensis coturniculus	California black rail	Fed: None CA: **THR**/FP	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Nycticorax nycticorax	black-crowned night heron	Fed: None CA: None	Common in wetlands across North America, including saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal mudflats, and wet agricultural fields. They require aquatic habitat for foraging and terrestrial vegetation for cover.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Polioptila californica californica	coastal California gnatcatcher	Fed: **THR** CA: SSC	Common yearlong resident of southern California in sage scrub habitats that are dominated by California sagebrush (Artemisia californica). Prefers scrub habitat with more low-growing vegetation. Species generally occurs below 750 feet above mean sea level (msl) along the coast	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			and below 1,500 feet above msl within inland regions.	
Setophaga petechia	yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Spinus lawrencei	Lawrence's finch	Fed: None CA: None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Spizella breweri	Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Vireo bellii pusillus	least Bell's vireo	Fed: **END** CA: **END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically, it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	
Xanthocephalus xanthocephalus	yellow-headed blackbird	Fed: None CA: SSC	Uncommon yearlong resident of southern California throughout freshwater emergent wetlands, and moist, open areas along agricultural areas, and mudflats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by cattails, tules, or other similar plant species along the border of lakes and ponds.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Invertebrates				
Bombus crotchii	Crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Danaus plexippus	Monarch Butterfly	Fed: None CA: None	Two subpopulations of monarchs in North America, with the eastern population overwintering in Mexico and breeding in the midwestern states, and the western population overwintering in coastal California and fanning out across the west from Arizona to Idaho with long-distance annual migration and reliance on milkweed as its obligate larval host plant.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Diplectrona californica	California diplectronan caddisfly	Fed: None CA: None	Larva found in fast-flowing, cool streams.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Neolarra alba	white cuckoo bee	Fed: None CA: None	Found in dry, sandy areas (particularly deserts) in the American southwest near the host plants for Perdita bee species, of which it is a nest parasite.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Fed: **END** CA: None	DSF habitat is limited to areas that include Delhi fine sand, an aeolian (wind-deposited) soil type. The highest density of DSF have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	**Presumed Absent:** As shown in **Figure 5.3-2**, there is no suitable habitat present within or adjacent to the Project site.
		Mammals		
Antrozous pallidus	pallid bat	Fed: None CA: SSC	Locally common species of low elevation in California. Occurs in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			rocky outcroppings, as well as sandy soils for burrowing.	
Dipodomys merriami parvus	San Bernardino kangaroo rat	Fed: **END** CA: CE/SSC	Primarily found in Riversidean alluvial fan sage scrub (RAFSS) and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May also occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to RAFSS habitat. Tends to avoid rocky substrates.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Dipodomys nitratoides brevinasus	short-nosed kangaroo rat	Fed: None CA: SSC	Occurs on friable sandy or silty soils in areas with no to moderate shrub cover and scattered herbaceous plants, including sparsely vegetated alkali sink communities where soils are generally sandy or silty, valley grassland, saltbush, and sink scrub.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Dipodomys simulans	Dulzura kangaroo rat	Fed: None CA: None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Dipodomys stephensi	Stephens' kangaroo rat	Fed: **END** CA: **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Eumops perotis californicus	western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Lasiurus xanthinus	western yellow bat	Fed: None CA: SSC	Occurs in valley/foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts under palm trees and feeds in, and near, palm oases and riparian habitats.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Fed: None CA: SSC	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Neotoma lepida intermedia	San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Nyctinomops femorosaccus	pocketed free-tailed bat	Fed: None CA: SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian,	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
			desert wash, alkali desert scrub, Joshua tree, and palm oasis.	
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Reptiles				
Anniella stebbinsi	southern California legless lizard	Fed: None CA: SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Arizona elegans occidentalis	California glossy snake	Fed: None CA: SSC	Occurs in a wide variety of habitat types including open desert, grasslands, shrublands, chaparral, and woodlands. Prefers areas where the soil is loose and sandy which allows for burrowing.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Aspidoscelis tigris stejnegeri	coastal whiptail	Fed: None CA: SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Diadophis punctatus modestus	San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Emys marmorata	western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Phrynosoma blainvillii	coast horned lizard	Fed: None CA: SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Salvadora hexalepis virgultea	coast patch-nosed snake	Fed: None CA: SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

TABLE 5.3-3
SPECIAL-STATUS WILDLIFE SPECIES

Species Name	Common Name	Status	Habitat	Potential to Occur
Thamnophis hammondii	two-striped garter snake	Fed: None CA: SSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Thamnophis sirtalis pop. 1	south coast garter snake	Fed: None CA: SSC	Occurs near permanent water that has good strips of riparian vegetation. Likes meadow-like habitats adjacent to marshlands.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.
Shellfish				
Gonidea angulata	western ridged mussel	Fed: None CA: None	Occurs on the benthos of streams, rivers, and lakes with substrates that vary from gravel to firm mud, and include at least some sand, silt or clay.	**Presumed Absent:** There is no suitable habitat present within or adjacent to the Project site.

U.S. Fish and Wildlife Service (USFWS) – Federal
END – Federally Endangered
THR – Federally Threatened

California Department of Fish and Wildlife (CDFW) – California
END – State Endangered
CEND – State Candidate Endangered
SSC – Species of Special Concern
WL – Watch List
FP – Fully Protected

BIO-3: **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Less Than Significant Impact.

No inundated areas, wetland features, or wetland plant species that would be considered wetlands, as defined by Section 404 of the Clean Water Act, occur within the proposed Project footprint. However, one riverine resource was identified adjacent to the eastern boundary of the Project site, i.e., the Cucamonga Channel, which is an open concrete box culvert flowing from north to south. Currently, a large majority of the Airport drains into the Cucamonga Channel at various discharge points. Four (4) separate drainage areas currently convey stormwater into the Cucamonga Channel. A series of storm catch basins and pipes would convey stormwater generally from a west to east direction and ultimately discharge this runoff into Cucamonga Channel, similar to existing conditions. However, post-development conditions would change the number of drainage areas from four to three (3) separate drainage areas. Pretreated stormwater would be discharged at a controlled rate to a new Avion Street drainage system. This system will be completed prior to the opening of the proposed Project, which will then discharge into the Cucamonga Channel. As discussed in **Section 5.9: Hydrology,** the proposed site shall include a level of Low-Impact Design (LID), which would include Best Management Practices (BMPs) listed in the OIAA Storm Water Pollution Prevention Plan (SWPPP). The drainage system would include a stormwater collection and conveyance system designed to collect and pre-treat stormwater in accordance with applicable LID standards in two underground storage/infiltration facilities. Based on calculations, 467,800-cubic-feet of stormwater will need to be stored in the underground infiltration systems before being discharged into the Cucamonga Channel.[19] The detained stormwater would then be discharged at a controlled rate into the Cucamonga Channel. When the systems reach capacity, they will release stormwater in accordance with San Bernadino County Water Quality Management Plan (WQMP) criteria. As the proposed Project would utilize the existing drainage areas and outlet points and implement BMPs to release

[19] CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission*. January 31, 2022 (Updated December 2022). (See **Appendix 5.9-1**).

stormwater at a controlled rate into the Cucamonga Channel, the proposed Project would not significantly impact the Cucamonga Channel. For this reason, the proposed Project, utilizing the existing outlet points or a new outlet into the Cucamonga Channel, would not have a substantial adverse effect on State or federally protected wetlands.

Therefore, potential impacts to the Cucamonga Channel would be less than significant.

BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact.

Habitat linkages connect vacant habitat areas that are separated by development. Wildlife corridors are like habitat linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor is typically defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging.

According to the San Bernardino Countywide Plan, the Project site is not within a wildlife corridor or linkage. The San Bernardino County General Plan Open Space Element identifies the Santa Ana River, approximately 7 miles to the south and separated by existing development, as the nearest major open space area or regional wildlife corridor to the Project site. According to the Ontario General Plan EIR, no regional wildlife movement corridors have been identified in the City. Concrete channelized drainages that flow north-south through the City can act as wildlife corridors, but they have limited habitat cover and do not directly link natural open spaces. Nevertheless, some urban wildlife, such as insects, amphibians, reptiles, small and medium-sized mammals (mice, opossums, racoons), and bird species, use the channels as nonmigratory movement corridors within the City.[20]

The Project site is developed with airport-related improvements and does not contain any wildlife corridors or linkages. Project implementation would be confined to developed areas on

20 City of Ontario. *General Plan Environmental Impact Report*. Biological Resources Section. July 2009.

the site, which are not in proximity to regional wildlife corridors and linkages, such as the Santa Ana River. Project implementation would not directly impact existing wildlife movement opportunities. The segment of the Cucamonga Channel adjacent to the Project site is an open concrete box culvert surrounded by airport operations. It does not support plant communities suitable for use as a wildlife corridor nor connect two comparatively undisturbed habitat fragments. The proposed Project would not change the designated use of the channel as Open Space – Non-Recreation. The proposed Project would not substantially impair the Cucamonga Channel, wildlife movement opportunities, nor prevent local wildlife movement through the area. Therefore, potential impacts to wildlife movement would be less than significant.

BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact.

The proposed air cargo warehouse facility and aircraft apron would operate 24 hours a day. Its design does not include water and landscape features that would attract wildlife to the Project site and surrounding areas. The ONT Wildlife Hazard Management Plan and the ONT Rules and Regulations provide regulations and standards regarding abatement of wildlife species, and associated habitat, that could present aviation hazards and threats. Additionally, the USFWS Depredation Permit separately issued for the Airport allows the trapping and relocation of certain birds, including the Burrowing Owl, "to resolve or prevent threats to human safety and/or aircraft safety." The ONT Wildlife Hazard Management Plan and the ONT Rules and Regulations contain the following related to biological resources:

- ONT Rules and Regulations: 2.18 Bird Hazard Reduction - Wildlife Hazard Management
    a. In general, wildlife which may impact aircraft, including birds, not only create a hazard to the wildlife involved; but can adversely affect the safety of aircraft flight, and the safety of the traveling public who use ONT. For this reason, Ontario Airside Operations manages an FAA approved ONT Wildlife Hazard Management Plan (WHMP) assisted by a contract USDA Wildlife Biologist.
    b. ONT Airside Operations monitors the Air Operations Area for the presence of wildlife. When bird(s) or other wildlife is observed to be a hazard to flight operations, ONT Airside Operations staff shall report to FAA ONT Air Traffic Control Tower (ATCT) controllers the following: the type and approximate location of the wildlife hazard; if involving birds, report the estimated number(s) and direction of flight above ground level (AGL); and, when the wildlife no longer presents an operational hazard.

c. It is FAA policy for ONT ATCT controllers, who observe or receive a wildlife hazard report, to advise aircraft pilots of the wildlife activity until the hazard potential is abated.

d. To the greatest extent practicable, as operationally safe, ONT Airside Operations, (909) 214-7682 or (909) 214-7683, conduct bird dispersal activities to discourage birds from flocking or nesting on ONT AMA.

e. ONT, in coordination with other ONT WHMP participants, conduct ongoing wildlife habitat mitigation with emphasis to eliminate conditions that create a habitat attracting bird populations at ONT.

f. In accordance with FAA Regulations, and the ONT WHMP, no person shall: feed, provide habitat, introduce, encourage, or attract the introduction of wildlife on the Airport.

The landscape trees for the proposed Project would be Desert Museum Palo Verde, approved by OIAA in consultation with the USDA Wildlife Biologist, as shown in **Figure 3.4: Landscape Plan,** in **Section 3.0** of this EIR. These trees would not cause more wildlife to occupy the Project Site. Should birds or other wildlife be observed to be a hazard to flight operations, ONT Airside Operations staff shall report to FAA ONT ATCT. Accordingly, the proposed Project would not be a wildlife attractant and its implementation would not conflict with the FAA approved WHMP, FAA policy for ONT ATCT controllers, bird dispersal activities, FAA Regulations, ONT Airside Operations, the FAA approved ONT Wildlife Hazard Management Plan, or ONT Rules and Regulations. Additionally, with the installation of Desert Museum Palo Verde, the proposed Project would be consistent with ongoing wildlife habitat mitigation and would eliminate conditions that create a habitat attracting bird populations.

The proposed Project would require the removal of existing vegetation, including trees. As illustrated in **Figure 3.4: Landscape Plan**, trees that would be removed as a part of the proposed Project are on Airport property and are not "parkway trees," as defined in Ontario Municipal Code, Title 10, Chapter 2. Project implementation would not require the removal of parkway trees. Nevertheless, Project implementation would comply with all requirements specified in the City of Ontario Parkway Tree Regulations (if applicable), which concerns the maintenance and removal of parkway trees. If required, the proposed Project would maintain any parkway trees adjacent to the Project site to preserve a neat appearance and non-obstructed use of East Avion Street. Therefore, potential Project impacts to parkway trees would be less than significant.

BIO-6: **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact.

The Project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. Therefore, no impact to any local, regional, or State habitat conservation plans would occur from development of the proposed Project.

5.3.4 CUMULATIVE IMPACTS

The geographic context for cumulative impact analysis on biological resources includes the City of Ontario and the surrounding cities and communities within the Guasti and Ontario quadrangles. Since the Project site is developed and does not contain any sensitive species or habitat, its proposed redevelopment would not significantly contribute to the cumulative loss and/or degradation of the region's biological resources. The proposed Project's potential effects on burrowing owls and migratory and nesting birds are localized and would be fully mitigated with the implementation of **Mitigation Measures BIO-1 and BIO-2**. The proposed Project's potential effects on the Cucamonga Channel would not be significant. Additionally, project implementation would be on Airport property, away from public right-of-way. Separate from the proposed Project, the OIAA approved the East Avion Street Realignment Project, which will realign East Avion Street from its current configuration to connect the western Jurupa Avenue terminus (located east of the Project site) to the existing segment of East Avion Street, near South Hellman Avenue; the realignment project will also improve the segment of East Avion Street fronting the Project site, westward to South Vineyard Street. The East Avion Street Realignment Project's potential impact to trees on public right-of-way was evaluated under a separate environmental review. If required, the proposed Project would maintain any parkway trees adjacent to the Project site to preserve a neat appearance and non-obstructed use of the realigned East Avion Street and impacts would be less than significant. Therefore, the proposed Project's impacts to biological resources would not be cumulatively considerable.

5.3.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

The Project would result in no impacts to BIO-2 and BIO-6. Upon implementation of regulatory requirements, impacts to BIO-3, BIO-4, and BIO-5 would be less than significant. Without mitigation, the following impacts would be potentially significant:

- **Impact BIO-1:** Impacts to the burrowing owl and migratory and nesting birds.

5.3.6 MITIGATION MEASURES

The following mitigation measures are recommended to reduce potentially significant impacts on biological resource from Project construction.

MM BIO-1: **Burrowing Owl.** All disturbed areas of the Project site that were determined to have a low potential to provide suitable habitat for burrowing owls, which primarily includes the existing track infield grassy areas of the Project site, require focused preconstruction surveys to be conducted; the first take avoidance survey shall be conducted within 14 days prior to ground disturbance and the second take avoidance survey shall be conducted 24 hours prior to ground disturbance to determine presence of burrowing owls. These surveys shall conform to the survey protocol established by the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) and will be conducted by a qualified biologist across all suitable breeding, wintering, and foraging habitat within the Project and appropriate buffer. Copies of the survey results shall be submitted to CDFW and OIAA.

- If no burrowing owls are detected, no further mitigation is necessary.
- If burrowing owls are detected during focused surveys and/or take avoidance surveys, CDFW will be immediately informed of its location and status. The project will avoid all impacts to burrowing owls onsite. If this is not feasible, a Burrowing Owl Protection Plan will be prepared by a qualified biologist, which must be approved by CDFW prior to initiating the project. The Burrowing Owl Protection Plan will include conserving all nesting, occupied, and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows, and burrowing owls impacted are maintained and/or replaced. Further coordination with CDFW will occur to identify mitigation for the loss of habitat through the acquisition, conservation, and management of in-kind habitat. Lands conserved will include 1) sufficiently large acreage with fossorial mammals present; 2) permanent protection through a conservation easement for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use; 3) development and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls; and 4) funding for the maintenance and management of mitigation land through the

establishment of a long-term funding mechanism such as an endowment (CDFW, 2012).

MM BIO-2: **Nesting Birds.** Bird nesting season generally extends from February 1 through September 15 in southern California and, specifically, April 15 through August 31 for migratory passerine birds and January 15 to August 31 for raptors. In order to ensure compliance with the Migratory Bird Treaty Act and to avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist must be retained to conduct pre-construction Nesting Bird Surveys (NBS) will occur prior to Project-related disturbance to nestable vegetation to identify any active nests. The NBS shall be performed no more than three days prior to the commencement of construction activities. The survey(s) will occur at the appropriate time of day/night, during appropriate weather conditions. Surveys will encompass all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration will take into consideration the acreage of the Project impacts; density, and complexity of the habitat; number of survey participants; survey techniques employed; and will be sufficient to ensure the data collected is complete and accurate. Pre-construction surveys will focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior (i.e., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors). The results of the NBS shall be documented by the qualified biologist. If construction is inactive for more than seven days, an additional survey shall be conducted. If no active nests are found, no further action will be required. If a nest is suspected, but not confirmed, the qualified biologist will establish a disturbance-free buffer until additional surveys can be completed, or until the location can be inferred based on observations. The qualified biologist will not risk failure of the nest to determine the exact location or status and will make every effort to limit the nest to potential predation as a result of the survey/monitoring efforts (i.e., limit number of surveyors, limit time spent at/near the nest, scan the site for potential nest predators before approaching, or immediately depart nest area if indicators of stress or agitation are displayed). If a nest is observed, but thought to be inactive, the qualified biologist will monitor the nest for 1 hour (4 hours for raptors during the nonbreeding season) prior to approaching the nest to determine status. The qualified biologist will use their

best professional judgement regarding the monitoring period and whether approaching the nest is appropriate. If an active nest is found, the biologist will set appropriate no-work buffers (typically 300 feet for passerine and non-special-status species, and 500 feet for hawks and special-status species) around the nest, which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity, and duration of disturbance – typically 300 feet of a migratory bird and 500 feet for raptors. Once the buffer is established, the qualified biologist will document baseline behavior, stage of reproduction, and existing site conditions, including vertical and horizontal distances from proposed work areas, visual or acoustic barriers, and existing level of disturbance. Following documentation of baseline conditions, the qualified biologist may choose to make adjustments to the buffer based on site characteristics, stage of reproduction, and types of Project activities proposed at/near that location. The qualified biologist will monitor the nest at the onset of Project activities, and at the onset of any changes in Project activities (i.e., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the qualified biologist determines that Project activities may be causing an adverse reaction, the qualified biologist will adjust the buffer accordingly. The qualified biologist will be onsite daily to monitor all existing nests, the efficacy of established buffers, and to document any new nesting occurrences. The qualified biologist will document the status of all existing nests, including the stage of reproduction and the expected fledge date. If a nest is suspected to have been abandoned or failed, the qualified biologist will monitor the nest for a minimum of 1 hour (4 hours for raptors), uninterrupted, during favorable field conditions. If no activity is observed during that time, the qualified biologist may approach the nest to assess the status. The permittee, under the direction of the qualified biologist, may also take steps to discourage nesting on the Project site, including moving equipment and materials daily, covering material with tarps or fabric, and securing all open pipes and construction materials. The qualified biologist will ensure that none of the materials used pose an entanglement risk to birds or other species.

The buffer shall remain until the young have fledged the nest and the nest is confirmed to no longer be active, or as determined by the qualified biologist. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field,

within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

5.3.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation Measures BIO-1 and BIO-2 would reduce potentially significant impacts on burrowing owls and sensitive wildlife species, including migratory and nesting birds to a less than significant level. Therefore, no significant and unavoidable adverse impacts related to biological resources would occur from Project implementation.

5.3.8 REFERENCES

16 USC Section 1536(a)(2).

64 Code of Federal Regulations (CFR). Sections 60727–60731.

California Department of Fish and Game (CDFG), sec. 3511, 4700, 5050, and 5515.

California Department of Fish and Wildlife (CDFW). 2012. *Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game*. March 7, 2012.

California Fish and Game Code (CFGC), sec. 3500–3516, div. 4, Birds and Mammals, pt. 2, Birds, ch. 1, General Provisions.

CFGC. Sec. 1900, et seq.

CFGC. Sec. 2050, et seq. California Endangered Species Act.

CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission*. January 31, 2022 (Updated December 2022).

City of Ontario. *General Plan Environmental Impact Report*. Biological Resources Section. July 2009.

ELMT Consulting, Inc. *Ontario International Airport South Airport Cargo Center Biological Resources Assessment*. October 2022.

Endangered Species Act of 1973 (ESA), 16 USC sec. 1531 et seq.

Final Supplemental Environmental Impact Report, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements at Ontario International Airport, Attachment 2 (Biological Technical Report), Exhibit E, Figure 7, June 2022.

US Migratory Bird Treaty Act (MBTA), 16 USC Section 703 et seq.

5.4.1 INTRODUCTION

Cultural resources include archaeological and historical resources. Archaeological artifacts include places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, and cultural importance. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. The analysis in this section is based in part on the following technical reports:

- PaleoWest. *Archaeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023. (DEIR **Appendix 5.4-1**).
- Desert Research Institute (DRI). *Historic Property Evaluation Report*. November 2022. (DEIR **Appendix 5.4-2**).

5.4.2 ENVIRONMENTAL SETTING

5.4.2.1 Existing Conditions

The Project site is located in the western San Bernardino Basin between the Santa Ana River to the south and the San Gabriel Mountain Range to the north. The San Bernardino Basin consists of an alluvial valley, formed by the Santa Ana River and its tributaries. The Santa Ana River originates on the northern and eastern slopes of Mount San Gorgonio and is the largest hydrological feature in the basin.

Prehistoric Setting

The prehistoric and ethnographic setting of the Project area was influenced by cultural patterns of both the interior desert and coastal region. The climate of the Project area is defined as Mediterranean, with hot, dry summers and cool, moist winters. Prior to its development with airport uses, the biotic environment of Project area contained various floral species from early spring until winter. The leaves, stems, seeds, fruits, roots, and tubers from many of these plant species were an important subsistence base for the Native American inhabitants of the area, including the Serrano, Cahuilla, and Gabrielino tribes (**Section 5.13: Tribal Cultural Resources**

of this EIR provides further discussion on the prehistoric and ethnographic settings of the Project area and includes Project impact analysis on tribal cultural resources).[1]

Historic Setting

San Bernardino County

The earliest recorded use of land in San Bernardino in the Historic Period (1770s-Present) began in the 1770s, following the establishment of the Mission San Gabriel, approximately 29 miles west of the Project site.[2] Euro-American settlement began in the early 1800s with the establishment of Spanish settlements and a Mormon colony. Due to the dry climate of the region, few crops were grown and cattle ranching was the dominant economic driver of the region until the 1860s. The settlers experimented with dry farming of barley and wheat. However, this was unsuccessful due to a lack of transport, lack of labor, and small profit margins. In 1857, oranges were introduced to the area. Oranges grew well in the foothills and citrus quickly became the largest industry in Southern California.[3]

San Bernardino County was established in 1853.[4] Beginning in the 1860s and 1870s, companies began to form with the intent of purchasing land to develop land colonies. The companies purchased the land, acquired water rights, established lots, and built infrastructure such as roads and water irrigation lines. The companies were pivotal in the rapid development of San Bernardino County's agricultural growth and the establishment of towns. Regional growth accelerated following completion of the Southern Pacific Railroad in 1876.[5] In 1893, a portion of San Bernardino County was ceded for the formation of Riverside County.

City of Ontario

The City of Ontario (City) was founded in 1882 as an agricultural colony.[6] This colony consisted of a patchwork of agricultural land around a townsite subdivided in a one-square-mile area. Due

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1 PaleoWest. *Archaeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023 (see **Appendix 5.4-1**).

2 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

3 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

4 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

5 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

6 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

to the Mediterranean climate and rich soils, agricultural production focused on citrus fruit and grapes. The City had immediate access to the Southern Pacific Railroad and with the glamorized Southern California landscape and lifestyle, new residents were attracted to Ontario from across the United States to establish farms and orchards. This boosted agricultural production and led to the creation of packing houses and other agricultural-based industries. The influx of people contributed to the development of hotels, schools, commercial blocks, and churches.

Through the early 1900s, the Ontario Land and Improvement Company continued to attract additional residents and facilitate additional growth.[7] By the 1920s, the City was a regional center with a developed downtown, residential neighborhoods, and an industrial center that focused on exporting citrus fruits and other agricultural products of the area. The California Fruit Growers Exchange and its subsidiary Sunkist was one of the largest employers in the City during this period. During the Great Depression the City continued to prosper. With the outbreak of World War II (WWII) in 1939, the U.S. Army established the Ontario Army Airfield in support of the war efforts in the Pacific, which became the foundation of the Ontario International Airport.[8]

Aviation Setting

Airport Development in 20th Century America

On December 17, 1903, the Wright Brothers embarked on the historic, inaugural flight that would usher in the Air Age and change the world.[9] This began a fascination with aviation in America followed by new industry for aircraft development, production, and service. Airshows, showcasing aviators and aircraft, became popular recreational events. The U.S. Army took early notice of the potential of powered flight, incorporating pilot training and airplanes by 1909, with the Navy ordering its first aircraft in 1911. The military used aviation in its missions as early as 1913. The U.S. Army Signal Corps sent the 1st Aero Squadron to Texas to respond, becoming the first air service unit of its kind ever organized. However, despite the early incorporation of military aviation, the U.S. lagged behind the rest of the world's major nations investment in military aviation leading up to its entry into World War I (WWI). A major increase in aircraft production was ordered in 1917 to meet the needs of the Army and Navy, as well as the country's allies.

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7 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

8 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

9 Desert Research Institute (DRI). *Historic Property Evaluation Report*. November 2022 (see **Appendix 5.4-2**).

Pressure mounted for increased research and development of aircraft technology as the war continued. This resulted in increased demand for airfields for training, aircraft manufacturing, testing, and repair, requiring a large and widespread network. The federal government appropriated hundreds of millions of dollars to the effort and an extensive program of temporary wartime construction quickly expanded at airfields around the country. In May 1917, master architect Albert Kahn designed a basic airfield plan using a one-square-mile section that would be replicated and customized for local conditions. Airfields were developed in prairies, farmlands, and coastlines all over the country, with airfields and training schools being added to existing Army posts. The facilities constructed were often temporary, consisting of wood-frame buildings and steel-frame hangars. With the end of WWI on November 11, 1918, airfield construction in the U.S. was brought to an immediate halt.[10] Most of the airfields constructed were leased properties, which the government either immediately vacated or retained temporarily for storage.

While the end of the war led to abandoned airfields, it also led to the beginning of a new era in aviation. One of the major domestic advances to come out of WWI aviation efforts was airmail. The first regularly scheduled airmail route began in 1918 under the direction of the Army and was quickly turned over to the U.S. Post Office Department (Post Office).[11] The first transcontinental route from New York to San Francisco was in service by 1920. In 1921, in response to Congress' hesitation to fund airmail services, the Post Office demonstrated how fast mail could be carried by aircraft flying across the country in a total of 33 hours and 20 minutes, compared to 4.5 days by rail. In the early 1920s, there were no lighted airways for safe night travel and navigating poor visibility due to weather. Congress funded the first lighted airway to remedy the problem in 1923. A prototype, 72-mile lighted route was established in Ohio, utilizing rotating beacons and field floodlights, and became the model for the entire transcontinental airmail route. By 1925, Congress passed the Air Mail Act of 1925, transferring airmail operations to private companies; this pivotal act helped launch the U.S. commercial aviation industry.[12]

Airmail led directly to the establishment of many municipal airports. Initially federal funding for airmail included money for pilots, aircraft, navigational aids, and some emergency fields, but not for a system of federally owned and operated airports. The Post Office campaigned around the country for local communities to build permanent facilities. Cities, local landowners, and aviation

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10 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

11 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

12 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

enthusiasts initiated the development of airfields. Further, the Army Air Service actively worked to persuade communities to build airfields through the Model Airway Program to ensure an adequate number of intermediate landing areas existed for training. In 1926, the Air Commerce Act transferred responsibility for airway establishment to the Aeronautics Branch of the Department of Commerce.[13]

In the same period, the Army also instituted the Air Service Reserve Flying Field Program for reserve pilots.[14] The program used War Department funds to construct training facilities without purchasing land by leasing land from local interests for one dollar per year. This resulted in the construction of airports in numerous U.S. cities. The Air Service developed and distributed a manual for airport construction, which became one of the first works on airport design, making local airport construction easier and more accessible. Further, military offices also published articles extolling the need for a national network of airports, the benefits for local communities, and arguing that constructing local airports was a civic duty.

Private citizens, often through chambers of commerce and local aviation groups, also took the lead in their community airfields through sponsorship and proactive construction. City governments took on greater roles in the early 1920s, and state governments became involved in airport operations as early as 1920. However, most states did not officially authorize cities to own and operate municipal airports until the latter half of the decade; between 1927 and 1929, 33 states created such legislation.[15] Further, the emphasis on safety increased in the late 1920s, as did public support for airports. Cities responded accordingly and airport development accelerated, shifting from the private to the public sector. A major factor in the shift was the Air Commerce Act of 1926, which gave responsibility for the development of airways and supporting systems to the federal government.[16] Local governments would have to build and maintain the airports and federal funding for local airports was prohibited. However, federal regulation of airports was not.

Regulation of airport design began with the Air Commerce Act of 1926, but compliance was voluntary. Construction boomed between 1926 and 1930, yet airport development varied widely through the early 1930s. Western cities were far more proactive in setting up airports than cities

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13 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

14 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

15 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

16 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

in other parts of the country, leading to regional disparities. In the early 1930s, airport construction waned due to the Great Depression, lack of municipal funds, and the rise of liability and nuisance lawsuits. Further, airport construction was not cheap or simple, with constant improvements in aviation technology meaning a constant need for improvements to airport facilities. Improved lighting, more durable landing surfaces, new technological devices, and customer amenities all drove up costs at local airports, and most airports were not profitable. President Roosevelt's New Deal in 1933 included federal assistance for local airports.[17]

The New Deal Civil Works Administration (CWA) enabled work on 808 landing fields and airports by 1934, most of which were in small communities.[18] The Works Progress Administration (WPA) replaced the CWA in 1935 and continued expanding airports. The enabling legislation required that cities own, rather than lease, their airports to qualify for assistance. This prompted cities, like Los Angeles, to purchase land they had previously been leasing. The Civil Aeronautics Act of 1938 removed some of the existing restrictions on federal direct funding for airports. By 1941, both New York's LaGuardia Airport and Washington's National Airport were considered model modern airports.

Once the U.S. entered WWII, the Army, Navy, and Army Air Force (AAF) all utilized civilian airports by leasing or purchasing airports or developing agreements with local governments to use existing airports throughout the country with the promise of returning these airports following the war. The War Department began investigating the possibility of using civilian airports as early as 1939 and developed a list of 4,000 airports for potential use with improvements eventually programmed at 250 airports under the Development of Landing Areas for National Defense (DLAND) program.[19] By 1941, 17 airport improvement projects were underway in California, with others in Florida, Maine, Texas, Washington, and Massachusetts. DLAND funding produced lasting improvements to municipal airports, including extended and new runways, lighting systems, and drainage systems. Many of the buildings and structures constructed by the military during WWII were temporary and removed after its conclusion.

Many cities had improved airfield facilities and were well-prepared for the expansion of civilian air travel in the postwar era. Both private and commercial aviation were poised to boom with hundreds of thousands of trained pilots and a new generation of passengers. Federal funding for airport improvements continued with an emphasis on funding smaller airports. However,

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17 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

18 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

19 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

there were competing interests inherent in the federal legislation, both separating the legislation from national defense interests and using defense as a justification. During the Korean War, Congress appropriated $500 million for airport improvements for military use.[20]

Airplanes, like airports, benefited from the extensive research, development, and mass production of the war years; in addition, the development of jet engines would prove to be world changing. Commercial airlines in the U.S. were hesitant to over-invest in jet technology in the early postwar years; however, by the late 1950s, the jet age had officially begun. National Airlines became the first in the U.S. to offer jet service on December 10, 1958.[21] Other major carriers followed, offering transcontinental and international flights to a rapidly-increasing consumer base. Jets required larger runways and served many more passengers than preceding aircraft. Accordingly, airports required numerous upgrades to both infrastructure and passenger facilities. Existing airport runways were extended and reinforced, and terminals were either significantly upgraded or replaced. Terminal architecture took on new importance as designs had to be more than just functional and efficient, as well as aesthetically appealing and comfortable.

By the 1970s, air travel had become a component of the nation's mass transit and after 40 years of federal regulation, Congress deregulated it in 1978.[22] Airlines were free to set their own fares and determine their own routes. This has had both positive and negative effects on U.S. air travel that continue to the present day.

Ontario International Airport

Aviation in Ontario

Aviation in Ontario and the development of the Airport followed nationwide trends throughout the 20th century.[23] A local group of pilots established the Airport, and it was subsequently expanded through the efforts of the local government. The Airport benefited from improvements made with federal funds through the Great Depression, WWII, and Cold War. It was reorganized several times and responded to changing needs and demands from both technological advances and consumer demand.

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20 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

21 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

22 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

23 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

Aviation in the area began in 1923 when a local flying club, known as the First Friends of the Ontario Airport, constructed a simple landing strip west of the Project site, between the Union Pacific (south) and Southern Pacific (north) railroad lines, Mountain Avenue to the west, and San Antonio Avenue to the east. This airfield was three miles west of the current Airport, on land leased from Union Pacific. The City of Ontario purchased 30 acres of agricultural land between the two railroad lines, in the southwest corner of present-day Ontario International Airport for $12,000, to create the Ontario Municipal Airport.[24]

By the late 1930s, flight schools were partially funded by the U.S. Civil Aeronautic Authority (CAA) as part of a Roosevelt Administration buildup of U.S. military capabilities for WWII.[25] The CAA began a program for training potential military pilots and in 1940, the CAA and WPA proposed a substantial expansion of the Ontario Municipal Airport airfield. In 1941, the City of Ontario annexed over 470 acres of ranchland located adjacent to the western edge of the Airport. In 1942, the U.S. Army Air Corps (AAC), a predecessor of the U.S. Air Force (USAF), took over the municipal airport for military operations and called it Ontario Army Airfield (OAAF). The AAC used the Airport as a P-38 training base, a P-59 operating base, and built 215 buildings and structures. The military presence also coincided with the transition from dirt to concrete runways. WPA began a rapid expansion of the Airport with the construction of two new concrete runways, a 6,200-foot east-west runway, and a 4,700-foot northwest-southwest runway at a cost of $350,000, a control tower, and support infrastructure. The U.S. Army Air Corps, now the USAF, began operating at the Ontario Municipal Airport after leasing it from the City. An additional several hundred acres was purchased to accommodate wartime operations, such as fighter pilot training and mission facilities. During this period, the facility was known as Ontario Army Airfield.

In 1946, after the end of WWII, the Ontario Municipal Airport was officially designated an international port of entry and renamed the Ontario International Airport to reflect the transpacific cargo flights originating there. In 1947, the military demolished most of the buildings and structures built during WWII and returned the Airport to the City.[26]

Commercial airline service began by 1949, a new terminal building was constructed in 1951, and an airport traffic control tower was constructed in 1953. Three major aircraft manufacturers had facilities at the Airport in the 1950s, including Lockheed, Douglas, and Northrop. Lockheed had

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24 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

25 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

26 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

the largest presence with facilities on both the north and south sides of the runways. General Electric (GE) later took over some of the Lockheed facilities on the south side of the runways.[27]

The airfield and USAF land continued to be used for military purposes during the post-war period. In 1949, an armory for the California Air National Guard (ANG) was established. The ANG approached the City about forming a station at the Airport but required a longer runway for its fighter jets. Thus, the City purchased additional land to allow for the runway to be extended, followed by establishment of the Ontario ANG Station.[28] The ANG required two additional runway extensions in 1956 and 1962 to accommodate faster aircraft. By 1964, the two original runways at the Airport were extended to their existing lengths. The ANG facilities were concentrated in the southwest corner of the Airport and included a maintenance hangar, dining hall, administrative buildings, training facilities, maintenance shops, and storage facilities.[29]

A new passenger terminal was added in the 1960s as air travel increased in popularity. In 1967, the City entered into a Joint Powers Agreement with the City of Los Angeles Department of Airports (LADoA), predecessor to the current Los Angeles World Airports (LAWA), to manage the Airport as part of the Los Angeles regional airport system.[30] In the 1970s, the Airport saw increased passenger traffic and facilities were expanded to increase capacity. The Airport added 300 acres of land and expanded the terminal facilities by 22,500 square feet in 1970. Passenger service continued to grow to one million annual travelers in 1972 and two million by 1979.[31]

In 1981, the second east-west runway was constructed.[32] In 1982, the City transferred the Airport title to the City of Los Angeles. Throughout the 1980s, the Airport experienced significant passenger volume increases to five million per year by 1989. New facilities constructed in this decade included a new 10,200-foot runway for wide-body jets to the south of the original east-west runway and a new airport traffic control tower.[33]

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27 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

28 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

29 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

30 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

31 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

32 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

33 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

By 1990, cargo operations were becoming a significant part of the activity at the Airport. United Parcel Service (UPS) began construction of a new cargo hub that year. Construction of a new $270 million passenger terminal began in 1998 on the north side of the Airport. The Ontario ANG Station officially closed in 1998, and the Airport became an increasingly important center for passenger traffic, as well as cargo and air freight services.[34] This coincided with the decommissioning of the aviation support services at the Airport by Lockheed and GE, which made additional land available to accommodate growth. In the mid-1990s, a new, longer, 12,200-foot runway was added to the north of the original east-west runway. By 2005, the Airport reached a peak annual enplanements volume of seven million passengers and then began to decline. Freight service also declined for a brief period before steadily increasing. The Airport continued to make physical improvements to its facilities, including airfield enhancements and ground transportation improvements.[35]

The Ontario International Airport Authority (OIAA) was formed in 2012 by a joint-powers agreement between the City and San Bernardino County.[36] LAWA transferred ownership and control of the Airport in 2015 to OIAA. The Airport is the only airport in the City. Smaller, general aviation airports exist in nearby cities, such as Redlands, Chino, and Upland. San Bernardino International Airport, located approximately 20.5 miles to the east, is the closest international airport.

Area of Potential Effect

The Area of Potential Effect (APE) considered in the historic resource analysis encompasses all areas that could be affected directly or indirectly by the Project. The topography of the Project site and the Airport is flat and mostly paved with limited areas of grass and trees. The APE includes buildings and structures constructed as early as the late 1940s. The types of buildings within the APE include large hangars, office buildings, maintenance facilities, security facilities, and support buildings. Located north of East Avion Street, the Project site contains three distinct areas of common development patterns amid large areas of vacant land and surface parking lots. These three distinct areas, shown on **Figure 5.4-1: Area of Potential Effect Map**, include the former General Electric (GE) maintenance facility at the west end of the Project site, a portion of

34 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

35 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

36 DRI. *Historic Property Evaluation Report.* (See **Appendix 5.4-2**).

the former Ontario Air National Guard (ANG) Station at the east end of the Project site, and a 1980s-era private jet center between the two.

Local Setting

SCCIC Record Searches

Literature review and a records search conducted at the South Central Coastal Information Center (SCCIC) identified previous studies and previously identified historic resources within a half mile of the Project site. Five studies, listed in **Table 5.4-1**, **Previous Cultural Studies Conducted Within Half Mile,** have been conducted. One of the studies (SB-05358) included a small portion of the Project site. This study involved the compilation of historical research on the development of the Cucamonga Channel as a flood control facility.

TABLE 5.4-1
PREVIOUS CULTURAL STUDIES CONDUCTED WITHIN HALF MILE

Report No.	Date	Author(s)	Title
SB-03586	2000	Love, Bruce	Ontario To Colton Pipeline, San Bernardino County, California
SB-04674	2004	Bonner, Wayne H. and Christeen Taniguchi	Records Search Results and Site Visit for Cingular Wireless Telecommunications Facility Candidate SB-476-01 (Villa Park Trucking) 2301 East Francis Street, Ontario, San Bernardino County, California
SB-05358	1976	Sider, W.A.	Cucamonga Creek 1776-1976 After 200 Years.
SB-05367	2004	Marvin, Judith and Riordan Goodwin	Cultural Resource Assessment: Hofer Ranch Airport Business Park Specific Plan Amendment, City of Ontario, San Bernardino County, California
SB-05814	2007	Bonner, Wayne H. and Marnie Aislin-Kay	Cultural Resource Records Search Results and Site Visit for Royal Street Communications, LLC Candidate LA-730C (Carlos Ct), 2001 Elm Court, Ontario, San Bernardino County, California

Source: Desert Research Institute (DRI). *Historic Property Evaluation Report*. November 2022 (see **Appendix 5.4-2**).

Two cultural resources were documented in the Archaeological Resource Assessment, identified in **Table 5.4-2: Cultural Resources Recorded within the Project Study Area** (see **Appendix 5.4-1**). These resources include one Historic Period building, the Ontario International Airport Terminal, and a Historic Period archaeological site consisting of the remains of an abandoned irrigation system located along Mission Boulevard. Neither of these resources is located within the Project site.

TABLE 5.4-2
CULTURAL RESOURCES RECORDED WITHIN THE PROJECT STUDY AREA

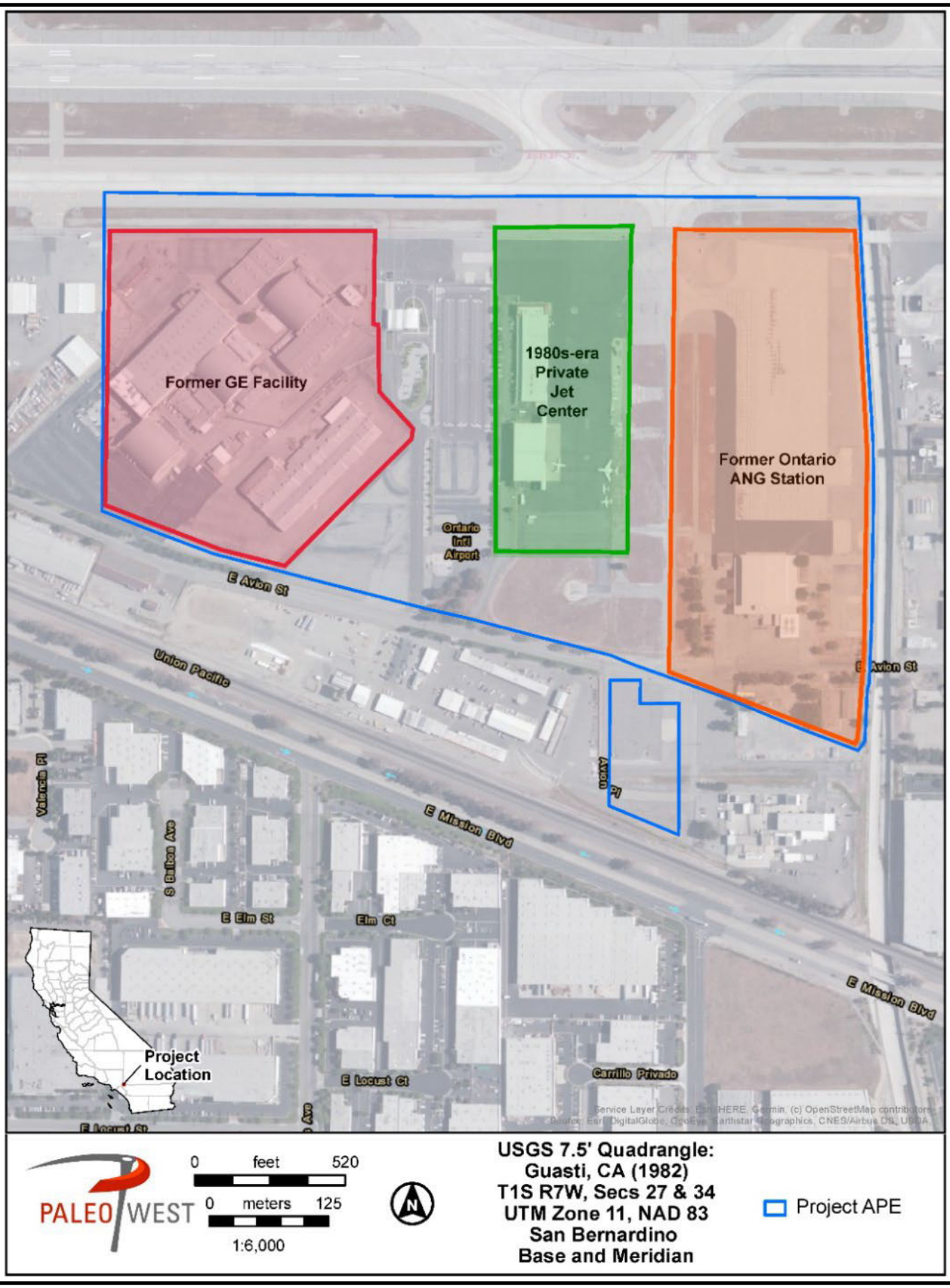
Primary No.	Trinomial	Type	Age	Description
P-36-007096	CA-SBR-7096H	Site	Historic	This resource consists of an abandoned irrigation system made up of a precast concrete valve gate and standpipes that was originally recorded in 1991. The resource is 427 ft × 7 ft and includes a linear arrangement of formed concrete standpipes that run parallel to Mission Boulevard and a transmission line.
P-36-012630	–	Building	Historic	The Ontario International Airport Terminal is a one- to two-story passenger terminal building, originally constructed in 1959–1960. Additions were made in the 1970s. The floor plan of the building is irregular and has a northwest facing façade. The building has a steel frame structural system with a concrete foundation and a rolled composite material roof. The original building was constructed in the International style; however, the additions are in a Modern style. The terminal was evaluated for listing in the NRHP in 2005 and not recommended eligible for listing under any criteria.

Source: Desert Research Institute (DRI). *Historic Property Evaluation Report*. November 2022 (see **Appendix 5.4-2**).

The Native American Heritage Commission (NAHC) was also consulted on August 26, 2021, for a review of the Sacred Lands File (SLF) to identify known Native American cultural resources that may be present. The results of both the records review and SLF search were negative.

Determination of Eligibility for Eight Structures for Proposed E. Avion Street Realignment

The re-alignment of E. Avion Street is a related project to the proposed Project (Related Project F; see **Section 4.0** of this EIR). A historic resources report, *Determination of Eligibility for Eight Structures at Ontario International Airport (ONT)*, was conducted by EAC/Archaeology, Inc., dated March 28, 2022, for this related project to reconstruct and realign portions of E. Avion Street and E. Jurupa Street on the Airport and City property. The report analyzed eight structures located to the southwest of the Project site. Two of the structures were part of the former ANG Base at the Airport, which closed in 1996, and six structures were part of the former GE Aviation test facility, which closed in 2006. All eight structures were recommended as not eligible for listing in either the NRHP or the CRHR.



SOURCE: OIAA-SACCP Section 106_CEQA Report_DRI FINAL_with Appendices - 2022

FIGURE **5.4-1**

Meridian Consultants

Area of Potential Effect Map

332-001-21

The resources were found not eligible both due to a lack of association with individuals or processes of local, regional, or national significance and lack of architectural or technological significance.[37] No resources eligible for the California Register or the National Register were identified by this study. As such, none of the eight structures studied were identified as cultural resources under CEQA.

Built Environment within Project Site

Ontario ANG Hangar

The Ontario ANG hangar was built in 1955 and used as a California ANG facility until 1995. The Ontario ANG Station officially closed in 1998. The Ontario ANG Hangar is located on the east side of the Project site, as indicated on **Figure 5.4-1**. Based on its intact features, it was designed and constructed according to the USAF standard plan for hangar type H-2, which dates to 1951 and is attributed to Mills & Petticord. Type H-2 hangars were maintenance hangars which featured a large central hangar with multi-leaved, telescoping doors, surrounded on two or three sides by two-story lean-tos for shop space. This hangar type was built at USAF and ANG installations all over the country in the Cold War era, as detailed by the Historic Property Evaluation Report prepared by Desert Research Institute (DRI) (see **Appendix 5.4-2**).

The Ontario ANG hangar is nearly identical to many of its extant contemporaries. The hangar is composed of a steel-frame central hangar with concrete block lean-tos on three sides faced with brick and corrugated metal siding. It has bands of multi-light metal windows on both the lean-tos and the hangar. The original doors are also metal, some with single lights, and the multi-leaved doors include eight total leaves with tall multi-light windows on all leaves and pilot doors in the end leaves. The hangar elevations are clad with corrugated metal siding. There is no tail cut in the primary elevation, indicating that the Ontario ANG Station did not service aircraft with high tails, evident from the relatively low bottom chords on its interior steel trusses. The hangar has one-story additions on its rear elevation and some of the windows have been painted over; otherwise, the building remains intact from its 1955 construction.

ANG groups stationed at the Airport while the hangar was in use as part of the Ontario ANG Station included both the 196th Tactical Air Support Group and the 163rd Tactical Support Group from July 1952 until 1983, as well as the 148th Combat Communications Squadron (CCS) from 1984 to 1995. During the 196th and 163rd Tactical Support Groups' tenures, the station was used as an operations area in support of the California ANG's air training mission. Both jet

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37 EAC/Archaeology, Inc. *Determination of Eligibility for Eight Structures at Ontario International Airport (ONT).* March 28, 2022.

and propeller aircraft were taxied, parked, and maintained at the station. During the 148th CCS period, the CCS conducted radar operations, maintenance, and training on the property. Missions attributed to the groups and squadrons at the station included fighter-interceptor, air defense, tactical air support, tactical reconnaissance, air refueling, and communications.

GE Maintenance Facility

The former GE maintenance facility consists of three former maintenance hangars (Buildings 1-3), a storage hangar (Building 4), an administration building connected to one of the maintenance hangars (Building 6), and support buildings (Buildings 5 and 7-9), as seen on **Figure 5.4-2: GE Maintenance Facility Map**. The GE Maintenance Facility is located on the west side of the Project site, as indicated on **Figure 5.4-1**.

The development of this facility began in 1946 and extended to approximately 1994, based on review of historical records and aerial photographs. Buildings 1 and 2, two Army surplus WWII hangars, were acquired by the City and moved from an offsite location in 1946. These buildings are not original to the Airport. Building 3, a similar hangar, was added by 1952. The three hangars are metal framed with metal siding and arched roofs. Originally, all had multi-leaved, multi-light doors with pocket extensions on their runway-facing elevations, but only one such door remains on the northwest elevation of Building 3.

Building 4, a double-gabled metal hangar, and Building 5, a small gabled building, were added to the facility by 1959, along with a few smaller buildings. Multiple large additions were added to Buildings 1 and 2 by 1966. Several new buildings, including Building 6 parallel to Buildings 1 and 2, Building 7, and more additions to Buildings 1 and 2, were constructed by 1980. Building 6 was extended by 1985 to physically adjoin Building 2 and to create administrative office space. Buildings 8 and 9 were completed by 1994, resulting in a facility composed of an assortment of buildings and additions from five decades of development.

In the late 1940s, the original three hangars (Buildings 1-3) functioned as municipal airport facilities, later used by Northrop and Douglas Aircraft. The city leased the buildings to GE in either 1954 or 1956, and GE remained at the site until 2010, using the buildings for aircraft engine maintenance activities. The buildings are currently occupied by OIAA offices, maintenance, and storage facilities.

Presently, the APE has an industrial character with little cohesion between buildings. The area started primarily as three, nearly identical arched-roof hangars organized on a northeast-southwest axis. Numerous additions and alterations have substantially diminished visual connection and continuity. A unifying element is the perimeter fencing composed of concrete block and chain link, though Building 4 is cutoff from the other buildings by an interim fence.

SOURCE: OIAA-SACCP Section 106_CEQA Report_DRI FINAL_with Appendices - 2022

FIGURE **5.4-2**

Meridian Consultants

GE Maintenance Facility Map

332-001-21

Materials vary based on period of original construction and alterations, and include smooth stucco, corrugated metal, standing seam metal, and concrete block. Building forms include rectangular plans with arched, gabled, shed, and flat roofs. There is no landscaping within the facility boundary. Outside the perimeter fence there is a row of trees along East Avion Street.

5.4.2.2 Regulatory Background

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966, as amended (54 United States Code [USC] 300101 et seq.) (NHPA), sets forth the responsibilities that federal agencies must meet in regard to cultural resources, especially Section 106 of the NHPA (Section 106) and its implementing regulations in 36 CFR Part 800. Federal agencies must conduct the necessary studies and consultations to identify cultural resources that may be affected by an undertaking, evaluate cultural resources that may be affected to determine if they are eligible for the National Register of Historic Places (NRHP) (that is, whether identified resources constitute historic properties) and assess whether such historic properties would be adversely affected. Historic properties are resources that are listed in or eligible for listing in the NRHP (36 CFR 800.16[l][1]). A property may be listed in the NRHP if it meets criteria provided in the NRHP regulations (36 CFR 60.4). Typically, such properties must also be 50 years or older (36 CFR 60.4[d]).

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, or association. Significant properties are those:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

Section 106 defines an adverse effect as an effect that alters, directly or indirectly, the qualities that make a resource eligible for listing in the National Register (36 CFR 800.5[a][1]). Consideration must be given to the property's location, design, setting, materials, workmanship,

feeling, and association, to the extent that these qualities contribute to the integrity and significance of the resource. Adverse effects may be direct and reasonably foreseeable or may be more remote in time or distance (36 CFR 800.5[a][1]).

Secretary of the Interior's Standards for the Treatment of Historic Properties

The Secretary of the Interior is responsible for establishing standards for the preservation and protection of buildings and other cultural resources eligible for listing in the National Register. The 1990 document *Secretary of the Interior's Standard for the Treatment of Historic Properties* outlines specific standards and guidelines for the preservation, rehabilitation, restoration, and reconstruction of historically designated structures. Preservation standards and guidelines apply to those buildings that require ongoing maintenance to sustain its existence as a historical structure. Rehabilitation standards and guidelines involve the reuse of an historic structure or property while maintaining portions that maintain historic value. Restoration standards and guidelines are applicable to projects that remove portions of a building from another historic period to reconstruct missing features from the restoration period. Reconstruction standards and guidelines apply to new developments that replicate a historic period or setting. Each set of standards provides specific recommendations for the proper treatment of specific building materials, as well as parts of building development.

Archaeological Resources Protection Act

The intent of the Archaeological Resources Protection Act (ARPA) of 1979[38] is to ensure the preservation and protection of archaeological resources on public and Indian lands. ARPA places a primary emphasis on a federal permitting process to control the disturbance and investigation of archaeological sites on these lands. In addition, ARPA's protective provisions are enforced by civil penalties for violation of the ARPA.

State

California State Office of Historic Preservation

The mission of the California State Office of Historic Preservation (OHP) and the State Historical Resources Commission (SHRC), in partnership with the people of California and governmental agencies, is to preserve and enhance California's irreplaceable historic heritage as a matter of public interest so that its vital legacy of cultural, educational, recreational, aesthetic, economic,

38 United States Code, tit. 16, sec. 470aa–470mm, *Archaeological Resources Protection Act of 1979*, Public Law 96-95, as amended.

social, and environmental benefits will be maintained and enriched for present and future generations.

The OHP is responsible for administering federally and State-mandated historic preservation programs to further the identification, evaluation, registration, and protection of California's irreplaceable archaeological and historical resources under the direction of the OHP and the SHRC. OHP reviews and comments on several thousand federally-sponsored projects, State programs, and State projects annually, pursuant to Section 106 of the National Historic Preservation Act.

California Register of Historical Resources

The SHRC designed the California Register of Historical Resources program (California Register) for use by State and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The California Register is the authoritative guide to the State's significant historical and archeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance, identifies historical resources for State and local planning purposes, determines eligibility for State historic preservation grant funding, and affords certain protections under the California Environmental Quality Act (CEQA).

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have Statewide historical significance by meeting at least one of the criteria listed in the following paragraph. The resource also must be approved for designation by the County Board of Supervisors or the City/Town Council in whose jurisdiction it is located, must be recommended by the SHRC, and must be officially designated by the Director of California State Parks.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of Historical Interest designated after December 1997 and recommended by the SHRC are also listed in the California Register. No historical resource may be designated as both a Landmark and a Point. If a Point is subsequently granted status as a Landmark, the Point designation will be retired.

California Environmental Quality Act

Under CEQA (Public Resources Code [PRC] Section 21084.1), a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. State CEQA Guidelines Section 15064.5 defines a historical resource as:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historic Resources (CRHR);

2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and

3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a cultural resource may be considered historically significant if it is 45 years old or older, possesses integrity of location, design, setting, materials, workmanship, feeling, and association, and meets any of the following criteria for listing on the CRHR:

    A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

    B. Is associated with the lives of persons important in our past;

    C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,

    D. Has yielded, or may be likely to yield, information important in prehistory or history (Public Resources Code Section 5024.1).

The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource, as defined in PRC Sections 5020.1(j) or 5024.1.

As described by PRC Section 21084.1 and State CEQA Guidelines Section 15064.5, should a project cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired) in the significance of an historical

resource, the lead agency must identify potentially feasible measures to mitigate these effects (State CEQA Guidelines Sections 15064.5(b)(1) and 15064.5(b)(4)).

Archaeological resources are defined in CEQA Section 21083.2, which states that a "unique" archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Unique archaeological resources, as defined in Section 21083.2, may require reasonable efforts to preserve resources in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. Additionally, the State CEQA Guidelines state that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (State CEQA Guidelines Section 15064.5(c)(4)).

Local

City of Ontario General Plan (The Ontario Plan)

The City of Ontario has acknowledged that, as Lead Agency under CEQA for Airport development projects, the OIAA is responsible to determine the historical significance, if any, of any structure that may be impacted by Airport development or construction projects. As part of that determination, the OIAA utilizes City regulations regarding potentially historical resources. The Ontario Plan Community Design Element contains the following goals and policies related to cultural resources and historic preservation.

Goal CD-4: Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, that have been preserved and serve as a focal point for civic pride and identity.

Policy CD-4.1: *Cultural Resource Management.* We update and maintain an inventory of historic sites and buildings, professional

collections, artifacts, manuscripts, photographs, documents, maps, and other archives.

Policy CD-4.2: *Collaboration with Property Owners and Developers.* We educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of our historic buildings, streetscapes and unique neighborhoods.

Policy CD-4.3: *Collaboration with Outside Agencies.* We pursue opportunities to team with other agencies, local organizations, and non-profits in order to preserve and promote Ontario's heritage.

Policy CD-4.4: *Incentives.* We use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.

Policy CD-4.5: *Adaptive Reuse*. We actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.

Policy CD-4.6: *Promotion of Public Involvement in Preservation.* We engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.

Policy CD-4.7: *Public Outreach.* We provide opportunities for our residents to research and learn about the history of Ontario through the Planning Department, Museum of History and Art, Ontario and the Robert E. Ellingwood Model Colony History Room.

Ontario Development Code

Adopted in 1991 and amended in the following decades, the City of Ontario enacted a Historic Preservation Ordinance that defines the framework for preserving the character and history of the city. 7.0 Historic Preservation in the Ontario Development Code contains the following purpose to specify significance criteria for the designation of historic resources, procedures for designation, and review procedures, to:

A. Safeguard the character and history of the City, which is reflected in its unique culturally, historically, and architecturally significant structures and heritage, with emphasis on the

"Model Colony," as recognized by an Act of Congress and presented at the St. Louis World's Fair in 1904;

B. Encourage and promote the adaptive reuse of the City's historic resources;

C. Enhance, perpetuate, and preserve architecturally and historically significant structures and promote revitalization of historic neighborhoods and commercial areas;

D. Ensure that the rights of the owners of historic resources are safeguarded;

E. Foster civic pride in the beauty and noble accomplishments of the past by promoting private stewardship of historic resources that represent these accomplishments;

F. Fulfill the City's responsibilities as a Certified Local Government under Federal preservation laws;

G. Promote the identification, documentation, and evaluation of the significance of individual historic resources and districts;

H. Implement the historic preservation goals, policies, and programs of the Policy Plan (General Plan) component of The Ontario Plan;

I. Promote the City as a destination for tourists and as a desirable location for business;

J. Promote public awareness of the value of rehabilitation, restoration, and maintenance of the existing building stock as a means to conserve reusable material and energy resources;

K. Recognize the City's historic resources as economic assets and provide economic financial incentives for historic preservation;

L. Stabilize and improve property values, and enhance the aesthetic and visual character, place making, diversity, and environmental amenities of the City's historic properties and areas;

M. Promote public knowledge, appreciation, and understanding of the City's past, and foster civic and neighborhood pride in the beauty and accomplishments of the past;

N. Promote the enjoyment and use of historic resources appropriate for the education and recreation of the people of the City;

O. Recognize historic resources and protect areas of historic structures from encroachment of incompatible designs;

P. Promote public awareness of the benefits of preservation; and

Q. Encourage public participation in historic preservation, thereby increasing civic pride in the City's heritage.

Ontario Register of Historic Places

The Ontario Register of Historic Resources (ORHR) is contained in Chapter 7.0 Historic Preservation, Section 7.01.010 of the Ontario Development Code. The ORHR includes a list of designated local Historic Landmarks and Districts that exhibit historical significance, as determined through an established set of eligibility criteria. Based upon the NRHR and CRHR significance criteria, and identified in Section 4.02.040(B)(2) of the Ontario Development Code, a Historic Landmark may qualify for designation by the City if it exhibits significance under one or more of the following criteria:

A. The historic resource exemplifies or reflects special elements of the City's history;

B. The historic resource is identified with persons or events significant in local, State, or national history;

C. The historic resource is representative of the work of a notable builder, designer, architect, or artist;

D. The historic resource embodies distinguishing architectural characteristics of a style, type, period, or method of construction;

E. The historic resource is a noteworthy example of the use of indigenous materials or craftsmanship;

F. The historic resource embodies elements that represent a significant structural, engineering, or architectural achievement or innovation;

G. The historic resource has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community, or the City;

H. The historic resource is one of the few remaining examples in the City, region, State or nation, possessing distinguishing characteristics of an architectural or historical type or specimen: or

I. The historic resource has yielded, or is likely to yield, information important to the City's history or prehistory.

Section 4.02.040(B)(3) further provides that a Local Historic District may either meet the criteria for listing in the NRHP or CRHR, or meet one or more of the following local criteria:

A. The historic resource is a geographically definable area possessing a concentration of historic resources or a thematically related grouping of structures that contribute to each other and are unified by plan, style, or physical development, and embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;

B. The historic resource reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of a park landscape, site design, or community planning;

C. The historic resource is associated with, or the contributing resources are unified by, events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or

D. The historic resource is, or the contributing resources are, associated with the lives of persons important to the City, State, or National history.

Landmarks and Districts listed in the NRHP or the CRHR are automatically placed on the City's List of Historic Landmarks and Districts.

In instances of potential Historic Landmarks and Districts, the resource must also retain sufficient historical integrity dating to the established "period of significance" in order to qualify for listing in the ORHR. The relevant aspects of integrity for listing in the ORHR include design, setting, materials and workmanship, location, feeling, and association.

5.4.3 ENVIRONMENTAL IMPACT ANALYSIS

5.4.3.1 Thresholds of Significance

The potential for the Project to result in impacts associated with cultural resources is based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

CUL-1: **Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?**

CUL-2: **Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

CUL-3: **Disturb any human remains, including those interred outside of formal cemeteries?**

5.4.3.2 Methodology

Archaeological Research

Records Search

A literature review and records search were conducted at the SCCIC at California State University, Fullerton, on November 17, 2021. The search included the Project site and one-half mile buffer

to identify prehistoric or historical cultural resources that have been previously recorded within the study area during prior cultural resource investigations. Historical maps and aerial images were evaluated to characterize the developmental history of the Project site and surrounding area. Historical maps consulted include Southern California Sheet No. 1 (1901) and San Bernardino, CA (1952 and 1958) 60-minute, Cucamonga (1894), Guasti and Vicinity (1941), and Ontario, CA (1954) 15-minute, and Guasti, CA (1953, 1966, and 1973) 7.5-minute USGS quadrangles. Historical aerial images from NETROnline dated to 1938, 1948, 1959, and 1966 were also reviewed. As discussed above, the NAHC was also consulted on August 26, 2021, for a review of the SLF to identify known Native American cultural resources that may be present.

Field Survey

A reconnaissance survey of the entire Project site was completed by a cultural resource specialist on September 29, 2021, for the Archaeological Resources Assessment. All areas likely to contain or exhibit sensitive cultural resources were inspected to ensure discovery and documentation of any visible, potentially significant cultural resources.

Historic Research

Records Search

As previously discussed, a literature review and records search were conducted at the SCCIC, housed at California State University, Fullerton, on November 17, 2021. The records search area included the Project APE and a one-half-mile radius around the Project area. The search identified prehistoric or historical cultural resources that have been previously recorded within the study area during prior cultural resource investigations.

Historic Consultation

Public outreach and interested party consultation was completed as part of OIAA's CEQA obligations. A Notice of Preparation (NOP) for this EIR was circulated for public comment from October 15 through November 15, 2021, in accordance with the CEQA Guidelines. The NOP was provided to the State of California Office of Planning and Research State Clearinghouse for distribution for review by state agencies. OIAA distributed the NOP to local public agencies and other parties, and the NOP was available on the OIAA website. A scoping meeting was held on November 10, 2021, by the OIAA.

One letter commenting on the NOP was received regarding the Project's potential to affect historic properties from the City of Ontario Planning Department. The letter notified OIAA that the City had a Historic Context Statement (HCS) prepared for the Airport in 2017 that contained

preliminary eligibility determinations for buildings and other resources. This HCS was reviewed with other literature as part of the Historic Property Evaluation Report.

Further consultation resulted in the City holding a Historic Preservation Subcommittee meeting on January 13, 2022, to review the findings of the 2017 HCS and subsequent related actions. At the January 2022 Subcommittee meeting, the City rescinded both the Tier designations and determinations of eligibility for inclusion on the Ontario Register of Historic Districts under its Code for the applicable properties and structures addressed in the 2017 HCS. Further, the City withdrew, rescinded, and voided the entire 2017 HCS through a formal memorandum in April 2022.[39] The memorandum recognizes that OIAA is the responsible public agency with the authority to prepare and evaluate historic context statements/surveys and to determine the historic significance of structures on its property. No other responses to the NOP or scoping meeting were received regarding historical resources.

Additional Historic Research

Several other sources were consulted to develop the appropriate historic contexts for the properties in the APE, including documents in the City of Ontario's Ovitt Family Library. This review included histories of the Airport and previous environmental documents, as well as newspaper articles from online databases. The resources consulted include the 2017 HCS and survey (though this was withdrawn, rescinded, and voided by the City in April 2022, as discussed above), general histories of Ontario and the Airport, previous technical and environmental studies, historic aerial photographs and maps, county assessor data, the California Built Environment Resources Directory (BERD), and credible online sources.

Historic Field Survey

The APE was surveyed by an architectural historian on March 24, 2022, as part of the Historic Property Evaluation Report. The purpose of the field survey was to document the condition and physical integrity of the potential historic properties in the APE, to confirm dates of construction

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39 Upon review, that the rescinded 2017 HCS of the Airport did not meet the requirements identified in PRC Section 5024.1 and 14 CCR Section 15064.5 for historical resources. The 2017 HCS is not included in the State Historical Resource Inventory, and there is no documentation indicating the SHPO concurred with the findings. Additionally, these findings were not identified in the records results, nor does it appear in the BERD. The Historic Property Evaluation Report included a review of the previous evaluation of this hangar in the 2017 HCS and determined this evaluation is incomplete by current industry standards as it lacks a detailed explanation of how the hangar meets Criterion C by identifying which physical features enable it to qualify, and comparing the hangar with other examples of its type (see **Appendix 5.4-2**). For these reasons, DPR 523 forms (included in **Appendix 5.4-2**) were prepared to evaluate the hangar as an individual resource.

and alterations. Photographs and notes were taken during the field survey (see **Appendix 5.4-2**).

5.4.3.3 Project Impacts

CUL-1: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Less Than Significant Impact.

The 1980s-era private jet center is not of sufficient age to be eligible for listing in the NRHP, CRHR, or as local Ontario Landmarks/Historic Districts, based on the records search, research, field survey, and applicable cultural resource codes and regulations. The private jet center dates from 1985 and later, as determined by the San Bernardino County Assessor and historic aerials. The buildings include a typical hangar and office buildings from the 1980s. Research did not reveal any potentially exceptionally significant associations that would warrant evaluation under NRHP Criteria Consideration G. The private jet center is not a historic property for purposes of CEQA compliance.

The majority of the former Ontario ANG Station is located outside the Project site. The Ontario ANG Station was previously determined ineligible for the NRHP as a potential historic district, as part of an Environmental Assessment (EA) for the disposal of the station in 1998. Fieldwork and research confirmed the findings in the prior evaluation and did not reveal any reasons for re-evaluation. A new DPR 523 Update form for the station was prepared to add to the existing documentation and provide information pertinent to the current undertaking (see *Appendix B* to **Appendix 5.4-2** of this EIR). Determinations regarding which DPR forms to prepare for which resources were based on the California Office of Historic Preservation's Instructions for Recording Historical Resources publication, pp. 23-24. The Ontario ANG hangar was excluded from the 1998 district evaluation of the Ontario ANG Station as it was outside the study area for that undertaking.

Based on the records search, research, field survey, and applicable cultural resource codes and regulations, the former Ontario ANG hangar and former GE maintenance facility were evaluated to determine eligibility for listing in the NRHP, CRHR, or as local Ontario Landmarks/Historic Districts.

Ontario ANG Hangar

The former Ontario ANG hangar is over 50 years old and located within the Project site.

NRHP Evaluation

To be eligible for listing in the NRHP under Criterion A, properties must be associated with events that have made a significant contribution to the broad patterns of our history. The missions and activities associated with the Ontario ANG hangar were typical of ANG installations throughout California and the United States. Research did not reveal any direct associations with important events or trends. No significant missions or activities originated at the station. Groups and squadrons stationed there are not directly related to any significant military events. For these reasons, the hangar is not significant under NRHP Criterion A for direct association with important historical trends or events.

To be eligible for listing in the NRHP under Criterion B, properties must be associated with the lives of persons significant in our past. The Ontario ANG hangar was associated with numerous members of the California ANG. Research did not reveal a direct association with any specific, important individuals in local, State, or national history. The collective contributions of personnel stationed at the hangar is best understood and evaluated under NRHP Criterion A. For these reasons, the hangar is not significant under NRHP Criterion B for direct associations with important individuals.

To be eligible for listing in the NRHP under Criterion C, properties must embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction. There are numerous H-2 type hangars across the country and every intact example is not eligible for listing in the NRHP. As such, the hangar would have to be an outstanding example in comparison with its peers, be an early prototype, or display some unique adaptations to suit a particular mission, aircraft type, or local conditions. The hangar followed standard design plans, nearly identical to other ANG hangars from the mid-1950s and served standard missions and aircraft. Many H-2 type hangars have been determined ineligible for the NRHP, including others in California. For these reasons, the hangar is not significant under NRHP Criterion C.

To be eligible for listing in the NRHP under Criterion D, properties must yield, or may likely yield, information important in prehistory or history. Criterion D generally applies to archaeological resources, and it would be unlikely that a military aircraft hangar would meet Criterion D. Adequate information for understanding the technologies and designs of the hangar is provided by drawings for standard plans and specific existing hangars. For these reasons, the hangar is not significant under NRHP Criterion D.

The Ontario ANG hangar is not significant under any of the established NRHP Criteria for Significance. It does not appear to be eligible for listing in the NRHP.

CRHR Evaluation

The CRHR criteria for significance is nearly identical to the NRHP criteria. As described above, the missions and activities associated with the Ontario ANG hangar were typical of ANG installations throughout California and the United States. Research did not reveal any direct associations with important events or trends. No significant missions or activities originated at the station. Groups and squadrons stationed there are not directly related to any significant military events. The Ontario ANG hangar was associated with numerous members of the California ANG. Research did not reveal a direct association with any specific important individuals in local, State, or national history. Additionally, the hangar followed standard design plans, nearly identical to other ANG hangars from the mid-1950s and served standard missions and aircraft. Lastly, adequate information for understanding the technologies and designs of the hangar is provided by drawings for standard plans and specific existing hangars. Therefore, the hangar is not historically or culturally significant and the Ontario ANG hangar does not appear to be eligible for the listing in the CRHR for the same reasons discussed above in the NRHP evaluation.

Ontario Historic Landmark Evaluation

The Ontario Historic Landmark criteria is nearly identical to the NRHP and CRHR criteria, with Criteria 1 and 2 directly relating to meeting the NRHP or CRHR criteria, respectively. As previously discussed, and detailed on the Department of Parks and Recreation (DPR) forms included in Appendix 5.4-2, the Ontario ANG hangar is not eligible for listing in either the NRHP or CRHR. As such, the hangar does not meet local Criteria 1 and 2. Criterion 3 includes eight subparts (a through h), with Criteria 3(a) through 3(f) restating the NRHP and CRHR criteria. As the hangar is not eligible under these NRHP and CRHR criteria, the Ontario ANG hangar is not eligible under local Criteria 3(a) through 3(f).

Criteria 3(g) applies to properties with unique locations, singular physical characteristics, and those that are established and familiar visual features. The hangar is an aviation property located at an airport. It is a standard aircraft hangar made of typical materials applied in a typical manner. It does not possess any singular distinguishing physical characteristic. The hangar is not a familiar visual feature in the City. It is only highly visible from restricted access locations within the Airport. For these reasons, the Ontario ANG hangar does not meet Criterion 3(g).

Criteria 3(h) applies to properties that are one of the few remaining examples in a geographic area possessing distinguishing characteristics of an architectural or historical type or specimen.

Dozens of examples of an H-2 maintenance hangar remain nationwide, including others in California. The ANG hangar is the only example in Ontario but, as previously discussed and detailed on the Department of Parks and Recreation (DPR) forms (included in **Appendix 5.4-2**), it does not possess distinguishing characteristics. It is an example of an H-2 maintenance hangar, but it is not an important example. The hangar is not one of the few remaining examples possessing distinguishing characteristics of an architectural or historical type. As such, the Ontario ANG hangar does not meet Criterion 3(h).

The Ontario ANG hangar is not significant under any of the established Ontario Historic Landmark Criteria and does not appear to be eligible for listing as an Ontario Historic Landmark.

GE Maintenance Facility

The former GE maintenance facility includes four hangars, an administration building, and ancillary buildings and structures, with five of the nine buildings surveyed being over 50 years old. As with the ANG Hangar, DPR 523 forms (included in **Appendix 5.4-2)** were prepared to evaluate the facility as a potential historic district.

NRHP Evaluation

Research did not reveal any evidence to suggest that important developments in the field of aviation or in the history of GE Aviation occurred at the Ontario maintenance facility. Engine maintenance was a routine operation and maintenance facilities were standard airport fixtures. As previously discussed, numerous aviation-related companies had facilities at the Airport in the postwar era, in addition to GE.

To be eligible for listing in the NRHP under Criterion A, properties must be associated with events that have made a significant contribution to the broad patterns of our history. The GE maintenance facility provided typical maintenance services. The facility developed through occupying existing buildings, then adding additions and new buildings on an as-needed basis. It does not appear to have directly generated growth of the Airport or surrounding communities. The GE maintenance facility is not significant under NRHP Criterion A for direct association with important historical trends or events.

To be eligible for listing in the NRHP under Criterion B, properties must be associated with the lives of persons significant in our past. While the former GE maintenance facility was associated with numerous GE employees, research did not reveal a direct association with any specific, important individuals in local, State, or national history. The collective contributions of employees working in the facility is best understood and evaluated under NRHP Criterion A. The facility is not significant under NRHP Criterion B for direct associations with important individuals.

To be eligible for listing in the NRHP under Criterion C, properties must embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction. The facility lacks a cohesive, discernable site plan and design program with buildings added and modified over time. The facility lacks the distinctive characteristics of a type, period, or method of construction. It does not represent the work of a master or possess high artistic values. Further, the facility does not exhibit a significant and distinguishable entity whose components may lack individual distinction principally as the facility lacks historic or architectural significance. The facility's WWII-era hangars have all been altered with additions: multi-leaf door removals, siding changes, window removals, and door replacements. The facility is not significant under NRHP Criterion C, given the lack of integrity to convey such significance.

To be eligible for listing in the NRHP under Criterion D, properties must yield, or may likely yield, information important in prehistory or history. Criterion D generally applies to archaeological resources, and it would be unlikely that the maintenance facility would meet Criterion D. The facility is a collection of altered, standard aircraft hangars and prefabricated buildings, constructed as recently as 1994, and has no such information potential. The facility is not significant under NRHP Criterion D.

The GE maintenance facility is not significant under any of the established NRHP Criteria for Significance and does not appear to be eligible for listing in the NRHP.

CRHR Evaluation

The CRHR criteria for significance is nearly identical to the NRHP criteria. As described above, the GE maintenance facility provided typical maintenance services. The facility developed through occupying existing buildings, then adding additions and new buildings on an as-needed basis. It does not appear to have directly generated growth of the airport or surrounding communities. While the former GE maintenance facility was associated with numerous GE employees, research did not reveal a direct association with any specific, important individuals in local, State, or national history. Additionally, the facility lacks a cohesive, discernable site plan and design program with buildings added and modified over time. The facility lacks the distinctive characteristics of a type, period, or method of construction. It does not represent the work of a master or possess high artistic values. Further, the facility does not exhibit a significant and distinguishable entity whose components may lack individual distinction principally as the facility lacks historic or architectural significance. The facility's WWII-era hangars have all been altered with additions: multi-leaf door removals, siding changes, window removals, and door replacements. The facility is a collection of altered, standard aircraft hangars and prefabricated

buildings, constructed as recently as 1994, and has no such information potential. Therefore, the GE Maintenance Facility is not historically or culturally significant and does not appear to be eligible for the listing in the CRHR for the same reasons discussed above in the NRHP evaluation.

Ontario Historic District Evaluation

The Ontario Historic District Criteria are nearly identical to the NRHP and CRHR criteria. Criteria 1 and 2 are directly related to meeting the NRHP or CRHR criteria, respectively. As previously discussed, and detailed on the Department of Parks and Recreation (DPR) forms included in Appendix 5.4-2, the GE maintenance facility is not eligible for either the NRHP or CRHR. As such, the hangar does not meet local Criteria 1 and 2. Criterion 3 has four subparts (a through d), with Criteria 3(a), 3(c), and 3(d) restating the NRHP and CRHR criteria. As such, the GE maintenance facility is not eligible under local Criteria 3(a), 3(c), and 3(d).

Criteria 3(b) applies to properties that reflect significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of a park landscape, site design, or community planning. As previously discussed, the facility developed over several decades in an as-needed manner with buildings and additions built in available space on-site. The facility does not reflect a clear development pattern, a distinctive example of park landscape, site design, or community planning. The GE maintenance facility does not meet Criterion 3(b).

The GE maintenance facility is not significant under any of the established Ontario Historic District Criteria and does not appear to be eligible for listing as an Ontario Historic District.

Conclusions

A summary of the results of the historic resource evaluations completed in the Historic Property Evaluation Report for the Project is provided in Table 5.4-3: Summary of Evaluation Recommendations.

TABLE 5.4-3
SUMMARY OF EVALUATION RECOMMENDATIONS

Name	Type	NRHP Recommendation	CRHR Recommendation	Ontario Recommendation
Ontario ANG hangar	Former military maintenance hangar	Ineligible. Though it retains integrity, it does not possess significance under any of the established criteria.	Ineligible. Though it retains integrity, it does not possess significance under any of the established criteria.	Ineligible. Though it retains integrity, it does not possess significance under any of the established criteria.
GE maintenance facility	District of maintenance hangars and associated buildings and structures	Ineligible. The potential district lacks both significance and integrity.	Ineligible. The potential district lacks both significance and integrity.	Ineligible. The potential district lacks both significance and integrity.

Source: DRI. *Historic Property Evaluation Report*. November 2022. (See **Appendix 5.4-2**).

As discussed above, the Ontario ANG hangar and the GE maintenance facility are not eligible for either the NRHP or CRHR. The Ontario ANG hangar is not eligible for listing as an Ontario Historic Landmark. The GE maintenance facility is not eligible for listing as an Ontario Historic District. The 1980s-era private jet center is not eligible for listing in the NRHP, CRHR, or as a local Ontario Landmark/Historic District. As such, they are not historical resources as defined by CEQA and the Project would not directly or indirectly impact any historical resources on the Project site and surrounding area. Therefore, impacts to historical resources during construction and operation of the proposed Project would be less than significant.

CUL-2: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant with Mitigation Incorporated.

The Archaeological Resource Assessment included a record search and background research, communication with the Native American Heritage Commission (NAHC), and a reconnaissance pedestrian survey of the APE (see **Appendix 5.4-1**). The built nature of the Project site with pavement, multiple buildings, structures, and landscape, as well as installation of related underground utilities, suggests that subsurface soil has been extensively disturbed.

Archival research indicates the Project area was used for agricultural purposes prior to the construction of the Airport and Cucamonga Channel. In the late 1940s, the Project site consisted of plowed fields and a minimally altered course of the Cucamonga Creek that merged into native areas eastward of the channel (see **Appendix 5.4-1**).[40] No abandoned creek channels or fluvial features are mapped within the Project site, indicating recent surface stability. Historic aerial imagery indicates that with the construction of the Airport and channelizing of the Cucamonga Creek in the late 1940s, the landscape appears to have further stabilized with minimal deposition or erosion. Geological mapping indicates artificial fill covers the Project site; however, no indication was seen in the historic aerial imagery of either the emplacement of fill or its potential depth. The former Historic Period surface appears to have been relatively stable through the latter half of the Holocene, having formed on material deposited between the late Pleistocene and middle Holocene. During this time, the surface may have been used prehistorically.

Accordingly, it is possible that farming in the early twentieth century and potential prehistoric occupation at the Project area may have resulted in surface disturbances and deposition of objects and features at the Project site. Therefore, there is a moderate potential for buried objects in the native soil under the Project site. There is a low potential for more deeply buried archaeological deposits associated with the early Holocene and late Pleistocene eras. Because ground disturbing activities for the Project could extend to a depth of up to 20 feet below the existing ground surface, ground disturbing activities during construction may encounter native soils containing potential archeological resources. Thus, the proposed Project would require an archaeological monitor to observe all ground disturbing activities associated with the Project, such as grading. Implementation of **Mitigation Measure CUL-1** during construction activities during Phase 1 and Phase 2 of the proposed Project would reduce the potential for significant impacts to archaeological resources that may be present in undisturbed native soils present on the Project site to less than significant. This mitigation measure requires monitoring during grading or other ground disturbing activities and, if objects are encountered, that work in the immediate area be halted and the resources evaluated.

CUL-3: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact.

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40 PaleoWest. *Archaeological Resource Assessment.* (See **Appendix 5.4-1**).

The Project site is not a dedicated graveyard or cemetery. Additionally, according to the NAHC Sacred Lands Inventory search, the Project site is not cataloged as a Native American sacred or cultural place of special religious or social significance, which would include graves and cemeteries (see **Appendix 5.4-1**).[41] Based on the developed condition of the Project site and its historic use as farmland, it is very unlikely that human remains would be discovered at the Project site. Nevertheless, the Project, would comply with existing laws and regulations related to human remains. In the event human remains were discovered during construction ground disturbance activities, the Project would be required to comply with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5, which provide guidance on the discovery of human remains and its treatment or disposition, with appropriate dignity. Through mandatory compliance with these regulations, potential impacts to human remains during construction of the Project would be less than significant.

5.4.4 CUMULATIVE IMPACTS

Historic Resources

As discussed in Impact CUL-1, the Project would not directly or indirectly impact any historical resources on the Project site and surrounding area. The Project is not a part of a historical district at the Airport, nor is it a contributor to the significance of historical resources and districts in the City, San Bernardino County, and Southern California (as a region); the growth of aviation in the State or nation; or the prewar efforts related to WWII. None of the built environment resources present on the Project site are eligible for listing in the NRHP, CRHR, or as Ontario Landmarks/Historic Districts, and are not historic properties as defined by CEQA. For this reason, the Project will not contribute to any cumulative impact to historic resources on the Airport or in the City of Ontario.

Archaeological Resources

The geographic scope for cumulative effects on archaeological resources is the southwest portion of San Bernardino County, including the City, as this is the area associated with the prehistoric, ethnographic setting of local Native American tribes and historic growth of the region during the early and mid-1900s. The proposed Project, like other related development projects, would have the potential to impact archaeological resources that may be present in undisturbed native soils during construction. The Project would be required to implement **Mitigation**

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41 PaleoWest. *Archaeological Resource Assessment*. (See **Appendix 5.4-1**).

Measure CUL-1, which would require an archaeological monitor to observe all ground disturbing activities associated with the Project. If objects are encountered, work in the immediate area will halt and the resources will be evaluated to mitigate potential impacts to less than significant. For this reason, the Project will not contribute to any cumulative impact to archeological resources. Related projects would be required to comply with PRC Section 21083.2(i), which states a lead agency may make provisions for archaeological sites accidentally discovered during construction. If the find is determined to be a unique archaeological resource, contingency funding and a time allotment sufficient to allow recovering an archaeological sample or to employ one of the avoidance measures may be required, during which construction work may continue on other parts of the site. Compliance with PRC Section 21083.2(i) would ensure that provisions are in place to address accidental discoveries of archaeological resources. For these reasons, no significant cumulative impacts to archeological resources will occur.

Human Remains

Every development project in the State would be required to comply with the provisions of California Health and Safety Code § 7050.5, and Public Resources Code § 5097 et seq., which would ensure that human remains uncovered during construction activities are treated in accordance with prescribed, respectful, and appropriate practices. Therefore, the proposed Project—in combination with related projects—would not result in significant cumulative impacts on human remains.

5.4.5 LEVEL OF SIGNIFIGANCE BEFORE MITIGATION

The proposed Project would result in less than significant impacts to CUL-1 and CUL-3. Without mitigation, the following impacts would be **potentially significant**:

- **Impact CUL-2**: Impacts to archeological resources.

5.4.6 MITIGATION MEASURES

MM CUL-1: Archaeological Monitoring of All Ground-Disturbing Activities During Construction of Phase 1 and Phase 2.

a) Prior to the issuance of grading permits by the City of Ontario for Phase 1 and Phase 2 of the proposed Project, the OIAA and/or its construction contractor must retain a qualified professional archeologist meeting the Secretary of Interior's PQS for Archaeology (as defined in the Code of Federal Regulations, 36 CFR Part 61). The qualified archaeologist will be retained to conduct monitoring of rough grading activities conducted during both Project phases.

The qualified archaeologist shall have the authority to redirect earthmoving activities in the event that suspected cultural resources are unearthed during construction activities.

b) The qualified archaeologist shall prepare a Cultural Resources Monitoring and Treatment Plan that will describe processes for archaeological monitoring and for handling incidental discovery of objects, features, and cultural resources for all ground-disturbing construction and preconstruction activities.

c) Prior to the issuance of a grading permit, all construction workers involved with grading and trenching operations shall receive training by the qualified archaeologist to recognize unique archaeological resources, including tribal cultural resources, should such resources be unearthed during ground-disturbing construction activities. The training of all construction workers involved with grading and trenching operations shall explain the importance and legal basis for the protection of significant archaeological resources. It will include a brief review of the cultural sensitivity of the construction area and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel involved with grading and trenching operations that begin work following the initial training session must take the training prior to beginning work; the qualified archaeologist shall be available to provide the training on an as needed basis.

d) In the event subsurface artifacts or features are encountered during ground-disturbing activities, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations within a 100-foot radius of the discovery and see identification and evaluation and evaluation of the suspected resource by the qualified archaeologist for listing in the NRHP and CRHR. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note.

e) After the qualified archaeologist makes his/her initial assessment of the nature of the find. The archaeologist shall pursue either protection in place or recovery, salvage, and treatment of the deposits. Recovery, salvage, and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA

Guidelines 15064.5 and 15126.4 in consultation with OIAA or with a recognized scientific or educational repository, including the SCCIC. Preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources, consistent with CEQA Guidelines Section 15126.4(b)(3)(C).

5.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of **Mitigation Measure CUL-1** and compliance with the regulatory requirements, Project impacts to cultural resources would be less than significant.

5.4.8 REFERENCES

Desert Research Institute (DRI). *Historic Property Evaluation Report*. November 2022 (see Appendix 5.4-2).

EAC/Archaeology, Inc. *Determination of Eligibility for Eight Structures at Ontario International Airport (ONT)*. March 28, 2022.

PaleoWest. *Archaeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023 (see Appendix 5.4-1).

United States Code, tit. 16, sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law 96-95, as amended.

5.5.1 INTRODUCTION

This section evaluates the potential for energy-related impacts associated with the proposed Project and ways in which the proposed Project would reduce unnecessary energy consumption, consistent with the suggestions contained in Appendix F of the CEQA Guidelines. The analysis in this section is based in part on the following documents:

- RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*. February 2023. (See **Appendix 5.2-1.**)
- Meridian Consultants, LLC. "Vehicle Fuel Calculations." July 2022. (See **Appendix 5.5-1.**)

5.5.2 ENVIRONMENTAL SETTING

5.5.2.1 Existing Conditions

Electricity

Electricity is typically a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers, that lower transmission line power (voltage) to a level appropriate for use by customers. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh, or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion watt-hours. According to the California Energy Commission's (CEC), the State of California

consumed approximately 279,000 GWh of electricity in 2020, with electricity demand projected to rise to 340,000 GWh in 2035, the furthest year of currently available projections.[1]

Electrical power within the City is supplied by SCE, which serves approximately 15 million people in a 50,000-square-mile service area.[2] The SCE service area generated approximately 58,870,798 MWh of electricity in 2020.[3] SCE produces and obtains electricity from various generating sources that utilize coal, nuclear, natural gas, hydroelectric, and renewable resources to generate power.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas satisfies almost one-third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as transportation fuel. Natural gas is primarily measured in terms of cubic feet (cf), as well as in terms of British thermal units (Btu), and Therms.[4]

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1 California Energy Commission (CEC). *Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast*. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2021-integrated-energy-policy-report. Accessed November 2022.

2 Southern California Edison (SCE). "Newsroom Fact Sheet." April 29, 2019. https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20193/SCE%20Service%20Area%20Fact%20Sheet_Ver2_04252019.pdf. Accessed November 2022.

3 SCE. "Electric Company ESG/Sustainability Quantitative Information." November 10, 2021. https://www.edison.com/content/dam/eix/documents/sustainability/eix-esg-pilot-quantitative-section-sce.pdf. Accessed November 2022.

4 One Therm is equivalent to 100,000 British thermal units (BTU) or 100 kBTU. A Therm is approximately the energy equivalent of burning 100 cubic feet (1 cf) of natural gas. The conversion of kBTU to cubic feet uses the factor of 1 cf to 1.037 kBTU.

According to the CEC's California Energy Consumption Database, the State of California consumed approximately 11,923 million Therms of natural gas in 2021,[5] with demand projected to rise to 13,254 million Therms in 2035,[6] the furthest year of currently available projections.

SoCalGas is the natural gas purveyor within the City. The SoCalGas service area reaches 21.8 million consumers through 5.9 million meters in more than 500 communities, covering an area of approximately 24,000 square miles throughout Central and Southern California.[7] The SoCalGas planning area had a natural gas throughput of 2,423 million cubic feet (MMcf) in 2021, with capacity projected to be 13,254 3775 MMcf in 2035,[8] the furthest year of currently available projections.[9]

Statewide natural gas demand is projected to decline at an annual rate of 1.1 percent each year through 2035.[10] The decline in demand is due to modest economic growth, CPUC-mandated energy efficiency (EE) standards and programs, as well as Senate Bill (SB) 350 goals. Other factors that contribute to the downward trend are tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, a decline in core commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure (AMI). By comparison, the 2018 California Gas Report projected an annual decline in demand of 0.74 percent over the forecast horizon.[11]

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5 CEC. California Energy Consumption Database. "Gas Consumption by County." https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed November 2022.

6 CEC. *Final 2021 Integrated Energy Policy Report.*

7 Southern California Gas (SoCalGas). "Company Profile." https://www.socalgas.com/about-us/company-profile. Accessed November 2022.

8 CEC. *Final 2021 Integrated Energy Policy Report.*

9 California Gas and Electric Utilities. *2022 California Gas Report*. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf. Accessed November 2022.

10 California Gas and Electric Utilities. *2022 California Gas Report*.

11 California Gas and Electric Utilities. *2018 California Gas Report.* https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf. Accessed November 2022.

Petroleum Based Fuel

Crude oil is a mixture of hydrocarbons that exists as a liquid in underground geologic formations and remains a liquid when brought to the surface.[12] Petroleum products are produced from the processing of crude oil and other liquids and include transportation-related fuels such as gasoline and diesel. Petroleum is a worldwide commodity. According to the U.S. Energy Information Administration (EIA), California consumed approximately 661,893,000 barrels (27,799,506,000 gallons or 42 gallons per barrel) in 2019, the most recent year of publicly available data.[13] The EIA forecasts a national oil supply of 17.7 million barrels per day (mb/d) from 2022 to 2030.[14] This equates to approximately 6,461 million barrels per year (mb/y) or 271,362 million gallons per year (mg/y).[15]

Over the last several decades, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gas (GHG) emissions from the transportation sector, and reduce vehicle travel. Incentive programs, such as the CEC's Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP), are helping the State to reduce its dependency on gasoline. The CEC predicts that the demand for gasoline will continue to decline over the upcoming years and there will be an increase in the use of alternative fuels.[16]

Jet Fuel

U.S. air travel fell significantly in 2020 because of reduced travel in response to the worldwide COVID-19 pandemic. In its Annual Energy Outlook 2021,[17] the EIA projects total U.S. passenger air travel demand will return to 2019 levels by 2025, but passenger travel jet fuel consumption

12 United States Energy Information Administration (US EIA). "Frequently Asked Questions." https://www.eia.gov/tools/faqs/faq.php?id=40&t=6. Accessed November 2022.

13 US EIA. Independent Statistics & Analysis. "Table F16: Total Petroleum Consumption Estimates, 2018." https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US. Accessed November 2022.

14 US EIA. "Annual Energy Outlook 2020." *Table 11. Petroleum and Other Liquids Supply and Disposition*. https://www.eia.gov/outlooks/aeo/data/browser/#/?id=11-AEO2020&cases=ref2020&sourcekey=0. Accessed November 2022.

15 One oil barrel is equivalent to 42 gallons.

16 CEC. *Final 2021 Integrated Energy Policy Report*.

17 US EIA. "Annual Energy Outlook 2022." https://www.eia.gov/outlooks/aeo/. Accessed November 2022.

will not return to 2019 levels until nearly 2030. Increasing air travel efficiency means that increasing air travel does not necessarily result in similar changes in jet fuel consumption.[18]

In 2020, many planes—primarily older planes—went unused for much of the year. These planes may not return to service because of their age or because they were converted to dedicated freighters to offset the loss in passenger aircraft belly freight capacity. EIA projects that newer, more efficient aircraft will replace these retired and converted aircraft, further accelerating improvement in passenger aircraft efficiency. Passenger travel accounted for an estimated 87 percent of U.S. commercial jet fuel consumption in 2019 and 83 percent of commercial jet fuel consumption in 2020.[19]

Jet fuel demand (measured as product supplied) has been well below its 2019 average of 1.74 million barrels per day (b/d) since the onset of the COVID-19 pandemic. In most weeks since August 2021, jet fuel consumption has been within 20 percent of 2019 levels. By comparison, in November 2020, U.S. jet fuel demand averaged 1.13 million b/d, or about two-thirds of its 2019 average value.[20]

Reduction Initiatives for Aviation Fuel

Federal Aviation Administration

Commercial aviation faces fuel cost, environmental, and energy security challenges that arise from petroleum-based jet fuel use. Sustainable alternative jet fuels can help to address these challenges. Their use could reduce emissions that impact surface air quality and global climate while expanding domestic energy sources that diversify fuel supplies, contribute to price and supply stability, and generate economic development in rural communities.

The Federal Aviation Administration (FAA) is working to enable the U.S. use of one billion gallons per year of "drop-in" sustainable alternative jet fuels. Though these alternative fuels are created from renewable sources, drop-in fuels mimic the chemistry of petroleum jet fuel and can be used

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18 US EIA. Today in Energy. *EIA projects US jet fuel consumption won't increase as quickly as air travel demand.* https://www.eia.gov/todayinenergy/detail.php?id=47216. Accessed November 2022.

19 US EIA. *EIA projects US jet fuel consumption won't increase as quickly as air travel demand*.

20 US EIA. Today in Energy. *Less production and more demand have reduced US jet fuel inventories*. https://www.eia.gov/todayinenergy/detail.php?id=50627. Accessed November 2022.

in today's aircraft and engines without modification and provide the same level of performance and safety as today's petroleum-derived jet fuel.[21]

FAA provides leadership in this evolving field through activities that support the development and use of sustainable alternative jet fuels. These include:

- **Continuous Lower Energy, Emissions, and Noise (CLEEN) Program**[22] - Develops environmentally promising aircraft technologies and sustainable alternative fuels that reduce aircraft noise, emissions, and fuel burn.
- **Airport Cooperative Research Program (ACRP)**[23] - Provides guidance and tools to support deployment of sustainable alternative aviation fuels.
- **Alternative Aviation Fuels Broad Agency Announcement (BAA)**[24] - Research in four priority areas: development of novel "drop-in" alternative jet fuels, alternative jet fuel quality control, sustainability guidance for alternative jet fuel users and performance, and durability testing of new fuels. This announcement closed in 2010.
- **Commercial Aviation Alternative Fuels Initiative (CAFFI)**[25] - A forum for information exchange and coordination among government, academic and aviation industry stakeholders to address challenges and engage with the emerging alternative jet fuels industry.

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21 Federal Aviation Administration (FAA). "Sustainable Alternative Jet Fuels." https://www.faa.gov/about/office_org/headquarters_offices/apl/research/alternative_fuels/. Accessed November 2022.

22 FAA. "Continuous Lower Energy, Emissions, and Noise (CLEEN) Program." https://www.faa.gov/about/office_org/headquarters_offices/apl/eee/technology_saf_operations/cleen. Accessed November 2022.

23 Transportation Research Board (TRB). "Airport Cooperative Research Program (ACRP)." https://www.trb.org/ACRP/ACRP.aspx. Accessed November 2022.

24 FAA. "Alternative Aviation Fuels Broad Agency Announcement (BAA)." https://www.faa.gov/about/office_org/headquarters_offices/apl/research/alternative_fuels/. Accessed November 2022.

25 FAA. Commercial Aviation Alternative Fuels Initiative (CAFFI). https://www.faa.gov/about/office_org/headquarters_offices/apl/research/alternative_fuels/. Accessed November 2022.

- **Partnership for Air Transportation Noise and Emissions Reduction (PARTNER) Center of Excellence (COE)**[26] - Projects on emissions measurement, sustainability analysis and tool development that improve our understanding of the environmental sustainability, and economic cost of production of alternative jet fuels.

Sustainable Aviation Fuel

Sustainable Aviation Fuel (SAF)[27] is jet fuel made from renewable materials such as waste biomass or food scraps. SAF has the potential to significantly reduce CO_2 emissions compared to traditional jet fuel. Other major benefits include local air quality improvements because of lower sulfur content and reductions in soot pollution. San Francisco International Airport (SFO) is taking the lead in making widespread use of SAF a reality on its own campus, throughout California, and across North America.

SFO has sought to expand SAF use but found the infrastructure and supply chain logistics to be a significant barrier. As a result, SFO brought together ten partner airlines and fuel producers to sign the industry's first voluntary Memorandum of Understanding (MOU), committing their partnership further to delivering an Infrastructure, Logistics, Supply Chain and Financing Study to identify the key strategies that SFO can deploy to increase SAF volumes at the Airport. The airline signatories to SFO's SAF MOU together represent over 66 percent of all flights at SFO.

5.5.2.2 Regulatory Background

In addition to the regulatory background information provided below, **Section 5.2: Air Quality** and **Section 5.7: Greenhouse Gas Emissions** of this EIR provide relevant information regarding various federal, state, regional and local initiatives that achieve co-benefits in the form of energy consumption patterns that are reduced and more efficient.

Federal Setting

Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the George W. Bush administration issued Executive Order 13432 in 2007, directing the USEPA, the US Department of Transportation (USDOT), and the US Department of Energy (USDOE) to establish

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26 FAA. Center of Excellence for Alternative Jet Fuels & Environment. "Partner: The Partnership for Air Transportation Noise and Emissions Reduction." https://ascent.aero/partner/. Accessed November 2022.

27 San Francisco International Airport. "Sustainable Aviation Fuel." https://www.flysfo.com/about/sustainability/reducing-carbon-emissions/sustainable-aviation-fuel. Accessed November 2022.

regulations that reduce GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008.[28] In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.[29]

In 2010, President Obama issued a memorandum directing the USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles.[30] The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On May 2, 2022, NHTSA also finalized fuel economy standards for passenger cars and light trucks for model years 2024–2025 that increase at a rate of 8 percent per year and increase at a rate of 10 percent per year for model year 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in model year 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings.[31]

In addition to the regulations applicable to cars and light-duty trucks described above, in 2016, the USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. If implemented, the Phase 2 standards would be expected to lower CO_2 emissions by approximately 1.1 billion metric

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28 US Government Publishing Office. Administration of George W. Bush. *Executive Order 13432—Cooperation Among Agencies in Protecting the Environment With Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines, 631* (May 14, 2007). https://www.gpo.gov/fdsys/pkg/WCPD-2007-05-21/pdf/WCPD-2007-05-21-Pg631.pdf. Accessed November 2022.

29 USEPA. "Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses." December 27, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed November 2022.

30 USEPA. "Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions." August 28, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-support-related. Accessed November 2022.

31 Federal Register. Vol. 87, No. 84. Rules and Regulations. "Corporate Average Fuel Economy Standards for Model Years 2024–2026 Passenger Cars and Light Trucks." May 2, 2022. https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf. Accessed November 2022.

tons (MT) and save vehicle owners fuels costs of about $170 billion.[32] On March 28, 2022, EPA published a proposed rule that would set new, more stringent standards to reduce pollution from heavy-duty vehicles and engines starting in model year 2027. The proposed standards would significantly reduce emissions of smog- and soot-forming nitrogen oxides (NOx) from heavy-duty gasoline and diesel engines and set more stringent GHG standards for certain commercial vehicle categories.[33]

State Setting

State Senate Bill 1389

SB 1389 (PRC Sections 25300–25323; SB 1389) requires the development of an integrated plan for electricity, natural gas, and transportation fuels. The CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. The CEC prepares updates to these assessments and associated policy recommendations in alternate years. Preparation of the Integrated Energy Policy Report involves close collaboration with federal, State, and local agencies and a wide variety of stakeholders in an extensive public process to identify critical energy issues and develop strategies to address those issues. The most recently approved report and update, the 2021 Integrated Energy Policy Report Update, addresses the State's implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, electricity system resilience and efficiency, barriers faced by disadvantaged communities, demand response, renewable energy, natural gas supplies, preliminary transportation energy demand forecast, and climate adaptation and resiliency.[34]

Renewables Portfolio Standard

California's Renewable Portfolio Standard (RPS) program was established in 2002 by SB 1078 with the initial requirement that 20 percent of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50 percent RPS by 2030. SB 350 included interim annual RPS targets with three-year compliance periods and required 65 percent of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increased the RPS to 60 percent by 2030 and required all the state's electricity to come from carbon-free resources by

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32 USEPA. *USEPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond*. August 2016.

33 USEPA. "Regulations for Greenhouse Gas Emissions from Commercial Trucks and Buses."

34 CEC. *Final 2021 Integrated Energy Policy Report.*

2045. The most recent RPS-related enactment occurred in 2022; specifically, SB 1020[35] codifies into law a state policy that eligible renewable energy resources and zero-carbon resources supply:

- 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent by December 31, 2040, and 100 percent by December 31, 2045; and
- 100 percent of electricity procured to serve all state agencies by December 31, 2035.

To achieve these objectives, SB 1020 requires that CARB and the CEC use unspecified programs authorized under existing statutes and employ measures to ensure that implementation of the policy does not cause increases in GHG emissions elsewhere.

The California Public Utilities Commission (CPUC) implements and administers RPS compliance rules for California's retail sellers of electricity, which include large and small investor-owned utilities (IOUs), electric service providers (ESPs) and community choice aggregators (CCAs). The California Energy Commission (CEC) is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities (POUs).[36]

California Building Standards Code

California Energy Code

California's Energy Efficiency Standards for Residential and Nonresidential Buildings[37] were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 requires the design of building shells and components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

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35 California Legislative Information. *Senate Bill No. 1020* (September 19, 2022), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020. Accessed November 2022.

36 California Public Utilities Commission. "Renewables Portfolio Standard (RPS) Program." https://www.cpuc.ca.gov/rps/. Accessed November 2022.

37 CEC. "2019 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed November 2022.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.[38]

California Green Building Code

The California Green Building Standards Code, which is Part 11 of the CCR, is commonly referred to as the CALGreen Code.[39] The most current version of the CALGreen building code went into effect in January 2020. However, the 2022 CALGreen code will go into effect January 1, 2023. The purpose is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, outdoor lighting standards, use and occupancy, location, and maintenance of all building and structures within its jurisdiction.

Transportation Sector Energy Related Regulations

Section 5.7: Greenhouse Gas Emissions of this Draft EIR discusses various statutes that address climate change, which also address energy generation and consumption. As expressed in these statutes, meeting the State's climate change goals requires focused action to quickly transform the State's energy system away from fuels that generate GHGs. The following statutes direct various State agencies to conduct assessments and forecasts that are used to develop recommendations for energy policies and programs that conserve State resources, provide reliable energy, protect the environment, enhance the State's economy, and protect public health and safety.

The State has provided a climate policy portfolio that addresses emissions across sectors including electricity, buildings, transportation, land use and agriculture, and industry. The transportation sector is the largest source of GHG emissions in the State and various State

38 CEC. "2022 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed November 2022.

39 California Buildings Standards Commission. California Green Building Standards Code (Cal. Code Regs., Title 24, Part 11). http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed November 2022.

policies call for speeding the transition to zero-emission vehicles (ZEVs), which among other things reduce energy use, including:

- CARB's Scoping Plan, which describes California's approach for achieving its GHG reduction goals. The plan was developed in 2008 and updated in 2014, 2017 and 2022;
- Executive Order B-16-2012 set a goal of reaching 1.5 million ZEVs on California roadways by 2025; and
- Executive Order B-48-18 calls for at least 5 million ZEVs on California roads by 2030 and spurs the installation of 250,000 plug-in electric vehicle chargers, including 10,000 direct fast current chargers, and 200 hydrogen refueling stations by 2025.

Executive Order B-55-18 established a Statewide goal to achieve carbon neutrality by 2045; that goal was subsequently codified by AB 1279 in 2022. Although these statutes are broader than the energy sector, reducing GHG emissions from California's energy system, including transportation, is a fundamental part of the effort to reduce reliance on fossil fuels.

Executive Order S-03-05

Executive Order S-03-05 mandates that California emit 80 percent fewer GHGs in 2050 than it emitted in 1990. Energy efficiency and reduced vehicle miles traveled (VMT) would play important roles in achieving this goal. As previously mentioned, GHG reduction efforts increase energy efficiency which also reduces the consumption of petroleum-based fuels.

Executive Order S-01-07

Executive Order S-1-07, the Low Carbon Fuel Standard (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020.[40] Regulatory proceedings and implementation of the Low Carbon Fuel Standard have been directed to the California Air Resources Board (CARB). The Low Carbon Fuel Standard has been identified by CARB as a discrete early action item in the adopted Climate Change Scoping Plan (discussed below). CARB expects the Low Carbon Fuel Standard to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Climate Change Scoping Plan work in tandem with one another. Other specific emission reduction measures included are the Million Solar Roofs Program[41] and Assembly Bill (AB) 1493 (Pavley I),

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40 Office of the Governor. *Executive Order S-01-07* (January 18, 2007). https://climateactionnetwork.ca/wp-content/uploads/2011/06/eos0107.pdf. Accessed November 2022.

41 US Department of Energy. *Laying the Foundation for Solar America: The Million Solar Roofs Initiative*. Final Report October 2006. https://www.nrel.gov/docs/fy07osti/40483.pdf. Accessed November 2022.

Vehicle Emissions: Greenhouse Gases, which establishes motor vehicle GHG emissions standards.[42] To avoid the potential for double-counting emission reductions associated with AB 1493, the Climate Change Scoping Plan has modified the aggregate reduction expected from the Low Carbon Fuel Standard to 9.1 percent. In accordance with the Climate Change Scoping Plan, this analysis incorporates the modified reduction potential for the Low Carbon Fuel Standard. CARB released a draft version of the Low Carbon Fuel Standard in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the Low Carbon Fuel Standard became effective on the same day.

In 2018, CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

California Air Resources Board

In 2012, CARB approved the Advanced Clean Cars (ACC) program, an emissions-control program for passenger vehicles and light-duty trucks for model years 2015–2025, thereby continuing the regulatory framework established under the Pavley standards beyond model year 2016. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.[43] Consistent with the other State-reduction policies geared toward reducing GHG emissions, the efforts to speed up integration of ZEVs and PHEVs would reduce the consumption of petroleum based fuels.

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, CCR Section 2485) was adopted to reduce public exposure to diesel particulate matter

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42 The standards enacted in Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 and going through 2016. Pavley I could potentially result in 27.7 million metric tons CO_2e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million metric tons CO_2e.

43 California Air Resources Board (CARB). "California's Advanced Clean Cars Program." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed November 2022.

and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by this class of vehicles.

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, CCR Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen (NOx), and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023, with compliance resulting in this class of vehicles using petroleum-based fuel in a more efficient manner, thereby reducing diesel fuel consumption.

CARB is responsible for enforcing CCR, Title 13, Sections 2449(d)(3) and 2485, which limit idling from both on-road and off-road diesel-powered equipment to no greater than five minutes at any location. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

CARB 2020 Mobile Source Strategy

CARB staff is developing the 2020 Mobile Source Strategy[44] to take an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets. The actions contained in the Mobile Source Strategy will deliver broad environmental and public health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector.

The 2020 Mobile Source Strategy was heard by the Board on October 28, 2021, and will be forwarded to the appropriate policy and fiscal committees of the California Legislature as required by California Senate Bill 44. Moving forward, the programs and concepts in the 2020 Mobile Source Strategy will be incorporated in other planning efforts, including the State Implementation Plans (SIP), the 2022 Climate Change Scoping Plan Update, and community emissions reduction plans developed as a part of Assembly Bill 617's Community Air Protection Program.

44 CARB. "2020 Mobile Source Strategy." https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed November 2022.

CARB Zero-Emission Airport Ground Support Equipment

Airport Ground support equipment (GSE) operate at airports and perform a wide variety of functions including providing power to aircraft, transporting cargo, baggage, and passengers to and from aircraft, and providing aircraft maintenance and fueling. The Zero-Emission Airport Ground Support Equipment measure will act as a catalyst to further adoption of zero-emission equipment in the off-road sector, facilitate the transfer of technology to suitable heavier duty-cycle applications, and expand use of zero-emission infrastructure.[45]

CARB Advanced Clean Cars II

The Advanced Clean Cars II program[46] is designed to take the State's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augment them to meet more aggressive tailpipe emissions standards and ramp up to 100 percent zero-emission vehicles. Additionally, the program will rapidly scale down light-duty passenger car, truck, and SUV emissions starting with the 2026 model year through 2035.

First, the Advanced Clean Cars II program amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles and relies on advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. Second, the program amends the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions while the sector transitions toward 100 percent electrification by 2035.[47]

CARB Advanced Clean Fleets

CARB is developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage

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45 CARB. "Zero-Emission Airport Ground Support Equipment." https://ww2.arb.ca.gov/our-work/programs/zero-emission-airport-ground-support-equipment. Accessed November 2022.

46 CARB. "Proposed Advanced Clean Cars II Regulations: All New Passenger Vehicles Sold in California to be Zero Emissions by 2035." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii. Accessed November 2022.

47 CARB. "Advanced Clean Cars II." https://ww2.arb.ca.gov/rulemaking/2022/advanced-clean-cars-ii. Accessed November 2022.

applications.[48] The initial focus would be on high-priority fleets with vehicles that are suitable for early electrification, their subhaulers, and entities that hire them. The goal of this effort is to accelerate the number of medium and heavy-duty zero-emission vehicle purchases to achieve a full transition to zero-emission vehicles in California as soon as possible. Final approval of this regulation has not been reached yet.[49]

CARB In-Use Off-Road Diesel-Fueled Fleets Regulation

The goal of the In-Use Off-Road Diesel-Fueled Fleets Regulation[50] is to reduce particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation covers a wide scope of vehicle types used in (but not limited to) industries as diverse as construction, air travel, manufacturing, landscaping, and ski resorts. Final approval of this regulation has not been reached yet.[51]

Sustainable Communities Strategy

SB 375, the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. These actions achieve their objectives in part through increased energy efficiency. Specific to energy conservation, electric vehicles, natural gas vehicles, and transit/rail, more compact development patterns that reduce vehicle travel also demand less energy per capita. Reducing vehicle travel also reduces energy related to producing and distributing of fuels and vehicles, as well as the construction and maintenance of roads.

California Environmental Quality Act

In accordance with Appendix F and G of the CEQA Guidelines, and in order to ensure that energy implications are considered in project decisions, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (PRC Section

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48 CARB. "Advanced Clean Fleets." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about. Accessed November 2022.

49 CARB. "Advanced Clean Fleets."

50 CARB. "In-Use Off-Road Diesel-Fueled Fleets Regulation." https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about. Accessed November 2022.

51 CARB. "In-Use Off-Road Diesel-Fueled Fleets Regulation."

21100(b)(3)). The 2020 update to Appendix G of the CEQA Guidelines now provides that if a project would result in potentially significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency, then an EIR shall be prepared for the project that includes mitigation measures for that energy use. The EIR's analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use, and any renewable energy features that could be incorporated into the project as further described below under Appendix F of the CEQA Guidelines.

Appendix F of the CEQA Guidelines provides a list of energy-related topics that may be discussed in an EIR, where topics are applicable or relevant to the project, including:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Regional

Southern California Association of Governments

The SCAG 2020–2045 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS)[52] is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent

52 Southern California Association of Governments (SCAG). *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies.* Adopted Final, Chapter 1. https://scag.ca.gov/connect-socal. Accessed November 2022.

reduction by 2035, and 21 percent reduction by 2040, compared to the 2005 level. Although the RTP/SCS is not technically an energy efficiency plan, consistency with the RTP/SCS has energy implications, including the reduction of VMT which reduces GHG emissions and has the co-benefit of reducing fossil fuel consumption from travel to and from a project.

As part of the 2020–2045 RTP/SCS, SCAG prepared an Aviation and Airport Ground Access Technical Report.[53] SCAG recognizes that it does not have any regulatory, developmental, operational, or planning authority over the airports. Rather, SCAG is primarily a regional surface transportation planning agency that maintains a list of airport ground access projects and a consultative relationship with the airports. Therefore, SCAG is focused on air and passenger cargo activity from the perspective of how the traffic coming and going from the airports affects the region's roads, highways, and transit system.

Local

The Ontario Plan

The Ontario Plan[54] (the City's General Plan) states long-term goals, principles, and policies for achieving the City's vision. It guides growth and development to achieve optimum results from the City's physical, economic, environmental, and human resources. The Environmental Resources Element of the Ontario Plan defines the ethic to guide management of the City's environmental resources, establishes goals for environmental infrastructure, and establishes policies that support system integration, resource conservation and regeneration, and energy independence. The Environmental Resources Element includes the following goal and policies related to energy:

Goal ER3: Cost-effective and reliable energy system sustained through a combination of low impact building, site and neighborhood energy conservation and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.

Policy ER3-1: Conservation Strategy. Require conservation as the first strategy to be employed to meet applicable energy-saving standards.

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53 SCAG. *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies.*

54 City of Ontario. *The Ontario Plan*. "Policy Plan." https://www.ontarioplan.org/policy-plan/. Accessed November 2022.

Policy ER3-2: Green Development–Communities. Require the use of best practices identified in green community rating systems to guide the planning and development of all new communities.

Policy ER3-3: Building and Site Design. Require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar and natural ventilation.

Policy ER3-4: Green Development–Public Buildings. Require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.

Policy ER3-5: Fuel Efficient and Alternative Energy Vehicles and Equipment. Purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.

Policy ER3-6: Generation- Renewable Sources. Promote the use of renewable energy sources to serve public and private sector development.

5.5.3 ENVIRONMENTAL IMPACT ANALYSIS

5.5.3.1 Thresholds of Significance

The potential for the proposed Project to result in impacts associated with energy is based on Appendix G of the CEQA Guidelines and is as follows:

Would the project:

ENE-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

ENE-2: Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

5.5.3.2 Methodology

Construction

Construction energy consumption would result from transportation fuels (e.g., petroleum) used for haul trucks, heavy-duty construction equipment, construction workers traveling to and from

the proposed Project, electricity consumed to convey water for dust control, and any electrically-driven construction equipment.

Construction activities could vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors that would travel to the proposed Project. This analysis considered these factors and provided the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources. The anticipated construction program is discussed in **Section 3.0**, *3.4.3: Construction*.

Construction fuel use was forecasted by assuming a conservative estimate of construction activities and applying mobile source emission factors. Construction of Phase 1 of the proposed Project is projected to start in the third quarter of 2023 and be completed by the third quarter of 2025. After completion of Phase 1, relocation of existing uses and facilities in the Phase 2 area would occur, followed by the demolition of existing structures and site improvements in the Phase 2 area including site preparation and grading. Construction of the remaining improvements, including the expansion of the Air Cargo Sort Building and aircraft apron improvements, would begin in the third quarter of 2027, after site preparation activities, and be completed by 2029.

Construction electricity use was estimated for water usage from dust control activities. The CalEEMod (Version 2020.4.0) emissions model, described further in **Section 5.2** of this Draft EIR, was used to estimate the proposed Project's emissions of criteria air pollutants. The same model used for air quality analyses was also used for the purpose of estimating energy use.

Natural gas would not be consumed in large quantity during construction of the proposed Project because construction equipment and vehicles would be primarily powered by either diesel, gasoline, or electricity.

Transportation fuels would be consumed for transportation of construction workers and materials to and from the proposed Project, and operation of construction equipment throughout the construction phases. Fuel consumption from construction equipment was calculated based on the anticipated equipment mix for construction of the proposed Project. Fuel usage was estimated using the CalEEMod output for CO_2, and a 10.15 $kgCO_2$/gallon conversion factor for diesel fuel.[55]

55 USEPA. "Emission Factors for Greenhouse Gas Inventories." https://www.epa.gov/sites/default/files/2018-03/documents/emission-factors_mar_2018_0.pdf. Accessed November 2022.

Operation

Operational energy impacts were assessed based on the increase in energy demand from the proposed Project. Operation of the proposed Project would include various components as discussed in **Section 3.0**, *3.4.2: Operational Characteristics.*

The proposed Air Cargo Sort Building would consume energy in the form of electricity. Electricity would be consumed for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery.

Aircraft would consume energy in the form of jet fuel which is a petroleum product. Jet fuel usage was estimated using FAA's Aviation Environmental Design Tool (AEDT, Version 3d).[56] [57]

GSE are equipment used to service aircraft between flights (e.g., cargo loaders, baggage tugs, tow tugs, belt loaders).[58] Diesel-powered fuel trucks and GSE would be used during Phase 1 and replaced with electric GSE within Phase 2. Specifically, the proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron.[59] **Table 5.5-1: Proposed Project GSE** provides a list of expected GSE associated with the proposed Project.

TABLE 5.5-1
PROPOSED PROJECT GSE

Ground Support Equipment	Fuel Type	Number of Units
Loaders (Commander 30)	Electric	12
Belt Loaders	Electric	8
Ground Power Units	Electric	8

56 FAA. *Aviation Environmental Design Tool (AEDT) Users Guide.* September 2017. https://aedt.faa.gov/Documents/AEDT3d_UserManual.pdf. Accessed November 2022.

57 FAA. *Aviation Environmental Design Tool (AEDT) Users Guide.*

58 APU/GSE associated with passenger, FedEx and UPS aircraft and other similar activities are not affected by the Project and therefore, were not included in the analysis.

59 Diesel-powered fuel trucks would be used during Phase 1 and replaced with electric hydrant carts within Phase 2.

TABLE 5.5-1 PROPOSED PROJECT GSE		
Ground Support Equipment	**Fuel Type**	**Number of Units**
Push back Tugs	Electric	5
Stairs (B737)	None	3
Stairs (B747/B767)	None	8
Tugs	Electric	25
Dollies	None	450
Tow bars	None	15
Ramp Support (Vans/Carts)	Electric	5
Large Dollies	None	10
Forklifts	Electric	27

The proposed Project also includes six 2.0-megawatt diesel-engine driven emergency generators.[60]

Motor vehicle activity associated with the proposed Project will primarily include employee and delivery trucks.[61] There would also be a small number of visitor trips on a daily basis, but these trips would be negligible. Emissions factors for these sources were obtained from the EMFAC model. For the proposed Project, electric charging stations would be provided in the employee and visitor parking lots, and truckyard. VMT data from the Traffic Study (**Appendix 5.12-1**) was used to calculate annual fuel consumption from motor vehicles.

5.5.3.3 Project Design Features

Section 3.0: Project Description of this EIR includes a description of the sustainable project features included as part of the proposed Project (see *Section 3.4.4*, *Sustainable Project Features*). Additionally, the Project Design Features (PDFs) presented within **Section 5.2: Air Quality** (see **PDF AQ-1** through **PDF AQ-8**), and **Section 5.7: Greenhouse Gas Emissions** (see

60 Passenger terminal (as well as FedEx and UPS) boilers, generators, and other stationary sources are not affected by the Project and therefore, were not included in the analysis.

61 Airport passenger associated motor vehicles, terminal deliveries, FedEx and UPS delivery trucks, and other similar activities are not affected by the Project and therefore, were not included in the analysis.

PDF GHG-1 and **PDF GHG-2**) would also be applicable to energy resource consumption associated with construction and operation of the proposed Project.

5.5.3.4 Project Impacts

ENE-1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction Impacts

During construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control, and on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment, construction worker travel, haul trips, and delivery trips.

Electricity

During construction, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. A total of approximately 2,849 kWh of electricity is anticipated to be consumed during construction.[62] The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction.

Due to the temporary nature of the construction process, and the fact that the extent of electricity consumption during construction would be typical of construction projects of this size, construction of the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of electricity resources. Accordingly, the proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of electricity during construction. Impacts would be less than significant.

62 See **Appendix 5.5-1** for energy calculations.

Transportation-Related Fuel

The proposed Project's construction activities would consume energy in the form of petroleum-based fuels associated with use of off-road construction vehicles and equipment on the Project site, construction worker travel to and from the Project site, and delivery and haul truck trips (e.g., for deliveries of construction supplies and materials). Based on CalEEMod and using standard fuel consumption estimates, construction activities during Phase 1 would require approximately 241,710 gallons of diesel fuel (onsite equipment) and approximately 87,625 gallons of diesel fuel (offsite haul/vendor trucks), along with 62,415 gallons of gasoline fuel (employee trips). During Phase 2, the proposed Project's construction activities would require approximately 219,540 gallons of diesel fuel (onsite equipment) and approximately 62,820 gallons of diesel fuel (offsite haul/vendor trucks), along with 54,220 gallons of gasoline fuel (employee trips).[63]

An on-site asphalt/concrete recycling operation is proposed on the south side of East Avion Street on a partially paved and flat parcel that is flanked by East Mission Boulevard (and railroad tracks) to the south and industrial abandoned (industrial) uses on either side (which is within the project site). The recycling operations would reduce the total vehicle miles traveled needed for asphalt/concrete delivery trucks. Moreover, PDF AQ-1 requires the use of Tier 4 off-road equipment during construction which is more fuel efficient than lower tiered equipment.

Due to the temporary nature of the construction process and the fact that the extent of fuel consumption is inherent to construction projects of this size and nature, the proposed Project would not result in inefficient or unnecessary consumption of transportation resources during construction. Accordingly, the proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of transportation fuel during construction. Impacts would be less than significant.

Operational Impacts

During operation of the proposed Project, energy would be consumed for multiple purposes associated with the proposed uses, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, machinery, vehicles and aircraft.

The analysis below does not address the operational consumption of natural gas, as the proposed Project has been designed to eliminate the consumption of natural gas (see PDF GHG-

63 RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project.* February 2023. (See **Appendix 5.2-1.**)

1 [all-electric Air Cargo Sort Building] in **Section 5.7: Greenhouse Gas Emissions**). This design feature of the proposed Project is not required by the California Building Standards Code and represents a "beyond code" commitment that has been informed by State policy regarding the importance of building electrification to California's overall decarbonization efforts and achievement of statewide GHG emission reductions.

Electricity

Electrical distribution would be supplied by SCE. Phase 1 of the proposed Project would require approximately 8.5 MW of power. Phase 2 of the proposed Project which would require approximately 2.85 MW of power at buildout. An additional 10 percent of other miscellaneous loads is needed for the proposed Project. At full development, the proposed Project would require approximately 12.4 MW of power. A new substation proposed by SCE for the proposed Project would be located to the west of the parking structure. Fire lanes would be located around the substation and parking structure.

The proposed Project's consumption of electrical resources would not be wasteful, inefficient, or unnecessary. In order to increase available renewable energy resources, the proposed Project would also include a 1.5-Megawatt Solar PV Panel system on the rooftops of the Air Cargo Sort Building and the Parking Structure. The proposed Project also would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts), that would be stored and charged in designated areas in the cargo building and aircraft apron. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes (see **Table 3.4** in **Section 3.0: Project Description**), for which charging stations would be provided in the southeast corner of the Project site. Electric charging stations would also be provided in the employee and visitor parking lots, and truckyard. Phase 1 of the proposed Project would require approximately 8.5 megawatts (MW) of power. Phase 2 of the proposed Project which would require approximately 2.85 MW of power at buildout. An additional 10 percent of other miscellaneous loads is needed for the proposed Project. At full development, the proposed Project would require approximately 12.4 MW of power. Moreover, as discussed above the proposed Air Cargo Sort Building would meet Leadership in Energy and Environmental Design (LEED) certification standards and would be all-electric (no natural gas usage). Accordingly, the proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of electricity during operation. Impacts would be less than significant.

Fuel Consumption

Table 5.5-2: Annual Fuel Demand, summarizes the proposed Project's estimated consumption of petroleum-based fuels during Phase 1 and Phase 2. The proposed Project would consume

fuel due to vehicles, GSE, emergency generators, and aircraft. As detailed within the Traffic Study (**Appendix 5.12-1**), the proposed Project would generate VMT from employee and delivery trucks. Specifically, the proposed Project would generate daily VMT estimates of 45,411 during Phase 1 operation and 50,163 during Phase 2 operation. GSE equipment would also be used during Phase 1 and Phase 2 and would consume diesel fuel. It was assumed that by Phase 2 all GSE equipment would be electric. The proposed Project would include seven 2.0- MW diesel-engine driven emergency generators; five generators during Phase 1 and an additional two generators within Phase 2. Detailed aircraft operations under the proposed Project are provided in **Table 3.4** in **Section 3.0: Project Description**. Jet fuel usage was estimated using FAA's AEDT model.[64]

As shown in **Table 5.5-2**, Phase 1 would consume a total of 193,295 gallons of diesel, 437,890 gallons of gasoline, and 6.4 million gallons of jet fuel. Moreover, Phase 2 would consume a total of 252,040 gallons of diesel, 406,610 gallons of gasoline, and 10.6 million gallons of jet fuel.

TABLE 5.5-2
ANNUAL FUEL DEMAND (GALLONS)

Source	Diesel	Gasoline	Jet Fuel
Phase 1			
GSE	7,975	0	0
Generators	34,760	0	0
Mobile Vehicles	150,560	437,890	0
Aircraft	0	0	6,437,288
Total	193,295	437,890	6,437,288
Phase 2			
GSE	0	0	0
Generators	48,660	0	0
Mobile Vehicles	203,380	406,610	0
Aircraft	0	0	10,642,404
Total	252,040	406,610	10,642,404

Source: RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project.* February 2023. (**Appendix 5.2-1**).

64 RCH Group. *Air Quality Technical Report.* (See **Appendix 5.2-1.**)

As discussed previously, the proposed Project incorporates sustainable project design features and technology in both design and operation. For example, the proposed Project would provide access to electric charging points in both the visitor parking lot and employee parking structure, which facilitates the use of vehicles that are not exclusively dependent on traditional, petroleum-based transportation fuels. The Air Cargo Sort Building would meet LEED certification standards and would be all-electric (no natural gas usage). A 1.5-Megawatt Solar PV Panel system would be installed on the rooftop of the Cargo Sort Building and the parking structure. The proposed Project also would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes (see **Table 3.4** in **Section 3.0: Project Description**), for which charging stations would be provided in the southeast corner of the Project site.

As detailed within **Section 5.12: Transportation** of this Draft EIR the proposed Project also includes mitigation measures **TRANS-1** through **TRANS-5** which provide transportation-related incentives for employees during operation. These include Commute Trip Reduction (CTR) programs, a ridesharing program, a transit program, a vanpool program, and bicycle facilities. These programs and features would serve to reduce VMT and transportation fuel consumption during operation.

The RTP/SCS includes an Aviation and Ground Access appendix. The RTP/SCS notes that SCAG has no authority over airports or airport activity and that the FAA has this authority. SCAG is interested in how traffic going and coming from airports affects the roads, highways and transit systems in the region. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts and SCAG modeling estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. The proposed Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections.

Moreover, over time new technologies or systems will emerge, or will become more cost-effective or user-friendly, which will further reduce the reliance upon nonrenewable natural resources. For example, future implementation of the Clean Fuel Standard and the Renewable Portfolio Standard are expected to decrease the use of nonrenewable fossil fuels. Similarly, efforts made by the FAA and SFO to increase usage of alternative jet fuels are expected to occur during the lifetime of the proposed Project.

Accordingly, the proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of transportation fuel during operation. Impacts would be less than significant.

ENE-2: Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Title 24 Energy Standards

As a matter of regulatory compliance, the proposed Project would comply with all applicable requirements of the California Building Standards Code. Further, as discussed previously, the proposed Project incorporates sustainable project design features and technology in both its design and operation that, at times, exceed the requirements of the California Building Standards Code. For example, the Air Cargo Sort Building would meet LEED certification standards and would be all-electric (no natural gas usage). A 1.5-Megawatt Solar PV Panel system also would be installed on the rooftop of the Air Cargo Sort Building and the parking structure.

SCAG's RTP/SCS

The RTP/SCS includes an Aviation and Ground Access appendix. The RTP/SCS notes that SCAG has no authority over airports or airport activity and that the FAA has this authority. SCAG is interested in how traffic going and coming from airports affects the roads, highways and transit systems in the region. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts and SCAG modeling estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. The proposed Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections.

The Ontario Plan

As discussed previously, the Environmental Resources Element of the Ontario Plan[65] includes several policies related to energy. The following analysis discusses whether the proposed Project conflicts with the goals and policies within the Environmental Resources Element of the Ontario

65 City of Ontario. *The Ontario Plan.* "Environmental Resources Element." https://www.ontarioplan.org/policy-plan/environmental-resources-element/ /. Accessed November 2022.

Plan. As shown in **Table 5.5-3: Project Consistency with Ontario Plan Energy Policies**, the proposed Project would not conflict with the City's goal and policies related to energy.

TABLE 5.5-3
PROJECT CONSISTENCY WITH ONTARIO PLAN ENERGY POLICIES

Policies	Proposed Project Consistency Analysis
Policy ER3-1: Conservation Strategy. Require conservation as the first strategy to be employed to meet applicable energy-saving standards.	**No Conflict.** As discussed previously, the proposed Project incorporates sustainable project design features and technology in both design and operation. The Air Cargo Sort Building would meet LEED certification standards and would be all-electric (no natural gas usage). A 1.5-Megawatt Solar PV Panel system would be installed on the rooftop of the Air Cargo Sort Building and the parking structure. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes (see **Table 3.4** in **Section 3.0: Project Description**), for which charging stations would be provided in the southeast corner of the Project site.
Policy ER3-2: Green Development–Communities. Require the use of best practices identified in green community rating systems to guide the planning and development of all new communities.	**No Conflict.** Same as above.
Policy ER3-3: Building and Site Design. Require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar and natural ventilation.	**No Conflict.** Same as above.
Policy ER3-4: Green Development–Public Buildings. Require all new and substantially renovated City buildings in excess of 10,000	**No Conflict.** Same as above.

TABLE 5.5-3
PROJECT CONSISTENCY WITH ONTARIO PLAN ENERGY POLICIES

Policies	Proposed Project Consistency Analysis
square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	
Policy ER3-5: Fuel Efficient and Alternative Energy Vehicles and Equipment. Purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	**No Conflict.** The proposed Project would be serviced by GSE, all of which would be electric powered. Employee parking would include 300 stalls with access to electric charging stations. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes (see **Table 3.4** in **Section 3.0: Project Description**), for which charging stations would be provided in the southeast corner of the Project site.
Policy ER3-6: Generation- Renewable Sources. Promote the use of renewable energy sources to serve public and private sector development.	**No Conflict.** As discussed above, the proposed Project would include electric GSE equipment and charging stations within the employee parking areas. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes. The proposed Project would also include a 1.5-Megawatt Solar PV Panel system which would be installed on the rooftop of the Air Cargo Sort Building and the parking structure

Source: City of Ontario. *The Ontario Plan.* "Policy Plan." https://www.ontarioplan.org/policy-plan/. Accessed November 2022.

As demonstrated above, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

5.5.4 CUMULATIVE IMPACTS

Electricity

As discussed previously, electricity within the City is supplied by SCE. The geographic scope for cumulative electricity impacts is SCE's electricity service area. Development of the proposed Project and related projects could cumulatively increase demands on the existing electricity supply. However, each project will require a site-specific assessment to determine any impacts to existing and forecasted electricity supply. Specifically, all related projects would be required

to assess construction and operational electricity usage and coordinate with SCE prior to project approval.

As discussed above, the proposed Project would include a 1.5-Megawatt Solar PV Panel system on the rooftops of the Cargo Sort Building and the Parking Structure. The proposed Project would also include the use and operation of electric-powered equipment. Moreover, a portion of the proposed Project's aviation operations would include electric cargo planes (see **Table 3.4** in **Section 3.0: Project Description**), for which charging stations would be provided in the southeast corner of the Project site. Electric charging stations would also be provided in the employee and visitor parking lots, and truckyard. As discussed above the proposed Air Cargo Sort Building would meet Leadership in Energy and Environmental Design (LEED) certification standards and would be all-electric (no natural gas usage). Further, like the proposed Project, other related projects would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including CALGreen and State energy standards in Title 24, and incorporate mitigation measures, as necessary. Therefore, the proposed Project's impacts related to the consumption of electricity would not be cumulatively considerable and its cumulative impact would be less than significant.

Fuel Consumption

The geographic scope for cumulative transportation fuel impacts is the SCAG region. As discussed previously, the proposed Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport under SCAG's RTP/SCS. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections. The proposed Project also would incorporate various design elements to enhance the efficiency of fuel consumption; see, e.g., **PDF AQ-2** through **PDF AQ-5** and **PDF AQ-8**. In addition, during the operational lifetime of the proposed Project and related projects, newer vehicles sold on the market would be required to comply with the latest engine efficiency and fuel economy standards, which are reasonably expected and projected to incrementally take effect. Accordingly, fuel consumption is anticipated to decrease each year through implementation of regulation that require higher energy efficiencies and higher efficiency, alternative-fueled vehicles. Similarly, efforts made by the FAA and SFO to increase usage of alternative jet fuels are expected to occur during the lifetime of the proposed Project. Therefore, the proposed Project's impacts related to the consumption of transportation fuels would not be cumulatively considerable and its cumulative impact would be less than significant.

5.5.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Impacts would be less than significant without mitigation.

5.5.6 MITIGATION MEASURES

No mitigation measures.

5.5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.5.8 REFERENCES

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engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed November 2022.

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5.6.1 INTRODUCTION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed Project to impact geological and soil resources, paleontological resources, or unique geologic features. The analysis in this section is based in part on the following technical reports:

- *Geotechnical Investigation South Airport Cargo Center (SACC) Ontario International Airport, Ontario, California*, Cotton, Shires and Associates, Inc. Consulting Engineers and Geologists, June 2022 (DEIR **Appendix 5.6-1**).
- *Paleontological Resource Assessment for Ontario Airport South Cargo Center Project*, PaleoWest, April 22, 2022 (DEIR **Appendix 5.6-2**).

5.6.2 ENVIRONMENTAL SETTING

5.6.2.1 Existing Conditions

Regional Setting

The Project site is located in the San Bernardino Valley, which lies in the southern part of the Transverse Range geomorphic province. The Transverse Range is an east-west trending mountain range that extends westward from the eastern margin of the San Bernardino Mountains to Point Arguello on the California coast and the Channel Islands off the coast in the Santa Barbara Channel. The San Bernardino Valley is bounded by the San Gabriel Mountains to the north and the Santa Ana Mountains to the south.[1]

The Project site is located in the northwestern portion of the Peninsular Ranges, distinguished by northwest trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are bound to the east by the Colorado Desert and extend

[1] Cotton, Shires and Associates, Inc. Consulting Engineers and Geologists. *Geotechnical Investigation South Airport Cargo Center (SACC) Ontario International Airport, Ontario, California*. June 2022 (see **Appendix 5.6-1**).

north to the San Bernardino – Riverside County line, west into the submarine continental shelf, and south to the California state line.[2]

Local Setting

The Project site is located in the Fontana Plain, an alluvial fan originating in Lytle Creek Canyon in the foothills of the San Bernardino Mountains to the north and extending south to the Jurupa Mountains. The Fontana Plain is divided by Lytle Creek into an eastern section that is dominated by deposits of the late Holocene Epoch, between approximately 11,700 years ago to today, as well as a western portion that contains deposits of the Pleistocene Epoch, between approximately 2.6 million years ago to 11,700 years ago, and of the Holocene Epoch.

The Project site slopes to the south and west with elevations ranging from approximately 919 feet on the north near the Airport's Taxiway 'S' to 894 feet on the south near East Avion Street.[3] The Project site is currently occupied by concrete and asphalt pavement areas, buildings, as well as aircraft hangars and landscaped areas.

Subsurface conditions consist of shallow artificial fill underlain by coarse-grained alluvium.[4] Artificial fill (Qaf) is encountered to a depth of 4.5 feet and generally consists of loose to dense silty sand, and medium stiff sandy silt. Moisture contents of the artificial fill is generally close to or below optimum proctor moisture content. Coarse-grained alluvium is below the artificial fill to the maximum depth explored of approximately 51.5 feet below ground surface (bgs). The upper 30 feet of alluvium generally consists of loose to medium dense silty sand and sand with varying amounts of silt and gravel, and non-continuous layers of medium stiff sandy silt. Medium to very dense silty sand and sand with varying amounts of silt and gravel is encountered below a depth of approximately 30 feet. Groundwater was not encountered in the boings conducted below the Project site.

Geologic Hazards

Faulting and Seismicity

The Southern California region is seismically active and commonly experiences strong ground shaking resulting from earthquakes along active faults. Earthquakes along these faults are part

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2 PaleoWest. *Paleontological Resource Assessment for Ontario Airport South Cargo Center Project*. April 2022 (see **Appendix 5.6-2**).

3 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

4 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

of a continuous, naturally occurring process, which has contributed to the characteristic landscape of the region.

The California Geological Survey (CGS) defines an active fault as a fault showing evidence for activity within the last 11,000 years. The Project site sits in the Upper Santa Ana River Valley, a highly seismically active area within Southern California. Active or potentially active faults are not known to exist on or trend toward the Project site. There are several active faults located north, east, south, and west of the Project site within the Upper Santa Ana River Valley, as shown in **Table 5.6-1: Major Active/Potentially Active Faults**.[5] As shown in this table, the nearest fault is the Red Hill Fault, located 3.5 miles north of the site. The Project site is not located within a designated Alquist-Priolo Earthquake Hazard Zone.[6]

TABLE 5.6-1
MAJOR ACTIVE/POTENTIALLY ACTIVE FAULTS

Fault or Fault Zone	Distance/Direction from Project site (Miles)
Red Hills Fault	3.5 mi./North
Central Avenue Fault	6.7 mi./Southwest
Chino/Elsinore Fault Zone	7 mi./Southwest
Cucamonga/Sierra Madre Fault Zone	7.4 mi./North
San Antonio Fault	8.5 mi./Northwest
San Jacinto Fault Zone	12 mi./East
Whittier/Elsinore Fault Zone	12.5 mi./Southwest
San Andreas Fault Zone	17 mi./Northeast

Source: California Department of Conservation, "Geologic Hazards Map," https://maps.conservation.ca.gov/geologichazards/, accessed May 2022.

5 California Department of Conservation. California Geological Survey. "Fault Activity Map of California." https://maps.conservation.ca.gov/cgs/fam/. Accessed December 10, 2021.

6 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

Ground Shaking

Ground shaking is the vibration of the ground during an earthquake.[7] Geologic factors that affect the level of shaking experienced in earthquakes include the softness of the surface rocks and the thickness of surface sediments.

The Project site is located in the Southern California region which is seismically active and commonly experiences strong ground shaking. The Project site surface generally consists of loose to dense silty sand and medium stiff sandy silt to a depth of 4.5 feet.

Ground Lurching

Ground lurching is the horizontal and vertical movement of soil or bedrock due to strong ground shaking. Lurching can be both transitory and permanent, and often forms cracks in the ground surface. The potential for ground lurching is most prevalent in areas underlain by soft or saturated loose soils but can also occur on steep slopes comprised of poorly consolidated or fractured rock formations. Horizontal and vertical ground deformation resulting from ground lurching can adversely affect structures and compromise the stability of slopes.

The Project site is not located on a steep slope. Subsurface, the artificial fill (Qaf) encountered to a depth of 4.5 feet generally consists of loose to dense silty sand and medium stiff sandy silt. Seismic settlement for dry sandy soils within the upper 40 feet of alluvium is estimated to be about two (2) to four (4) inches. However, the Project site is located in the Southern California region which is seismically active and commonly experiences strong ground shaking.

Landslides

A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Landslides are a type of mass wasting, which denotes any down-slope movement of soil and rock under the direct influence of gravity.[8] Based on the California Department of Conservation Landslide Inventory, the Project site is not located in an area that is susceptible to landslides.[9]

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7 USGS. Earthquake Hazards. "Ground Motion." https://www.usgs.gov/programs/earthquake-hazards/science/ground-movement-and-ground-shaking#overview. Accessed May 2022.

8 USGS. "Natural Hazards." https://www.usgs.gov/faqs/what-a-landslide-and-what-causes-one?qt-news_science_products=0#qt-news_science_products. Accessed August 2021.

9 California Department of Conservation. California Geological Survey. "Landslide Inventory." https://maps.conservation.ca.gov/cgs/lsi/app/. Accessed December 14, 2021.

Liquefaction

Liquefaction can occur when a site is located in a zone with seismic activity, on-site soils are cohesionless, groundwater is encountered within 50 feet of the surface, and soil relative densities are less than about 70 percent. Liquefaction occurs when granular soil below the water table is subjected to vibratory motions, such as those produced by earthquakes.[10] With strong ground shaking, an increase in pore water pressure develops, as the soil tends to reduce in volume. If the increase in pore water pressure is sufficient to reduce the vertical effective stress (suspending the soil particles in water), the soil strength decreases and the soil behaves as a liquid (similar to quicksand). Liquefaction can produce excessive settlement, ground rupture, lateral spreading, or failure of shallow bearing foundations. The potential for primary ground surface rupture due to faulting is low.

The Project site is not located within a Liquefaction Hazard Zone as mapped by the State of California under the Seismic Hazards Mapping Act of 1990.[11] According to the Ontario Plan Safety Element, the Project site would not be susceptible to liquefaction.[12] Medium dense to very dense silty sands, sandy silts, and sands are present beneath the Project site. Additionally, static groundwater levels below the Project site are not anticipated to rise within 50 feet of the ground surface.

Ground Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement.[13] Ground subsidence has been reported in areas of southern California as a result of gas, oil, or water extraction, as well as peat oxidation. Subsidence resulting from oil and gas extraction is not a concern on the Project site, as it has no history of oil and gas extraction. The Cucamonga Channel bordering the eastern boundary of the Project site is fully paved and water is not being extracted from the Project site. Groundwater was not encountered in the borings conducted on the Project site. Further, the Project site is mostly paved with the moisture contents of the artificial fill generally close to or below optimum proctor moisture

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10 USGS. Natural Hazards. "Liquefaction." https://www.usgs.gov/faqs/what-liquefaction. Accessed August 2022.

11 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

12 City of Ontario. *General Plan*. "Safety Element." S1 Seismic and Geologic Hazards. Figure S-1 Seismic Hazards. https://www.ontarioplan.org/wp-content/uploads/sites/4/2015/05/seismic-hazards.pdf. Accessed December 14, 2021.

13 USGS. "Land Subsidence in California." https://www.usgs.gov/centers/land-subsidence-in-california. Accessed August 2022.

content, at which the soil attains optimum dry density. The risk of subsidence due to water extraction is low.

Expansive Soils

Expansive soils are generally plastic clays that can undergo a substantial increase in volume, with an increase in moisture content, and a substantial decrease in volume, with a decrease in moisture content.[14] Expansive soils can cause uplift pressures that can lead to structural damage. On the Project site, the artificial fill and alluvial subsurface materials are primarily coarse-grained with varying amounts of silt and low levels of clay. The potential for soil expansiveness is considered very low due to existing soil conditions.

Corrosive Soils

Corrosive soils possess properties that are reactive with construction materials, such as metals and concrete. Generally, soils that contain clays have low electrical resistivity and can cause corrosion of metals in contact with such soils. Soils that contain high amounts of sulfates can cause degradation of concrete. Soil conditions on the Project site are mildly corrosive to underground steel and concrete based on soil tests for resistivity, pH, sulfates, and chlorides.

Soil Erosion

Soil erosion is the movement of near-surface soil particles generally by flowing water and, in some cases, high winds. Sandy soils are generally more susceptible to erosion than clayey soils. The risk of soil erosion on the Project site is low. The Project site is mostly paved and, due to the gentle slope of the site, the potential for water-related erosion is low.

Paleontological Resources

Paleontological resources are fossils and fossiliferous deposits found in geologic units that consist of vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils that are typically older than recorded human history. As shown in **Figure 5.6-1, Geologic Map**, the Project site is underlain by artificial fill (Qaf) of the late Holocene geological epoch (11,700 years ago to today). Qaf was deposited on Young alluvial-fan deposits—Unit 1 (Qyf_1) and Unit 3 (Qyf_3)—of the late Pleistocene epoch (2.6 million years ago to 11,700 years ago) and Holocene Epochs.[15] As shown in **Figure 5.6-1**, the Young alluvial-fan units (Qyf_1 and Qyf_3) are mapped at

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14 USGS. "Landslides Glossary." https://www.usgs.gov/glossary/landslides-glossary. Accessed August 2022.

15 PaleoWest. *Paleontological Resource Assessment.* (See **Appendix 5.6-2**).

the surface immediately outside Airport boundaries. Locally, the alluvial fans are sourced from the San Bernardino Mountains to the north.

According to the Natural History Museum of Los Angeles County (NHMLAC), there are no fossil localities on the Project site or within one mile of the Project site.[16] The Qaf and upper levels of Qyf1 or Qyf3 are unlikely to yield any significant paleontological resources, as late Holocene deposits are too young to contain fossils, and therefore possess low sensitivity. However, several fossil localities have been discovered in Pleistocene sediment in the region, see **Table 5.6-2, Fossil Localities in the Project Vicinity**. Pleistocene sediments, which are considered to have a high paleontological sensitivity because they have proven to yield significant paleontological resources, including identifiable vertebrate fossils, have been discovered in San Bernardino County.

TABLE 5.6-2
FOSSIL LOCALITIES IN THE PROJECT VICINITY

Locality No.	Geologic Unit	Age	Taxa	Depth
LACM VP 7811	Unknown eolian tan silt	Pleistocene	Whip snake (*Masticophis*)	9-11 feet bgs
LACM VP 7268, 7271	Unknown	Pleistocene	Horse (*Equus*)	Unknown
LACM VP 7508	Unknown	Pleistocene	Ground sloth (*Nothrotheriops*), proboscid (*Proboscidea*), horse (*Equus*)	Unknown
LACM VP 1728	Unknown light brown shale with interbeds of very coarse brown sand	Pleistocene	Horse (*Equus*), camel (*Camelops*)	15 – 20 ft bgs
LACM VP 1207	Unknown	Pleistocene	Bovidae	Unknown

Source: PaleoWest. *Paleontological Resource Assessment for Ontario Airport South Cargo Center Project*. April 2022 (see **Appendix 5.6-2**).

16 PaleoWest. *Paleontological Resource Assessment.* (See **Appendix 5.6-2**).

5.6.2.2 Regulatory Background

Federal

Earthquake Hazards Reduction Act

The United States Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

Uniform Building Code

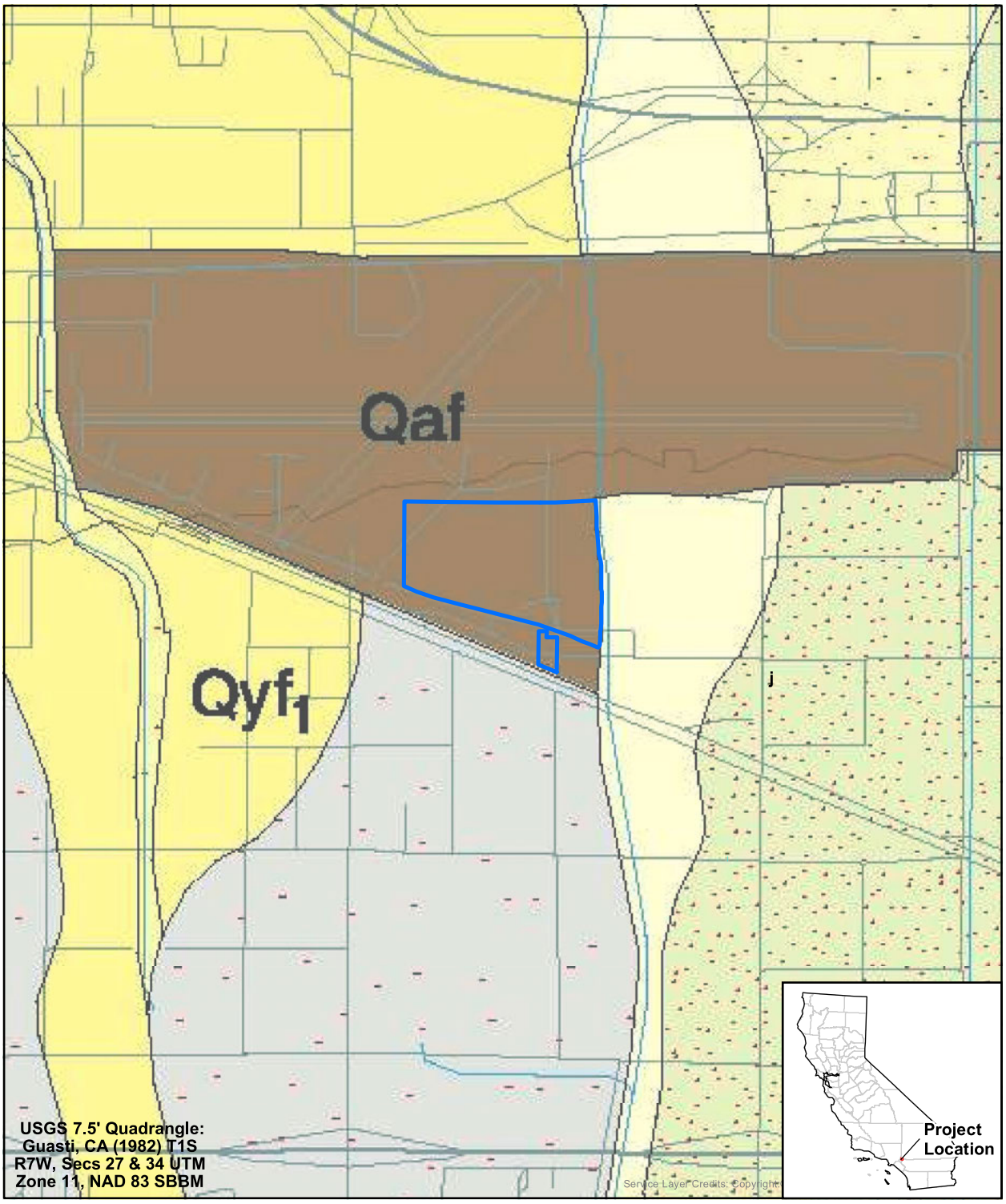
The Uniform Building Code is published by the International Conference of Building Officials and forms the basis for the California Building Standards Code (CBC), as well as approximately half of the State building codes in the U.S. It has been adopted by the California Legislature to address the specific building conditions and structural requirements for California, as well as provide guidance on foundation design and structural engineering for different soil types.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zone Act (California PRC Sections 2621–2630) was passed into law following the destructive February 9, 1971, San Fernando earthquake, which was associated with extensive surface fault ruptures that damaged numerous structures. The act provides a mechanism for reducing losses from surface fault rupture on a Statewide basis. The intent of the act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep.

The State Geologist is required to establish and map zones around the surface traces of active faults, which are then distributed to County and City agencies to be incorporated into their land use planning and construction policies. Proposed development needs to be proven through geologic investigation to not be located across active faults before a city or county can permit the implementation of a project. If an active fault is found, development for human occupancy is prohibited within a 50-foot setback from the identified fault. Alquist-Priolo Special Studies Zones are now commonly known as State of California Earthquake Fault Zones.



- Project Area
- Qf: Very young alluvial-fan deposits (late Holocene)
- Qyf1: Young alluvial-fan deposit, Unit 1 (middle Holocene)
- Qaf: Artificial Fill (late Holocene)
- Qyf3: Young alluvial-fan deposit, Unit 3 (middle Holocene)
- Qye: Young eolian deposits (Holocene and late Pleistocene)

N

0 1000 2000 4000

APPROXIMATE SCALE IN FEET

SOURCE: Paleo West - 2022

FIGURE **5.6-1**

Meridian Consultants

Geologic Map

332-001-21

The CGS is responsible for enforcing the Alquist-Priolo Earthquake Fault Zoning Act and enforcing the Seismic Hazards Mapping Act.

Seismic Hazards Mapping Act

The purpose of the Seismic Hazards Mapping Act is to protect the public from the effects of non-surface fault rupture earthquake hazards, inducing strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The Seismic Hazards Mapping Act requires delineated maps to be created by the State Geologist to reflect where potential ground shaking, liquefaction, or earthquake-induced landslides may occur.[17] Cities and counties are required to obtain approval for development on non-surface fault rupture hazard zones and mitigate seismic hazards.

California Building Standards Code, California Code of Regulations

The CBC is administered by the California Building Standards Commission (CBSC).[18] The CBC governs all development within the State of California, as amended and adopted by each local jurisdiction. These regulations include provisions for site work, demolition, and construction, which include excavation and grading, as well as provisions for foundations, retaining walls, and expansive and compressible soils. The CBC provides guidelines for building design to protect occupants from seismic hazards. The most recent version of the code, the 2019 CBC, went into effect on January 1, 2020.[19] With the shift from seismic zones to seismic design, the CBC philosophy has shifted from "life safety design" to "collapse prevention," meaning that structures are designed for prevention of collapse for the maximum level of ground shaking that could reasonably be expected to occur at a site.

In addition, the CBC regulates excavation, foundations, and retaining walls, as well as contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. The CDC also regulates grading activities, including drainage and erosion control.

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17 Seismic Hazards Mapping Act. PRC Section 2690–2699.6.

18 California Building Standards Commission (CBSC). "Welcome to the California Building Standards Commission." http://www.bsc.ca.gov/. Accessed May 2021.

19 California Building Standards Code. 24 California Code of Regulations (CCR).

Public Resources Code

The Public Resources Code (PRC) includes regulations for paleontological resources, as described below:

- PRC Section 5097.5: Provides for the protection of paleontological resources and prohibits the removal, destruction, injury, or defacement of paleontological features on any lands under the jurisdiction of State or local authorities.
- PRC Section 30244: Requires reasonable mitigation for impacts on paleontological resources that occur as a result of development.

Society of Vertebrate Paleontology

Guidelines have been developed by the Society of Vertebrate Paleontology (SVP) to establish protocols for the assessment of the paleontological resource potential of underlying geologic units and to determine measures to mitigate adverse impacts that could result from project development. Using baseline information gathered during a paleontological resource assessment, the paleontological resource potential of the geologic unit(s) (or members thereof) underlying a Project area can be assigned to one of four categories defined by SVP. These categories include high, low, undetermined, and no paleontological resource potential (see **Table 5.6-3: Paleontological Sensitivity Categories**).

TABLE 5.6-3
PALEONTOLOGICAL SENSITIVITY CATEGORIES

Resource Potential	Criteria
High Potential (sensitivity)	Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.

TABLE 5.6-3
PALEONTOLOGICAL SENSITIVITY CATEGORIES

Resource Potential	Criteria
Low Potential (sensitivity)	Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species, and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction gets underway it is possible that significant and unanticipated paleontological resources might be encountered and require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.
Undetermined Potential (sensitivity)	Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.
No Potential	Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Source: PaleoWest. *Paleontological Resource Assessment for Ontario Airport South Cargo Center Project*. April 2022 (see **Appendix 5.6-2**).

5.6.3 ENVIRONMENTAL IMPACT ANALYSIS

5.6.3.1 Thresholds of Significance

The potential for the Project to result in impacts associated with geology and soils is based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

GEO-1: **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the

State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

GEO-2: Result in substantial soil erosion or the loss of topsoil?

GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

GEO-4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

5.6.3.2 Methodology

Geology / Soils

A Geotechnical Study for the proposed Project was prepared that researched, compiled, and reviewed historic aerial photographs and published documents, including previous geotechnical investigations near the Project site, for information pertaining to previous uses and geotechnical conditions on the Project site (see **Appendix 5.6-1**). Field exploration of the Project site was conducted from January 18 to January 27, 2022. Subsurface conditions were explored by excavating eighty-six (86) exploratory borings to depths of 6 to 51.5 feet bgs, including two (2) percolation test holes excavated to depths of 11.5 feet bgs. Laboratory testing of disturbed and undisturbed soil samples from the borings was performed. The tests consisted of moisture content, wet and dry unit weight determinations, particle size analysis, #200 sieve wash analysis, direct shear strength, collapse potential, California Bearing Ratio (CBR), R-value, permeability, general corrosion (resistivity, pH, sulfates, and chlorides), and maximum unit weight/optimum

moisture content. Geotechnical evaluation of the Project site consisted of characterizing field and laboratory test data, then developing conclusions and recommendations regarding geotechnical and seismic hazards, foundation type, and design criteria.

Paleontological Resources

A Paleontological Resource Assessment was prepared by PaleoWest for the proposed Project (see Appendix 5.6-2). Published geologic maps were reviewed in the Paleontological Resource Assessment to determine the geology and stratigraphy of the Project site and to assess whether the Project site has the potential to contain significant fossil resources. A search of pertinent local and regional museum repositories for paleontological localities within and nearby the Project site was conducted to determine whether fossil localities have been previously discovered within a particular geologic unit. A formal museum records search was conducted at the Natural History Museum of Los Angeles County; due to COVID concerns, the San Bernardino County Museum is currently not accepting paleontological records search requests. Informal records searches were also conducted from the online University of California Museum of Paleontology Collections and the San Diego Natural History Museum Collections, the online Paleobiology Database and FAUNMAP, which is an electronic database documenting the late Quaternary distribution of mammal species in the United States; and other published and unpublished geological and paleontological literature of the area was utilized. Assessment of paleontological sensitivity and the level of effort required to manage potential impacts to significant fossil resources is based on the SVP system.[20]

5.6.3.3 Project Impacts

GEO-1: **Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence**

20 PaleoWest. *Paleontological Resource Assessment.* (See **Appendix 5.6-2**).

of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact.

As indicated in the Geotechnical Study (see **Appendix 5.6-1**), active or potentially active faults are not known to exist on or trend toward the Project site. There are several active faults surrounding the Project site to the north, east, south, and west, within the Upper Santa Ana River Valley. The Project site is not located within a designated Alquist - Priolo Earthquake Hazard Zone.[21]

The proposed Project would adhere to the appropriate engineering design measures, as required by the latest *Standard Specifications for Public Works Construction* (Greenbook)[22] and CBC. Thus, the Project will have a less than significant impact with respect to directly or indirectly causing potential substantial adverse effects, including risk of loss, injury, or death by exacerbating existing environmental conditions related to ground rupture from known earthquake faults.

ii) Strong seismic ground shaking?

Less Than Significant with Mitigation Incorporated.

As previously discussed, the Project site sits in the Upper Santa Ana River Valley, a highly seismically active area within Southern California. Active or potentially active faults are not known to exist on or trend toward the Project site. There are several active faults surrounding the Project site to the north, east, south, and west, within the Upper Santa Ana River Valley.[23] For these reasons, there is a potential for ground shaking due to an earthquake. Additionally, potential for settlement, foundation, and pavement bearing conditions could occur with the construction of the proposed Project.[24] Therefore, impacts related to strong seismic ground shaking could be potentially significant.

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21 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

22 Public Works Standards, Inc. *2021 Greenbook: Standard Specifications for Public Works Construction* (BNi Publications, Inc., 2021).

23 California Department of Conservation. California Geological Survey. "Fault Activity Map of California." https://maps.conservation.ca.gov/cgs/fam/. Accessed December 10, 2021.

24 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.** These recommendations will be incorporated into proposed Project plans and specifications and implemented during construction of the proposed Project. These recommendations include, but are not limited to, design standards and requirements pertaining to site preparation, excavation, subgrade stabilization, retaining walls, fill materials and compaction, foundations, site drainage, backdrains, utility trenches, pipe bedding, trench backfilling, corrosivity, pavements, and the infiltration basin. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest *Standard Specifications for Public Works Construction* (Greenbook)[25] and CBC.

With the implementation of **Mitigation Measure GEO-5**, the Project will have a less than significant impact with respect to directly or indirectly causing potential substantial adverse effects, including risk of loss, injury, or death involving strong seismic ground shaking.

iii) **Seismic-related ground failure, including liquefaction and lateral spreading?**

Less Than Significant with Mitigation Incorporated.

Potential for settlement, foundation, and pavement bearing conditions could occur with the construction of the proposed Project.[26] Therefore, impacts related to strong seismic ground shaking could be potentially significant. Recommendations identified in the proposed Project's Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.** The recommendations will be incorporated into proposed Project plans and specifications and implemented during construction of the proposed Project. They are based on subsurface exploration and supporting laboratory testing of boring samples collected from the Project site. These recommendations include, but are not limited to, design standards and requirements pertaining to site preparation, excavation, subgrade stabilization, retaining walls, fill materials and compaction, foundations, site drainage, backdrains, utility trenches, pipe bedding, trench backfilling, corrosivity, pavements, and the infiltration basin. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook[27] and CBC. Thus, with the incorporation of **Mitigation Measure GEO-5**, the Project will have a less than significant impact

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25 Public Works Standards, Inc. *2021 Greenbook.*

26 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

27 Public Works Standards, Inc. *2021 Greenbook.*

with respect to directly or indirectly causing potential substantial adverse effects, including risk of loss, injury, or death due to seismic-related ground failure during construction and operation of the proposed Project.

Liquefaction

As previously discussed, liquefaction occurs when loose, cohesionless, and water-saturated soils (generally sands and silt) are subjected to strong seismic ground motion of a single sudden disturbance or through cyclic (repeated) loading. Liquefaction more often occurs in earthquake-prone areas underlain by young, sandy alluvium where the groundwater table is less than 50 feet below the ground surface.

As indicated in the Geotechnical Study (see **Appendix 5.6-1**), the Project site is not located within a Liquefaction Hazard Zone, as mapped by the State of California[28] under the Seismic Hazards Mapping Act of 1990. According to the Ontario Plan Safety Element, the Project site is not located in an area that would be susceptible to liquefaction.[29]

Medium dense to very dense silty sands, sandy silts, and sands are present beneath the Project site. Consolidation testing performed on near surface sandy soils similar to those encountered within the percolation test holes generally showed less than 0.5 percent collapse upon inundation with water and at a higher overburden stress than should be experienced by the basin soils.[30] The saturation of subsurface soils above the existing groundwater table could occur due to stormwater infiltration. Due to the primarily loose to medium dense nature and high percolation rates of the sandy alluvial soils adjacent to and below the Project site, the potential for localized liquefaction to occur above the groundwater table is low. Additionally, static groundwater levels below the Project site are not anticipated to rise within 50 feet of the ground surface. Groundwater is not anticipated to rise to a level that would adversely affect the Project site. The potential for liquefaction to occur on the Project site is very low. The proposed Project would adhere to the appropriate engineering design measures as required by the latest Greenbook[31] and CBC, which contain provisions for soil preparation to minimize hazards from

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28 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

29 City of Ontario. *General Plan*. "Safety Element." S1 Seismic and Geologic Hazards. Figure S-1 Seismic Hazards. https://www.ontarioplan.org/wp-content/uploads/sites/4/2015/05/seismic-hazards.pdf. Accessed December 14, 2021.

30 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

37 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

liquefaction and other seismic-related ground failures. Thus, the Project will have a less than significant impact with respect to directly or indirectly causing potential substantial adverse effects, including risk of loss, injury, or death due to seismic-related ground failure, including liquefaction, during construction and operation of the proposed Project.

Lateral Spreading

Lateral spreading can occur as a result of liquefaction and ground shaking. As indicated in the Geotechnical Study (see **Appendix 5.6-1**), the estimation of lateral movements resulting from seismic events is uncertain. There is a potential for ground lurching due to an earthquake. Based on empirical procedures presented by Bartlett and Youd[32] regarding deep groundwater and relatively level site grade, the potential for large lateral movements caused by post-seismic residual shear strength reduction is considered to be very low.

The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[33] and CBC. Thus, the Project will have a less than significant impact with respect to directly or indirectly causing potential substantial adverse effects, including risk of loss, injury, or death due to seismic-related ground failure, including lateral spreading, during construction and operation of the proposed Project.

iv) Landslides?

Less Than Significant.

A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Landslides are a type of mass wasting, which denotes any down-slope movement of soil and rock under the direct influence of gravity. There is a potential for ground lurching due to an earthquake. Based on the California Department of Conservation Landslide Inventory, the Project site is not located in an area that is susceptible to landslides.[34] As such, the potential for landslides at the Project site is very low.

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32 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

33 Public Works Standards, Inc. *2021 Greenbook.*

34 California Department of Conservation. California Geological Survey. "Landslide Inventory." https://maps.conservation.ca.gov/cgs/lsi/app/. Accessed December 14, 2021.

Thus, the Project will have a less than significant impact with respect to directly or indirectly causing potential substantial adverse effects, including risk of loss, injury, or death due to landslides during construction and operation of the proposed Project.

GEO-2: Result in substantial soil erosion or the loss of topsoil?

Less Than Significant with Mitigation Incorporated.

Construction Impacts

Construction activities could potentially result in soil erosion or loss of topsoil; however, the Project site has been previously disturbed. During construction, prior to commencing grading operations, soil materials containing debris, organics, pavement, or other unsuitable materials would be stripped.[35] Demolition would include removal of old foundations, pavements, slabs, abandoned utilities, and soils disturbed during the demolition process. Depressions or disturbed areas left from the removal of such material would be replaced with compacted, engineered fill. In areas that are proposed for pavements, sidewalks, retaining walls, and other improvements that could be adversely impacted by differential settlement of soils, further removal of the existing artificial fill material and replacement with compacted, engineered fill would occur.

There is potential for intermittent areas of exposed graded soil on the Project site to be subject to wind-related erosion. As described in **Section 5.9: Hydrology and Water Quality**, the proposed Project would obtain coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP), maintained by OIAA, to comply with federal regulations requiring transportation facilities with discharges from vehicle maintenance shops, equipment cleaning operations, or airport de-icing to be covered under an industrial permit. For landside projects affecting areas outside of OIAA management, Contractors shall work with the City of Ontario to obtain NPDES permit coverage. The City is a Co-Permittee of the San Bernardino County Flood Control District (SBCFCD), which manages the NPDES Permit for San Bernardino County. To minimize potential impacts, the City requires the development of the proposed Project to obtain coverage under the NPDES CGP (Order No. 2009-0009-DWQ, as well as its subsequent amendments 2010- 0014-DWQ and 2012-0006-DWQ), pursuant to NPDES requirements.[36]

In accordance with State Construction General Permit Order No. 2009-0009-DWQ, a project-specific Storm Water Pollution Prevention Plan (SWPPP) would be developed and implemented

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35 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

36 City of Ontario. Ontario Municipal Code (OMC). Article 5. Sec. 6-6.502.

prior to the construction of the proposed Project. The SWPPP would set forth Best Management Practices (BMPs), in this case OIAA outlines BMPs from the California Storm Water Quality Association (CASQA), including: covering stockpiles; retaining eroded sediments and pollutants on site; proper storage for fuels, oils, solvents and other toxic materials; containing non-storm water runoff at the project site; and proper concrete washout facilities[37] to minimize the discharge of pollutants in stormwater runoff.[38] The SWPPP would specify BMPs to target pollutants of concern and reduce or eliminate pollutants in stormwater discharges. Additionally, the NPDES requires a Standard Urban Storm Water Mitigation Plan (SUSMP) to be implemented to reduce the level of pollutants in stormwater and urban runoff. Any temporary dewatering system(s) would treat groundwater prior to discharge to the public storm drain system, as authorized by a NPDES General Permit issued by the Regional Water Quality Control Board (RWQCB), Santa Ana, and a storm drain connection permit issued by the City of Ontario Department of Public Works.

Additionally, potential for settlement, foundation, and pavement bearing conditions could occur with the construction of the proposed Project.[39] Therefore, impacts related to soil erosion or the loss of topsoil could be potentially significant. The over-excavation and re-compaction of artificial fill and upper alluvial materials in the airfield apron area would reduce the potential for settlement and provide uniform bearing conditions. The site grade will be increased by about 1 to 10 feet in elevation to achieve minimum drainage requirements. The largest grade increase through the addition of compacted fill would occur at the southeastern portion of the proposed airfield apron proximal to the infiltration basin. In areas where the finished subgrade elevation is less than two (2) feet above existing grade, the artificial fill and upper alluvial materials within the apron areas would be over-excavated, as needed, to achieve at least two (2) feet of compacted fill beneath finish subgrade elevation. Depressions or disturbed areas left from the removal of such material would be replaced with compacted fill.

Artificial fill and upper alluvial materials within the truck area south of the cargo facility and site retaining walls with shallow foundations would be over-excavated to a depth of at least two (2)

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37 Ontario International Airport Authority. *Guidance Manual for Construction Stormwater Pollution Prevention*. https://www.flyontario.com/sites/default/files/oiaa_construction_general_permit_guidance_manual.pdf. Accessed December 2021.

38 City of Ontario. "Stormwater Pollution Prevention for Industrial Businesses." https://www.ontarioca.gov/sites/default/files/Ontario-Files/Engineering/environmental-services/industrial_outreach_pkt_050415.pdf. Accessed July 2022.

39 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

feet below existing grade and could be up to as much as 4.5 feet. This would be one (1) foot below the proposed finish subgrade elevation, or at least one (1) foot below foundation bottom, whichever is deeper. Depressions or disturbed areas left from the removal of such material should be replaced with compacted engineered fill.

The southern portion of the site will be raised to match the elevation of the northern portion of the site, adjacent to Taxiway 'S,' while continuing to drain to the southeast corner of the site. Approximately 67,000 cubic yards of soil would be cut on this portion of the site and approximately 132,800 cubic yards of soil would be imported to raise the site. Existing concrete and asphalt demolished at the site may be pulverized and re-used as general compacted fill.

The potential for adverse impacts as a result of the proposed development from erosion is considered to be low with the incorporation of **Mitigation Measure GEO-5**. Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.** The recommendations will be incorporated into proposed Project plans and implemented during construction of the proposed Project. They are based on subsurface exploration and supporting laboratory testing of boring samples collected from the Project site. These recommendations include, but are not limited to, design standards and requirements pertaining to site preparation, excavation, subgrade stabilization, retaining walls, fill materials and compaction, foundations, site drainage, backdrains, utility trenches, pipe bedding, trench backfilling, corrosivity, pavements, and the infiltration basin. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[40] and CBC. Thus, with the incorporation of **Mitigation Measure GEO-5**, the Project will have a less than significant impact with mitigation with respect to substantial soil erosion or the loss of topsoil during construction of the proposed Project.

Operational Impacts

During operations, the proposed Project could result in a limited degree of soil erosion from vegetated areas. Once land disturbance and construction are completed for each component of the proposed Project, nonerosive drainage features, such as the infiltration basins and associated infrastructure, and the maintenance of these structures would be conducted over the long-term operations of the Project. The proposed Project would be required to have a SUSMP to be implemented to reduce the level of pollutants in stormwater and urban runoff. Per the CEQA and the San Bernardino County Technical Guidance Document for Water Quality Management

40 Public Works Standards, Inc. *2021 Greenbook.*

Plans (WQMP), a level of low impact design (LID) must be incorporated into all new development projects by implementing Best Management Practices (BMPs). The BMPs, developed in accordance with San Bernadino County's MS4 Permit requirements, include compliance with the City's Low Impact Development Ordinance, as described in **Section 5.9: Hydrology and Water Quality**. The Project has been designed to meet applicable LID requirements, which would include BMPs, to treat stormwater. The drainage system would include two separate stormwater collection and conveyance systems designed to collect and pre-treat stormwater in accordance with applicable LID standards in an underground storage/infiltration facility. Surface runoff would be directed away from foundations or on-grade improvements, collected and stored in two separate underground infiltration systems, and discharged at a controlled rate into the Cucamonga Channel. The proposed Project would comply with all applicable City grading permit regulations, plans, and inspections to reduce sedimentation and erosion. Through compliance with the City's construction requirements, implementation of BMPs, compliance with applicable City grading permit regulations and requirements of the Statewide general construction stormwater permit, construction activities would not result in substantial erosion or loss of topsoil. Thus, the Project will have a less than significant impact with respect to substantial soil erosion or the loss of topsoil during construction of the proposed Project.

GEO-3: **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

Less Than Significant with Mitigation Incorporated.

As discussed in the Geotechnical Study (see **Appendix 5.6-1),** the existing soils within the Project site are artificial fill and alluvial subsurface materials that are primarily coarse-grained with varying amounts of silt and low levels of clay.

As previously discussed, prior to commencing grading operations, unsuitable soil materials would be stripped.[41] Demolition activities would include removal of soils disturbed during the demolition process. The over-excavation and re-compaction of artificial fill and upper alluvial materials in the airfield apron area would reduce the potential for settlement and provide uniform bearing conditions. The site grade would be increased in elevation to achieve minimum drainage requirements. Additionally, the artificial fill and upper alluvial materials within the truck area south of the cargo facility, as well as site retaining walls with shallow foundations, would be over-

41 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

excavated. Depressions or disturbed areas left from the removal of such material would be replaced with compacted, engineered fill. Approximately 67,000 cubic yards of soil would be cut on this portion of the site and approximately 132,800 cubic yards of soil would be imported to raise the site. Existing concrete and asphalt demolished at the site may be pulverized and re-used as general compacted fill. The proposed Project would comply with all applicable City grading permit regulations, plans, and inspections to reduce sedimentation and erosion.

Landslides

As previously discussed, based on the California Department of Conservation Landslide Inventory, the Project site is not located in an area that is susceptible to landslides.[42] As such, the potential for landslides at the Project site is very low. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[43] and CBC. Thus, the Project will have a less than significant impact with respect to being located on a geologic unit or soil that is unstable, or that will become unstable as a result of the Project, and potentially result in on- or off-site landslides during construction and operation of the proposed Project.

Lateral Spreading

As indicated in the Geotechnical Study (see **Appendix 5.6-1**), the estimation of lateral movements resulting from seismic events is uncertain. There is a potential for ground lurching due to an earthquake. Based on empirical procedures presented by Bartlett and Youd,[44] deep groundwater and relatively level site grade have a very low potential for large lateral movements caused by post-seismic residual shear strength reduction. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[45] and CBC. Thus, the Project will have a less than significant impact with respect to being located on a geologic unit or soil that is unstable, or that will become unstable as a result of the Project, and potentially result in on- or off-site lateral spreading during construction and operation of the proposed Project.

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42 California Department of Conservation. California Geological Survey. "Landslide Inventory." https://maps.conservation.ca.gov/cgs/lsi/app/. Accessed December 14, 2021.

43 Public Works Standards, Inc. *2021 Greenbook.*

44 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

45 Public Works Standards, Inc. *2021 Greenbook.*

Subsidence

As previously discussed, ground subsidence resulting from oil and gas extraction is not a concern on the Project site, as it has no history of oil and gas extraction. The risk of subsidence due to water extraction is low. The Cucamonga Channel bordering the eastern boundary of the Project site is fully paved and water is not being extracted from the Project site. Groundwater was not encountered in the borings conducted on the Project site. Further, the Project site is mostly paved with the moisture contents of the artificial fill generally close to or below optimum proctor moisture content, at which the soil attains optimum dry density. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[46] and CBC. Thus, the Project will have a less than significant impact with respect to being located on a geologic unit or soil that is unstable, or that will become unstable as a result of the Project, and potentially result in on- or off-site subsidence during construction and operation of the proposed Project.

Liquefaction

As previously discussed, the Geotechnical Study indicated the Project site is not located within a Liquefaction Hazard Zone, as mapped by the State of California under the Seismic Hazards Mapping Act of 1990 (see **Appendix 5.6-1**).[47] The Ontario Plan Safety Element identifies that the Project site is not located in an area that would be susceptible to liquefaction.[48] The potential for liquefaction to occur on the Project site is very low. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[49] and CBC, which contain provisions for soil preparation to minimize hazards from liquefaction and other seismic-related ground failures. Thus, the Project will have a less than significant impact with respect to being located on a geologic unit or soil that is unstable, or that will become unstable as a result of the Project, and potentially result in on- or off-site liquefaction during construction and operation of the proposed Project.

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46 Public Works Standards, Inc. *2021 Greenbook.*

47 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

48 City of Ontario. *General Plan*. "Safety Element." S1 Seismic and Geologic Hazards. Figure S-1 Seismic Hazards. https://www.ontarioplan.org/wp-content/uploads/sites/4/2015/05/seismic-hazards.pdf. Accessed December 14, 2021.

49 Public Works Standards, Inc. *2021 Greenbook.*

Collapse

As previously discussed, medium dense to very dense silty sands, sandy silts, and sands are present beneath the Project site. Ten collapse-potential tests were performed for selected driven ring samples of the near surface earth material, as indicated by the Geotechnical Study (see **Appendix 5.6-1)**. Consolidation testing performed on near surface sandy soils similar to those encountered within the percolation test holes generally showed less than 0.5 percent collapse upon inundation with water and at a higher overburden stress than should be experienced by the basin soils.[50] Potential for settlement, foundation, and pavement bearing conditions could occur with the construction of the proposed Project.[51] Therefore, impacts related to collapse could be potentially significant. The proposed Project would comply with all applicable City grading permit regulations, plans, and inspections to reduce sedimentation and erosion. Through compliance with the City's construction requirements, implementation of BMPs, compliance with applicable City grading permit regulations, and requirements of the Statewide general construction stormwater permit, construction activities would not result in a collapse. Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.** The recommendations will be incorporated into proposed Project plans and specifications and implemented during construction of the proposed Project. They are based on subsurface exploration and supporting laboratory testing of boring samples collected from the Project site. These recommendations include, but are not limited to, design standards and requirements pertaining to site preparation, excavation, subgrade stabilization, retaining walls, fill materials and compaction, foundations, site drainage, backdrains, utility trenches, pipe bedding, trench backfilling, corrosivity, pavements, and the infiltration basin. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[52] and CBC. Thus, with the incorporation of **Mitigation Measure GEO-5**, the Project will have a less than significant impact with mitigation with respect to being located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site collapse during construction and operation of the proposed Project.

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50 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

51 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

52 Public Works Standards, Inc. *2021 Greenbook.*

GEO-4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant with Mitigation Incorporated.

As discussed in the Geotechnical Study (see **Appendix 5.6-1),** the existing soils within the Project site are artificial fill and alluvial subsurface materials that are primarily coarse-grained with varying amounts of silt and low levels of clay. The potential for soil expansiveness is considered very low due to existing soil conditions. However, water infiltration can cause or exacerbate expansive soil movement. Consolidation testing performed on near surface sandy soils similar to those encountered within the percolation test holes generally showed less than 0.5 percent collapse upon inundation with water and at a higher overburden stress than should be experienced by the basin soils.[53]

Existing concrete and asphalt demolished at the site may be pulverized and re-used as general compacted fill. The recycled material will be prepared and placed separately from the other onsite sandy fill and alluvial materials that will be used as compacted fill. The recycled material used as general compacted fill will meet all grading and compaction requirements. Potential for settlement, foundation, and pavement bearing conditions could occur with the construction of the proposed Project.[54] Therefore, impacts related to expansive soil could be potentially significant. Recommendations identified in the Geotechnical Study (see **Appendix 5.6-1)** will be incorporated and implemented into the proposed Project through **Mitigation Measure GEO-5.** The recommendations will be incorporated into proposed Project plans and specifications, and implemented during construction of the proposed Project. They are based on subsurface exploration and supporting laboratory testing of boring samples collected from the Project site. These recommendations include, but are not limited to, design standards and requirements pertaining to site preparation, excavation, subgrade stabilization, retaining walls, fill materials and compaction, foundations, site drainage, backdrains, utility trenches, pipe bedding, trench backfilling, corrosivity, pavements, and the infiltration basin. The proposed Project would adhere to the appropriate engineering design measures, as required by the latest Greenbook[55] and CBC. Thus, with the incorporation of **Mitigation Measure GEO-5**, the Project will have a less than significant impact with mitigation, with respect to being located on expansive soil, creating

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53 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

54 Cotton, Shires and Associates, Inc. *Geotechnical Investigation.* (see **Appendix 5.6-1**).

55 Public Works Standards, Inc. *2021 Greenbook.*

substantial direct or indirect risks to life or property, during construction and operation of the proposed Project.

GEO-5: **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No Impact.

The proposed Project will connect to the City's sewer system and will not require the use of septic tanks or alternative wastewater disposal systems. Therefore, the Project will have no construction or operational impacts with respect to site soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

GEO-6: **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less Than Significant with Mitigation Incorporated.

As shown in **Figure 5.6-1** and in the Paleontological Resource Assessment (see **Appendix 5.6-2**), the Project site contains artificial fill (Qaf) of the late Holocene epoch, which was deposited on Young alluvial-fan deposits (Qyf_1 and Qyf_3) of the Pleistocene epoch. Due to the artificial nature and origin off-site of this fill, the Qaf has no paleontological sensitivity. Additionally, Holocene units typically are considered to have a low paleontological sensitivity, as they are too young to have accumulated and preserved significant biologic material. However, as Holocene units transition with greater depth, they encounter Pleistocene deposits, which have higher sensitivity for findings and the potential to produce the remains of diverse land animals, including ground sloths, deer, mammoths, camels, horses, bison, badgers, moles, rabbits, gray foxes, coyotes, and snakes. As shown in **Table 5.6-2**, fossils deposited in Pleistocene sediment have been identified in the region.

The proposed Project would require ground disturbance of 20 feet bgs related to utilities trenching, although most of the ground disturbance would be less than 7 feet bgs. The depth of the Qaf units on the Project site is unknown; however, it is expected that shallow excavations up to 9 feet would impact only Qaf units and possibly the upper levels of Qyf_1 or Qyf_3.[56] These are unlikely to yield significant paleontological resources, as late Holocene deposits are too young

56 PaleoWest. *Paleontological Resource Assessment.* (See **Appendix 5.6-2**).

to contain fossils and considered to possess low sensitivity. As a result, no impact to paleontological resources would occur from earth-moving activities up to nine (9) feet bgs.

Deeper excavations, i.e. beyond nine (9) feet bgs, at the Project site may extend down into older Pleistocene sediments, which are considered to have a high paleontological sensitivity. Accordingly, ground disturbing activities beyond 9 feet bgs could potentially result in significant impacts related to paleontological resources.

To reduce potentially significant impacts, monitoring by a qualified paleontological monitor to identify and effectively salvage any recovered resources would be conducted during ground disturbing activities (**Mitigation Measure GEO-1 through GEO-4**). With the implementation of **Mitigation Measure GEO-1 through GEO-4**, Project impacts to paleontological resources would be less than significant.

5.6.4 CUMULATIVE IMPACTS

Geotechnical impacts tend to be site-specific rather than cumulative in nature, and any development occurring within the Airport and the surrounding area would be subject to, at a minimum, site development and construction standards relative to seismic and other geologic conditions that are prevalent within the region. As with the Project site, related projects would be subject to the same local, regional, State, and federal regulations pertaining to geology and soils, as well as to the Greenbook.[57] In addition, related project impacts would be addressed through imposition of recommendations specific to each project. With conformance to such regulations, cumulative impacts related to geology and soils would be less than significant. Therefore, no significant cumulative impacts will result from the proposed Project. Related projects, other growth, and the proposed Project's contribution to cumulative impacts will not be cumulatively considerable.

5.6.5 LEVEL OF SIGNIFIGANCE BEFORE MITIGATION

The proposed Project would result in no impacts to **GEO-5**. Without mitigation, the following impacts would be **potentially significant**:

- **Impact GEO-1:** Impacts to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving: seismic-related ground failure.

57 Public Works Standards, Inc. *2021 Greenbook.*

- **Impact GEO-2:** Impacts to substantial soil erosion or the loss of topsoil.
- **Impact GEO-3:** Impacts to being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site collapse.
- **Impact GEO-4:** Impacts to being located on expansive soil, causing substantial direct or indirect risks to life or property.
- **Impact GEO-6:** Impacts to paleontological resources.

5.6.6 MITIGATION MEASURES

MM GEO-1: Paleontological Resources Mitigation and Monitoring Plan (PRMMP)

A professional paleontologist shall be retained to monitor earth-disturbing construction activities. Prior to the commencement of ground-disturbing activities, the qualified paleontologist, meeting the Society of Vertebrate Paleontology (SVP) Standards, must prepare a Paleontological Resources Mitigation and Monitoring Plan (PRMMP) for the proposed Project. The PRMMP shall describe the monitoring required during excavations that extend into Pleistocene sediment, at approximately 9 feet bgs, and the location of areas deemed to have a high paleontological resource potential. The results of the geotechnical investigation conducted for the proposed Project shall be consulted to determine the approximate depth of Pleistocene sediment in the Project site. Paleontological monitoring shall entail the visual inspection of excavated and graded areas and trench sidewalls. If the qualified Paleontologist determines full-time monitoring is no longer warranted, based on the geologic conditions at depth, he or she may recommend that monitoring be reduced or cease entirely.

MM GEO-2: Workers Environmental Awareness Program (WEAP)

Prior to the start of the proposed Project ground-disturbing activities, all field personnel shall receive a worker's environmental awareness training on paleontological resources. The training must provide a description of the laws and ordinances protecting fossil resources, the types of fossil resources that may be encountered in the Project area, the role of the paleontological monitor, outline steps to follow in the event that a fossil discovery is made and provide contact

information for the qualified Paleontologist. The training must be developed by the qualified Paleontologist and can be delivered concurrent with other training.

MM GEO-3: Fossil Discoveries

In the event that a paleontological resource is discovered, the Paleontological monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and, if appropriate, collected. If the resource is determined to be of scientific significance, the Paleontologist shall complete the following:

1. **Salvage of Fossils.** If fossils are discovered, all work in the immediate vicinity shall be halted to allow the paleontological monitor, and/or Project-qualified Paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially significant, the Project-qualified Paleontologist shall recover them following standard field procedures for collecting paleontological resources as outlined in the PRMMP prepared for the project. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils, such as complete skeletons or large mammal fossils, require more extensive excavation and longer salvage periods. In this case the Paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.

2. **Fossil Preparation and Curation.** The PRMMP must identify a museum that has agreed to accept fossils that may be discovered during project-related excavations. Upon completion of fieldwork, all significant fossils collected must be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation and inventory, the fossils specimens must be identified to the lowest taxonomic level practical prior to curation at an accredited museum. The fossil specimens must be delivered to the accredited museum or repository no later than 90 days after all fieldwork is completed. The cost of curation shall be assessed by the repository and shall be the responsibility of the client.

MM GEO-4: Final Paleontological Mitigation Report

Upon completion of ground disturbing activity, and curation of fossils if necessary, the qualified Paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.

MM GEO-5: Geotechnical Investigation Recommendations

The proposed Project shall implement and incorporate the recommendations in the Geotechnical Investigation, Section 5.0 Conclusion and Recommendations (see pages 7 through 24 of Appendix 5.6-1 of this EIR). Prior to contract bidding, site grading and foundation plans shall be reviewed and approved by Cotton, Shires and Associates, Inc., or a certified Geologist, for consistency with the Geotechnical Investigation recommendations.

5.6.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation Measures GEO-1 through GEO-5 would reduce potentially significant impacts related to geology and paleontological resources to a less than significant level. Therefore, no significant and unavoidable adverse impacts related to geology and soils would occur from proposed Project implementation.

5.6.8 REFERENCES

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5.7.1 INTRODUCTION

This section of the Draft EIR provides a discussion of global climate change, existing regulations pertaining to climate change, and an inventory of the greenhouse gas (GHG) emissions that would result from the proposed Project. The analysis in this section is based in part on the following technical report:

- RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*. February 2023. (**Appendix 5.2-1**)

5.7.2 ENVIRONMENTAL SETTING

5.7.2.1 Existing Conditions

Greenhouse Gases and Climate Change

Global Context

GHGs are global pollutants that have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere for a long enough time to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more carbon dioxide (CO_2) is currently emitted into the atmosphere than is avoided or sequestered. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through photosynthesis and dissolution, respectively. These are two of the most common processes of CO_2 sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered within a year through ocean uptake, northern hemisphere forest regrowth, and other terrestrial sinks; the remaining 46 percent of human-caused CO_2 emissions are stored in the atmosphere.[1]

The effects of GHGs are borne globally (sea-level rise, hurricanes, droughts, etc.), as opposed to the localized air quality effects of criteria air pollutants and toxic air contaminants (TACs). The quantity of GHGs that it takes to ultimately result in climate change is not precisely known. That being said, no single project would be expected to measurably contribute to a noticeable

[1] United States Environmental Protection Agency (USEPA). "Inventory of U.S. Greenhouse Gas Emissions and Sinks." https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed November 2022.

incremental change in the global average temperature, or to global, local, or microclimates. Rather, it is the combined GHG contributions of multiple projects that create an impact. In this respect, global climate change is an inherently cumulative issue.

Greenhouse Effect

GHGs play a critical role in determining the Earth's surface temperature because these gases absorb solar radiation. Solar radiation enters the Earth's atmosphere from space. A portion of the radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected back into space. The radiation absorbed by the Earth is reradiated as lower-frequency infrared radiation, which is then selectively absorbed by GHGs in the Earth's atmosphere. As a result, the greater the amount of GHGs in the atmosphere, the greater the amount of infrared radiation trapped, resulting in a warming of the atmosphere. This phenomenon is commonly referred to as the "greenhouse effect."

Anthropogenic GHG emissions leading to atmospheric levels in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the Earth's atmosphere and oceans, with corresponding effects on global air and water circulation patterns and climate. CO_2 emissions associated with fossil fuel combustion are the primary contributors to human-induced emissions.[2]

Climate Change Effects for California

Climate change could affect environmental conditions in California in a variety of ways. One effect of climate change is rising sea levels. Sea levels along the California coast rose approximately 7 inches during the last century, and they are predicted to rise an additional 7 to 22 inches by 2100, depending on the future levels of GHG emissions. The effects of a rise in sea level could include increased coastal flooding, saltwater intrusion (especially a concern in the low-lying Sacramento–San Joaquin Delta, where pumps delivering potable water to Southern California could be threatened), and disruption of wetlands.

As the State's climate changes over time, the range of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the State if suitable conditions are no longer available. Additional concerns associated with climate change include a reduction in the snowpack, leading to less overall water storage in the mountains (the

2 USEPA. "Climate Change Indicators: Greenhouse Gases." https://www.epa.gov/climate-indicators/greenhouse-gases. Accessed November 2022.

largest "reservoir" in the State), and increased risk of wildfires caused by changes in rainfall patterns and plant communities. Changes in the climate can also impact California's weather patterns and rainfall.

Sources of Greenhouse Gas Emissions

GHGs are the result of both natural and anthropogenic activities. With respect to anthropogenic activities, motor vehicle travel, air travel, consumption of fossil fuels for power generation, industrial processes, heating and cooling, landfills, agriculture, and wildfire are the primary sources of GHG emissions. Additionally, land use decisions and development projects can affect the generation of GHG emissions from multiple sectors, resulting in direct or indirect GHG emissions. For example, electricity consumed in the lighting and heating of buildings is an indirect source of GHG emissions because it requires electricity from power plants, which emit GHG directly into the atmosphere. Conversely, tailpipe emissions from the use of vehicles generate direct GHG emissions.

GHGs are a group of emissions that include CO_2, methane (CH_4), nitrous oxides (N_2O), HFCs, PFCs, sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). Carbon dioxide is the most abundant GHG. As stated above, other GHGs are less abundant, but have higher global warming potential than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e.[3] A general description of GHGs discussed is provided in **Table 5.7-1: Description of Identified Greenhouse Gases.**

TABLE 5.7-1
DESCRIPTION OF IDENTIFIED GREENHOUSE GASES

GHG	General Description
Carbon Dioxide (CO_2)	An odorless, colorless GHG that has both natural and anthropocentric sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of CO_2 are burning coal, oil, natural gas, and wood.
Methane (CH_4)	A flammable gas and is the main component of natural gas. When one molecule of CH_4 is burned in the presence of oxygen, one molecule of CO_2 and two molecules of water are released. A natural source of CH_4 is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain

3 California Air Resources Board (CARB). "GHGs Descriptions & Sources in California." https://ww2.arb.ca.gov/ghg-descriptions-sources. Accessed November 2022.

TABLE 5.7-1
DESCRIPTION OF IDENTIFIED GREENHOUSE GASES

GHG	General Description
	CH_4, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
Nitrous Oxide (N_2O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O 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 in rocket engines, race cars, and as an aerosol spray propellant.
Hydrofluorocarbons (HFCs)	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH4 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 Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as substitute for CFCs as refrigerants. HFCs deplete stratospheric ozone, but to a much lesser extent than CFCs.
Perfluorinated Chemicals (PFCs)	PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semi-conduction manufacturing.
Sulfur Hexafluoride (SF_6)	An inorganic, odorless, colorless, nontoxic, and nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.
Nitrogen Trifluoride (NF_3)	An inorganic, nontoxic, odorless, nonflammable gas. NF_3 is used in the manufacture of semiconductors, as an oxidizer of high energy fuels, for the preparation of tetrafluoro hydrazine, as an etchant gas in the electronic industry, and as a fluorine source in high power chemical lasers.

Source: GHGs identified in this table are ones identified in the Kyoto protocol and other synthetic gases recently added to the IPCC's Fifth Assessment Report.

Greenhouse Gas Emissions Inventory and Trends

Existing Statewide GHG Emissions

In 2019, California produced 418.2 million metric tons of carbon dioxide equivalents ($MMTCO_2e$), including imported electricity, and excluding combustion of international fuels and carbon sinks or storage. The major source of GHGs in California is transportation, contributing to 40 percent of the State's total GHG emissions. The Statewide inventory of GHGs by sector is shown in **Table 5.7-2: California GHG Inventory 2011-2019.**

TABLE 5.7-2
CALIFORNIA GHG INVENTORY 2011–2019

Main Sector	Emissions (MMTCO2e)								
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transportation[a]	161.8	161.4	161.3	162.6	166.2	169.8	171.2	169.6	166.1
Electric Power	89.2	98.2	91.4	88.9	84.8	68.6	62.1	63.1	58.8
Industrial[b]	89.4	88.9	91.7	92.5	90.3	89.0	88.8	89.2	88.2
Commercial and Residential	46.0	43.5	44.2	38.2	38.8	40.6	41.3	41.4	43.8
Agriculture	34.4	35.5	33.8	34.7	33.5	33.3	32.5	32.7	31.8
High GWP[c,d]	14.5	15.5	16.8	17.7	18.6	19.2	20.0	20.4	20.6
Recycled and waste	8.4	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.9
Total Emissions	**443.7**	**451.3**	**447.6**	**443.0**	**440.7**	**429.1**	**424.6**	**425.1**	**418.2**

[a] *Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations. Emissions from aircraft are not included.*

[b] *Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions.*

[c] *These categories are listed in the Industrial sector of CARB's GHG Emission Inventory sectors.*

[d] *This category is listed in the Electric Power sector of CARB's GHG Emission Inventory sectors.*

Note: $MMTCO_2e$ - million metric tons of carbon dioxide equivalent emissions

Source: CARB. "GHG Current California Emission Inventory Data." https://ww2.arb.ca.gov/ghg-inventory-data. Accessed November 2022.

International Reduction Initiatives for Aviation GHG Emissions

International Civil Aviation Organization

The International Civil Aviation Organization (ICAO) was created in 1944 to promote the safe and orderly development of international civil aviation throughout the world. It sets standards and regulations necessary for aviation safety, security, efficiency, and regularity, as well as for

aviation environmental protection. The ICAO serves as the forum for cooperation in all fields of civil aviation among its 193 Member States.[4]

With a view to minimize the adverse effects of international civil aviation on the global climate, ICAO formulates policies, develops, and updates Standards and Recommended Practices (SARPs) on aircraft emissions, and conducts outreach activities. These activities are conducted by the Secretariat and the Committee on Aviation and Environmental Protection (CAEP). In pursuing its activities, ICAO also cooperates with other United Nations' bodies and international organizations.

The ICAO Assembly at its 40th Session in 2019 adopted Resolution A40-18: Consolidated statement of continuing ICAO policies and practices related to environmental protection — Climate change.[5] It reiterated the two global aspirational goals for the international aviation sector of 2 percent annual fuel efficiency improvement through 2050 and carbon neutral growth from 2020 onwards, as established at the 37th Assembly in 2010.

In 2016, ICAO adopted the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to address CO_2 emissions from international aviation. The aviation sector is committed to advances in technology, operations, and infrastructure to continue to reduce its carbon emissions. CORSIA is intended to help the sector achieve its climate targets in the short- and medium-term by complementing emissions education initiatives within the sector.[6]

ICAO is also exploring the feasibility of a long-term global aspirational goal for international aviation, as requested by the 40th Session of the ICAO Assembly (Reference: ICAO Assembly Resolution A40-18, paragraph 9).

International Air Transport Association

The International Air Transport Association (IATA) was created in 1945 and is the prime entity for inter-airline cooperation in promoting safe, reliable, secure and economical air services for the benefit of the world's consumers. IATA is the trade association for the world's airlines,

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4 International Civil Aviation Organization (ICAO). "About ICAO." https://www.icao.int/about-icao/Pages/default.aspx. Accessed November 2022.

5 ICAO. *Resolution A40-18: Consolidated statement of continuing ICAO policies and practices related to environmental protection — Climate change*. https://www.icao.int/environmental-protection/Documents/Assembly/Resolution_A40-18_Climate_Change.pdf. Accessed November 2022.

6 International Air Transport Association (IATA)/ICAO. "Factsheet: CORSIA." https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet---corsia/. Accessed December 2022.

representing close to 300 airlines or 83 percent of total air traffic. IATA supports many areas of aviation activity and helps formulate industry policy on critical aviation issues.

Similar to ICAO, IATA approved a resolution for the global air transport industry to achieve net-zero carbon emissions by 2050. The strategy is to abate as much CO_2 as possible from in-sector solutions such as sustainable aviation fuels, new aircraft technology, more efficient operations and infrastructure, and the development of new zero-emissions energy sources such as electric and hydrogen power.[7]

Sustainable Aviation Fuel

Sustainable Aviation Fuel (SAF)[8] is jet fuel made from renewable materials, such as waste biomass or food scraps. SAF has the potential to significantly reduce CO_2 emissions compared to traditional jet fuel. Other major benefits include local air quality improvements because of lower sulfur content and reductions in soot pollution. San Francisco International Airport (SFO) is taking the lead in making widespread use of SAF a reality on its own campus, throughout California, and across North America.

SFO has sought to expand SAF use but found the infrastructure and supply chain logistics to be a significant barrier. As a result, SFO brought together ten partner airlines and fuel producers to sign the industry's first voluntary Memorandum of Understanding (MOU), committing their partnership further to delivering an Infrastructure, Logistics, Supply Chain, and Financing Study to identify the key strategies that SFO can deploy to increase SAF volumes at the Airport. The airline signatories to SFO's SAF MOU together represent over 66 percent of all flights at SFO.

5.7.2.2 Baseline Conditions

In this EIR, the term "Baseline Conditions" is used when discussing the hybrid 2019/2020 base year condition, as it relates to the air quality, GHG, and noise environments. Per CEQA Guidelines Section 15125(a)(1), "where necessary to provide the most accurate picture practically possible of the proposed Project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence." Due to the COVID-19 pandemic, existing

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7 IATA. "Net-Zero Carbon Emissions by 2050." October 4, 2021. https://www.iata.org/en/pressroom/pressroom-archive/2021-releases/2021-10-04-03/. Accessed December 2022.

8 San Francisco International Airport. "Sustainable Aviation Fuel." https://www.flysfo.com/about/sustainability/reducing-carbon-emissions/sustainable-aviation-fuel. Accessed November 2022.

conditions in 2021 at the time of the EIR's Notice of Preparation issuance do not represent activity levels that have been, or will be, typical of the Airport or that are reasonably expected to exist during the timeframe for proposed Project implementation.

Specifically, the Federal Aviation Administration (FAA) advised, as part of their annual Terminal Area Forecast (TAF) "In 2020 there was a major decrease in passenger enplanements and commercial operations as a result of the COVID-19 pandemic. There is uncertainty associated with the forecasts because of the uncertainty regarding the path of the pandemic and its economic impacts."[9] FAA estimated that medium hub airports (the Airport is a medium hub airport) would have an aggregate recovery to 2019 levels of aircraft operations and enplanements by 2025, however the projections for the Airport indicate operations will exceed 2019 levels by 2023.[10] The FAA's estimates were developed prior to the extensive uptake in passenger activity in mid to late 2021 and are thus likely under representative of the recovery expected at the Airport. Notably, the recovery estimated by FAA in their TAF released in May of 2021 does not incorporate the additional cargo activity that occurred in 2020 in response to the world's reliance on cargo carriers during the pandemic. Airports Council International-North America (ACI-NA) reported an increase of approximately 17 percent in cargo operations between 2019 and 2020 and the Airport ranked 10th in North American airports for cargo activity, growing approximately 21 percent in total cargo when compared to 2019.

Thus, to more accurately represent historically consistent existing conditions at the Airport, and to avoid a potentially misleading comparison of project impacts, this EIR considers the impacts to three resource categories (noise, air quality, and GHGs) by using a hybrid of 2019 and 2020 operation levels at the Airport. The existing/base year aircraft fleet mix is a hybrid of 2019 and 2020 operations and was based on the Airport Noise & Operations Monitoring System (ANOMS) radar data from 2019 and 2020, and FAA Traffic Flow Traffic Flow Management System Count (TFMSC) and Operations Network (OSPNET). Specifically, passenger air carriers, air taxi, and General Aviation (GA) operations were obtained from the 2019 ANOMS data and the all-cargo operations were obtained from the 2020 ANOMS data. The military operations were obtained from the FAA TFMSC data. This approach serves to normalize operations to represent Baseline Conditions recognizing that the temporary reduction in passenger air carrier and air taxi

9 Federal Aviation Administration (FAA). "Terminal Area Forecast (TAF)." Executive Summary Fiscal Years 2020-2045. https://www.faa.gov/data_research/aviation/taf/. Accessed November 2022.

10 FAA. "Terminal Area Forecast (TAF)."

operations, due to the COVID-19 pandemic, is not indicative of baseline/existing conditions at the Airport.

5.7.2.3 Regulatory Background

Federal

Federal Clean Air Act

The US Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*[11] that carbon dioxide and other GHGs are pollutants under the federal Clean Air Act (CAA), which the US Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare.[12]

On April 17, 2009, the USEPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009-0171.[13] The USEPA stated that high atmospheric levels of GHGs "are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes." The USEPA further found that "atmospheric concentrations of greenhouse gases endanger public health and welfare within the meaning of Section 202 of the Clean Air Act." The final rule was effective on January 14, 2010.[14] While these findings alone did not impose any requirements on industry or other entities, this action was a prerequisite to regulatory actions by the USEPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

In response, the USEPA promulgated a regulation to require reporting of all GHG emissions from all sectors of the economy. The final rule applies to fossil fuel suppliers and industrial gas

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11 *Massachusetts v. Environmental Protection Agency*. 127 S.Ct. 1438 (2007).

12 Payne PW, Rosenbaum S. *Massachusetts et al. v Environmental Protection Agency: Implications for Public Health Policy and Practice*. Public Health Reports. 2007;122(6):817-819. doi:10.1177/003335490712200614. https://journals.sagepub.com/doi/10.1177/003335490712200614. Accessed November 2022.

13 National Archives and Records Administration. *Federal Register*. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. December 15, 2009. https://www.federalregister.gov/documents/2009/12/15/E9-29537/endangerment-and-cause-or-contribute-findings-for-greenhouse-gases-under-section-202a-of-the-clean. Accessed November 2022.

14 USEPA. "Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act." https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a. Accessed November 2022.

suppliers, direct GHG emitters and manufacturers of heavy-duty and off-road vehicles and engines. The rule does not require control of GHGs; rather, it requires only that sources above certain threshold levels monitor and report emissions.[15]

USEPA Regulation of Aircraft GHG Emissions

On November 15, 2021, the USEPA filed a motion to govern in the litigation on a rule that put in place commercial aircraft GHG emission standards, which the USEPA promulgated in early 2021. That rule implemented the historic international agreement the Obama Administration negotiated in 2016 through ICAO to set the first-ever GHG emission standards for aircraft.

At the same time, in order to effectively address the climate crisis, the Biden Administration recognizes more action is necessary across the transportation sector and in the aviation sector specifically to significantly reduce GHG emissions. As such, the U.S. will press for ambitious new international CO_2 standards at the upcoming round of ICAO negotiations. The Biden Administration announced a series of actions aimed at boosting the development of sustainable aviation fuel and released the U.S. Aviation Climate Action Plan at COP26.[16]

Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the George W. Bush administration issued Executive Order 13432 in 2007, directing the USEPA, the US Department of Transportation (USDOT), and the US Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008.[17] In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for

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15 National Archives and Records Administration. *Federal Register*. Mandatory Reporting of Greenhouse Gases. October 30, 2009. https://www.gpo.gov/fdsys/pkg/FR-2009-10-30/pdf/E9-23315.pdf. Accessed November 2022.

16 USEPA. "Statement on Airplane Greenhouse Gas Emissions Standards Litigation." https://www.epa.gov/regulations-emissions-vehicles-and-engines/statement-airplane-greenhouse-gas-emissions-standards. Accessed November 2022.

17 United States Government Publishing Office. Administration of George W. Bush. *Executive Order 13432—Cooperation Among Agencies in Protecting the Environment With Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines*. May 14, 2007. Page 631. https://www.gpo.gov/fdsys/pkg/WCPD-2007-05-21/pdf/WCPD-2007-05-21-Pg631.pdf. Accessed November 2022.

model year 2011; in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.[18]

In 2010, President Obama issued a memorandum directing the USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles.[19] The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On May 2, 2022, NHTSA also finalized fuel economy standards for passenger cars and light trucks for model years 2024–2025 that increase at a rate of 8 percent per year, and increase at a rate of 10 percent per year for model year 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in model year 2026, and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings.[20]

In addition to the regulations applicable to cars and light-duty trucks described above, in 2016, the USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. If implemented, the Phase 2 standards would be expected to lower CO_2 emissions by approximately 1.1 billion metric tons (MT), save vehicle owners fuels costs of about $170 billion.[21] But as discussed above, the USEPA and NHTSA have proposed to roll back GHG and fuel economy for cars and light-duty

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18 USEPA. "Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses." December 27, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed November 2022.

19 USEPA. "Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions." August 28, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-support-related. Accessed November 2022.

20 National Archives and Records Administration. *Federal Register*. Corporate Average Fuel Economy Standards for Model Years 2024–2026 Passenger Cars and Light Trucks. May 2, 2022. https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf. Accessed September 2022.

21 National Highway Traffic Safety Administration. "Fact Sheet: USEPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond." August 2016.

trucks, which suggest a similar rollback of Phase 2 standards for medium and heavy-duty vehicles may be pursued.

Clean Trucks Plan

On December 20, 2022 the USEPA finalized the strongest-ever national clean air standards to cut smog- and soot-forming emissions from heavy-duty trucks beginning with model year 2027. The new standards, which represent the first update to federal clean air standards for heavy duty trucks in more than 20 years, are more than 80 percent stronger than current standards. This final rulemaking is the latest step toward implementing the historic Clean Truck Plan, which is moving America's highly polluting heavy-duty trucking fleet towards low-carbon and electric technologies. This final rule includes provisions for longer useful life and warranty periods. These provisions guarantee that as target vehicles age, they will continue to meet USEPA's more stringent emissions standards for a longer period of time. The rule also requires manufacturers to better ensure that vehicle engines and emission control systems work properly on the road.[22]

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:[23]

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of renewable fuel in 2022, with at least 16 billion gallons from cellulosic biofuels and a cap of 15 billion gallons for corn-starch ethanol;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;

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22 USEPA. "Final EPA Standards for Heavy-Duty Vehicles to Slash Dangerous Pollution and Take Key Step Toward Accelerating Zero-Emissions Future." https://www.epa.gov/newsreleases/final-epa-standards-heavy-duty-vehicles-slash-dangerous-pollution-and-take-key-step. Accessed January 2023.

23 USEPA. "Summary of the Energy Independence and Security Act." https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. Accessed November 2022.

- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- Establishing miles per gallon targets for cars and light trucks; and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks, and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."[24]

FAA Aviation Climate Action Report

On November 9, 2021, the FAA published the United States Aviation Climate Action Plan, which describes a whole-of-government approach to put the sector on a path toward achieving net-zero emissions by 2050.[25] The plan builds on individual and sector-wide commitments announced by the U.S. aviation industry, and highlights specific actions and policy measures to foster innovation and drive change across the entire U.S. aviation sector. The actions identified in the plan will decrease emissions through:

- Development of new, more efficient aircraft and engine technologies
- Improvements in aircraft operations throughout the National Airspace System
- Production and use of Sustainable Aviation Fuels (SAF)
- Electrification and, potentially hydrogen, as solutions for short-haul aviation
- Advancements in airport operations across the United States
- International initiatives such as the airplane CO_2 standard and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
- Support for research into climate science

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24 A green job, as defined by the United States Department of Labor, is a job in business that produce goods or provide services that benefit the environment or conserve natural resources.

25 FAA. "Aviation Climate Action Plan." https://www.faa.gov/sustainability/aviation-climate-action-plan. Accessed November 2022.

Federal Aviation Administration Aviation Emissions and Air Quality Handbook

Air quality assessments, including as to GHG emissions, for proposed Federal actions are required to demonstrate compliance with the National Environmental Policy Act (NEPA), the Clean Air Act, and other environment-related regulations and directives. The FAA's Aviation Emissions and Air Quality Handbook[26] is a comprehensive guide intended to assist the air quality analyst/environmental specialist in assessing the air quality impact of proposed actions at airports. It provides guidance, procedures, and methodologies for use in carrying out such assessments. The Version 3 Update was created in January of 2015. It includes simplified diagrams, aligns with the latest FAA orders and policies, and contains new material covering hazardous air pollutants (HAPs) and GHGs. Furthermore, the updated handbook emphasizes that there is no single, universal criterion for determining what type of analysis is appropriate for FAA-supported projects or actions. Instead, the handbook provides guidance for determining appropriate types of analysis.

Federal Aviation Administration 1050.1F Desk Reference

FAA's Desk Reference[27] provides explanatory guidance for environmental impact analysis performed to comply with Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (CEQ Regulations) (40 Code of Federal Regulations CFR) parts 1500-1508), U.S. Department of Transportation (DOT) Order 5610.1C, Procedures for Considering Environmental Impacts, and Federal Aviation Administration (FAA) Order 1050.1F Environmental Impacts: Policies and Procedures. In addition, FAA Order 1050.1F outlines the requirements under the FAA's National Environmental Policy Act (NEPA) implementing procedures.

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26 FAA. *Aviation Emissions and Air Quality Handbook Version 3 Update 1*. January 2015. https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/. Accessed November 2022.

27 FAA. "1050.1F Desk Reference." https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/policy/faa_nepa_order/desk_ref. Accessed November 2022.

United States Aviation Greenhouse Gas Emissions Reduction Plan

The Aviation Greenhouse Gas Reduction Plan[28] provides an overview of the primary initiatives the United States Government (USG)—in partnership with the US aviation industry—is undertaking to reduce greenhouse gas emissions from US aviation. The USG is committed to managing the carbon footprint of US aviation while simultaneously enhancing the safety and efficiency of the National Airspace System (NAS). This commitment to reducing environmental impacts is reflected in an aspirational goal of achieving carbon-neutral growth for US commercial aviation by 2020, using 2005 emissions as a baseline. Under the auspices of the Next Generation Air Transportation System (NextGen), the USG has laid out plans and initiatives for improvements in technology and operations advances in development and deployment of sustainable alternative jet fuels, and policies, standards, and selective measures to incentivize transition of the fleet and airspace system. This action plan details the specific programs being pursued under these areas, their expected emissions impacts, and notable achievements thus far. The USG has prepared this plan as an update to the 2012 United States Aviation Greenhouse Gas Emissions Reduction Plan. This plan includes both domestic and international aviation. The domestic reductions are reflected in the national contributions submitted by the United States to the United Nations Framework Convention on Climate Change (UNFCCC). This plan also discusses ongoing work to better understand and model the environmental impacts of aircraft, including climate impacts, and presents an analysis that projects the future environmental performance of the NAS and shows the potential for significant environmental benefit from the aviation system improvements that are described in the document.

Key elements of the action plan include:

- Aircraft and Engine Technology Improvement
- Operational Improvements
- Alternative Jet Fuels Development and Deployment
- Policies, Standards, and Measures
- Scientific Understanding and Modeling/Analysis

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28 Transportation Resource Board. "Airport Air Quality Resource Library." United States Aviation Greenhouse Gas Emissions Reduction Plan. https://crp.trb.org/acrpwebresource4/united-states-aviation-greenhouse-gas-emissions-reduction-plan/. Accessed November 2022.

State

Executive Orders

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger and issued in June 2005, proclaimed that California is vulnerable to the impacts of climate change.[29] It declared that increased temperatures could reduce the Sierra snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established the following statewide total GHG emission reduction targets:

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

Executive Order S-01-07

Executive Order S-1-07, the Low Carbon Fuel Standard (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020.[30] Regulatory proceedings and implementation of the Low Carbon Fuel Standard have been directed to the California Air Resources Board (CARB). The Low Carbon Fuel Standard has been identified by CARB as a discrete early action item in the adopted Climate Change Scoping Plan (discussed below). CARB expects the Low Carbon Fuel Standard to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Climate Change Scoping Plan work in tandem with one another. Other specific emission reduction measures included are the Million Solar Roofs Program[31] and Assembly Bill (AB) 1493 (Pavley I), Vehicle Emissions: Greenhouse Gases, which establishes motor vehicle GHG emissions

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29 State of California. Office of the Governor. *Executive Order S-3-05*. June 9, 2005. https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/5129-5130.pdf. Accessed November 2022.

30 State of California. Office of the Governor. *Executive Order S-01-07*. January 18, 2007. https://climateactionnetwork.ca/wp-content/uploads/2011/06/eos0107.pdf. Accessed November 2022.

31 United States Department of Energy. *Laying the Foundation for Solar America: The Million Solar Roofs Initiative*. https://www.nrel.gov/docs/fy07osti/40483.pdf. Accessed November 2022.

standards.[32] To avoid the potential for double-counting emission reductions associated with AB 1493, the Climate Change Scoping Plan has modified the aggregate reduction expected from the Low Carbon Fuel Standard to 9.1 percent. In accordance with the Climate Change Scoping Plan, this analysis incorporates the modified reduction potential for the Low Carbon Fuel Standard. CARB released a draft version of the Low Carbon Fuel Standard in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the Low Carbon Fuel Standard became effective on the same day.

In 2018, CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

Executive Order B-30-15

Executive Order B-30-15, signed by Governor Edmund Gerald "Jerry" Brown and issued on April 29, 2015, established a new Statewide policy goal to reduce GHG emissions to 40 percent below 1990 levels by 2030. Reducing GHG emissions by 40 percent below 1990 levels in 2030, and by 80 percent below 1990 levels by 2050 (consistent with Executive Order S-3-05), aligns with scientifically established levels needed to limit global warming to less than 2 degrees Celsius.[33]

Executive Order B-55-18

Executive Order B-55-18, issued by Governor Brown in September 2018, establishes a new Statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. Executive Order B-55-18 directs CARB to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

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32 The standards enacted in Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 and going through 2016. Pavley I could potentially result in 27.7 million metric tons CO_2e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million metric tons CO_2e.

33 State of California. Office of the Governor. "Governor Brown Established Most Ambitious Greenhouse Gas Reduction Target in North America." April 29, 2015. https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html. Accessed November 2022.

Executive Order B-16-2012

Governor Brown issued Executive Order B-16-2012[34] in March of 2012 to reinforce the State's Zero Emission Vehicle (ZEV) Program. The executive order directed California to "encourage the development and success of zero-emission vehicles to protect the environment, stimulate economic growth and improve the quality of life in the State." The ZEV Program is designed to achieve the state's long-term emission reduction goals by requiring manufacturers to offer for sale specific numbers of the cleanest car technologies available, which include: battery electric, fuel cell, and plug-in hybrid electric vehicles. While it has been amended several times, it has the long-term goal of 1.5 million ZEVs in California by 2025.

Executive Order B-48-18

Governor Brown signed Executive Order B-48-18[35] on January 26, 2018, that boosts the use of zero-emission vehicles (ZEVs), electric vehicle charging infrastructure, and hydrogen refueling infrastructure in California. Executive Order B-48-18 implements the Governor's call for a new target of 5 million ZEVs in California by 2030 and 250,000 vehicle charging stations and 200 hydrogen refueling stations by 2025.

Assembly Bills

Assembly Bill 32 and Related Legislation

AB 32, the Global Warming Solutions Act of 2006, requires a reduction of GHG emissions to 1990 levels by 2020. To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap and institute a schedule to meet the cap; implement regulations to reduce Statewide GHG emissions from stationary sources; and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. To reach the reduction targets, AB 32 requires CARB to adopt—in an open, public process—rules and regulations that achieve the maximum technologically feasible and cost-effective GHG reductions.

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34 State of California. Office of the Governor. *Executive Order B-16-2012.* March 23, 2012. https://www.ca.gov/archive/gov39/2012/03/23/news17472/index.html. Accessed November 2022.

35 State of California, Executive Department. Office of the Governor. *Executive Order B-48-18*. January 26, 2018. https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/39-B-48-18.pdf. Accessed November 2022.

Climate Change Scoping Plan

CARB approved a Climate Change Scoping Plan (Scoping Plan) on December 11, 2008, as required by AB 32. The Scoping Plan proposed a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."[36] The Scoping Plan had a range of GHG reduction actions, including direct regulations; alternative compliance mechanisms; monetary and nonmonetary incentives; voluntary actions; market-based mechanisms, such as a cap-and-trade system; and an AB 32 implementation regulation to fund the program.

The Scoping Plan called for a "coordinated set of strategies" to address all major categories of GHG emissions.[37] Transportation emissions were to be addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard,[38] and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations were encouraged and, sometimes, required to implement energy efficiency practices. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the Scoping Plan emphasized opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicated that substantial savings of electricity and natural gas would be accomplished through improving energy efficiency.

CARB updated the Scoping Plan in May 2014 (2014 Scoping Plan). The 2014 Scoping Plan[39] adjusted the 1990 GHG emissions levels to 431 million metric tons of carbon dioxide equivalents ($MMTCO_2e$); the updated 2020 GHG emissions forecast is 509 $MMTCO_2e$, which credited for certain GHG emission reduction measures already in place (e.g., the RPS). The 2014 Scoping

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36 CARB. *Climate Change Scoping Plan: A Framework for Change*. December 2008. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed November 2022.

37 CARB. *Climate Change Scoping Plan.*

38 State of California. *Executive Order S-01-07*.

39 CARB. *First Update to the Climate Change Scoping Plan: Building on the Framework*. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed November 2022.

Plan also recommended a 40 percent reduction in GHG emissions from 1990 levels by 2030, and a 60 percent reduction in GHG emissions from 1990 levels by 2040.

The 2017 Scoping Plan,[40] approved on December 14, 2017, builds on previous programs and takes aim at the 2030 target established by the SB 32 (Pavley), which is further discussed below. The 2017 Scoping Plan outlines options to meet California's aggressive goals to reduce GHGs by 40 percent below 1990 levels by 2030. In addition, the plan incorporates the State's updated RPS requiring utilities to procure 50 percent of their electricity from renewable energy sources by 2030. It also raises the State's Low Carbon Fuel Standard[41] and aims to reduce emissions of methane and hydrofluorocarbons by 40 percent from 2013 levels by 2030 and emissions of black carbon by 50 percent from 2013 levels.

The 2017 Scoping Plan[42] advises that absent conformity with a qualified GHG reduction plan, projects should incorporate all feasible GHG reduction measures and that achieving "no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development."

On November 16, 2022, CARB adopted the approved the final proposed □□□□1;GHÆ?.I9F.[43] The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Assembly Bill 1279

Assembly Bill 1279, also known as the California Climate Crisis Act, declares the policy of the state both to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter, and to ensure that by

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40 CARB. *California's 2017 Climate Change Scoping Plan*. https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf. Accessed November 2022.

41 State of California. *Executive Order S-01-07*.

42 CARB. *California's 2017 Climate Change Scoping Plan*.

43 CARB. "2022 Scoping Plan Documents." https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed November 2022.

2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below the 1990 levels. The bill requires CARB to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California, as specified.[44]

Senate Bills

Senate Bill 375

SB 375, signed into law in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations.[45] The act requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) that prescribes land use allocation in that MPO's regional transportation plan (RTP). CARB, in consultation with MPOs, provided regional reduction targets for GHGs for the years 2020 and 2035.

Senate Bill 1078 (Renewable Portfolio Standard)

California's Renewable Portfolio Standard (RPS) program was established in 2002 by SB 1078 with the initial requirement that 20 percent of electricity retail sales must be served by renewable resources by 2017. The program was accelerated in 2015 with SB 350 which mandated a 50 percent RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65 percent of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60 percent by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

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44 California Legislative Information. *Assembly Bill No. 1279, The California Climate Crisis Act*. September 19, 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279. Accessed November 2022.

45 California Legislative Information. *Senate Bill No. 375*. September 30, 2008. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375. Accessed November 2022.

Enacted in August 2022, SB 1020[46] contains the most recent amendments to the RPS and codifies into law a state policy that eligible renewable energy resources and zero-carbon resources supply:

- 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent by December 31, 2040, and 100 percent by December 31, 2045; and
- 100 percent of electricity procured to serve all state agencies by December 31, 2035.

To achieve these objectives, SB 1020 requires that CARB and the CEC use unspecified programs authorized under existing statutes and employ measures to ensure that implementation of the policy does not cause increases in GHG emissions elsewhere.

The California Public Utilities Commission (CPUC) implements and administers RPS compliance rules for California's retail sellers of electricity, which include large and small investor-owned utilities (IOUs), electric service providers (ESPs) and community choice aggregators (CCAs). The California Energy Commission (CEC) is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities (POUs).[47]

Senate Bill 32 and Assembly Bill 197

Enacted in 2016, SB 32 codifies the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. The reduction of GHG emissions is a priority for development projects throughout the State and is achieved through a combination of policies, planning, direct regulations, market approaches, incentives, and voluntary efforts. Generally speaking, the focus of GHG emission reductions is on energy production and motor vehicles.

SB 32 was coupled with a companion bill: AB 197. Designed to improve the transparency of CARB's regulatory and policy-oriented processes, AB 197 created the Joint Legislative Committee on Climate Change Policies, a committee with the responsibility to ascertain facts and make recommendations to the Legislature concerning Statewide programs, policies and

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46 California Legislative Information. *Senate Bill No. 1020*. September 19, 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020. Accessed November 2022

47 California Public Utilities Commission. "Renewables Portfolio Standard (RPS) Program." https://www.cpuc.ca.gov/rps/. Accessed November 2022.

investments related to climate change. AB 197 also requires CARB to make certain GHG emissions inventory data publicly available on its website; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

Mobile Source Strategies

CARB 2020 Mobile Source Strategy

CARB staff developed the 2020 Mobile Source Strategy[48] to take an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's air quality and GHG targets. The actions contained in the Mobile Source Strategy will deliver broad environmental and public health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector.

CARB Zero-Emission Airport Ground Support Equipment

Airport ground support equipment (GSE) perform a wide variety of functions including providing power to aircraft, transporting cargo, baggage, and passengers to and from aircraft, and providing aircraft maintenance and fueling. The Zero-Emission Airport Ground Support Equipment Measure is intended to act as a catalyst to further adoption of zero-emission equipment in the off-road sector, facilitate the transfer of technology to suitable heavier duty-cycle applications, and expand use of zero-emission infrastructure.[49]

CARB Advanced Clean Cars II

The Advanced Clean Cars II program[50] is designed to take the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augment them to meet more aggressive tailpipe emissions standards and ramp up to 100 percent zero-emission

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48 CARB. "2020 Mobile Source Strategy." https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed November 2022.

49 CARB. "Zero-Emission Airport Ground Support Equipment." https://ww2.arb.ca.gov/our-work/programs/zero-emission-airport-ground-support-equipment. Accessed November 2022.

50 CARB. "Proposed Advanced Clean Cars II Regulations: All New Passenger Vehicles Sold in California to be Zero Emissions by 2035." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii. Accessed November 2022.

vehicles. Additionally, the program will rapidly scale down light-duty passenger car, truck and SUV emissions starting with the 2026 model year through 2035.

First, the Advanced Clean Cars II program amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. Second, the program amends the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions while the sector transitions toward 100 percent electrification by 2035.[51]

CARB Advanced Clean Fleets

CARB is developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications.[52] The initial focus would be on high-priority fleets with vehicles that are suitable for early electrification, their subhaulers, and entities that hire them. The goal of this effort is to accelerate the number of medium and heavy-duty zero-emission vehicle purchases to achieve a full transition to zero-emission vehicles in California as soon as possible. Final approval of this regulation has not been reached yet.[53]

CARB In-Use Off-Road Diesel-Fueled Fleets Regulation

The goal of the In-Use Off-Road Diesel-Fueled Fleets Regulation[54] is to reduce particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation covers a wide scope of vehicle types used in (but not limited

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51 CARB. "Advanced Clean Cars II." https://ww2.arb.ca.gov/rulemaking/2022/advanced-clean-cars-ii. Accessed November 2022.

52 CARB. "Advanced Clean Fleets." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about. Accessed November 2022.

53 CARB. "Advanced Clean Fleets."

54 CARB. "In-Use Off-Road Diesel-Fueled Fleets Regulation." https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about. Accessed November 2022.

to) industries as diverse as construction, air travel, manufacturing, landscaping, and ski resorts. Final approval of this regulation has not been reached yet.[55]

California Building Standards Code

California Energy Code

California's Energy Efficiency Standards for Residential and Nonresidential Buildings[56] were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 requires the design of building shells and components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December of that same year, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.[57]

California Green Building Code

The California Green Building Standards Code, which is Part 11 of the CCR, is commonly referred to as the CALGreen Code.[58] The most current version of the CALGreen building code, the 2022 CALGreen code, went into effect January 1, 2023. The purpose is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design,

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55 CARB. "In-Use Off-Road Diesel-Fueled Fleets Regulation."

56 California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed November 2022.

57 CEC. "2022 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed November 2022.

58 California Buildings Standards Commission. California Green Building Standards Code (Cal. Code Regs., Title 24, Part 11). http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed November 2022.

construction, quality of materials, outdoor lighting standards, use and occupancy, location, and maintenance of all building and structures within its jurisdiction.

Appliance Standards

The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the CCR. The regulations establish water and energy efficiency standards for both federally regulated appliances and non–federally regulated appliances. The most current Appliance Efficiency Regulations cover 23 categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions) and apply to appliances offered for sale in California.

Regional

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990.[59] The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

59 South Coast Air Quality Management District (SCAQMD). "SCAQMD's Historical Activity on Climate Change." http://www.aqmd.gov/nav/about/initiatives/climate-change. Accessed November 2022.

On December 5, 2008, the SCAQMD Governing Board also adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects of 10,000 MT of GHG per year where SCAQMD is the Lead Agency.[60]

San Bernardino County Regional Greenhouse Gas Reduction Plan

The 2021 San Bernardino County Regional Greenhouse Gas Reduction Plan[61] includes an inventory of GHG emissions and evaluation of reduction measures to be adopted by 25 Partnership Cities within the County. The reduction measures set forth in the plan are being and should be considered for adoption by agencies in the region that are developing jurisdiction-specific climate action plans. The Regional GHG Reduction Plan includes reduction measures evaluated for the City of Ontario. Measures that could assist in reducing GHG emissions expected from the proposed Project, if adopted by the relevant agencies, include State fuel efficiency measures, electric-powered construction equipment, and idling ordinances.

SCAG 2020-2045 RTP/SCS

With regard to GHG emissions, SCAG has prepared and adopted the 2020–2045 RTP/SCS,[62] which includes a Sustainable Communities Strategy that addresses regional development and growth forecasts. The SCAG 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level.

Additionally, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation sources, with the exception of goods movement. To address goods movement, the RTP/SCS proposed an environmental strategy to address the emissions

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60 SCAQMD. "Greenhouse Gases: CEQA Significance Thresholds." http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds. Accessed November 2022.

61 ICF International. *San Bernardino County Regional Greenhouse Gas Reduction Plan*. March 2021. https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf. Accessed November 2022.

62 Southern California Association of Governments (SCAG). *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*. "Chapter 1." September 3, 2020. https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020, Accessed November 2022.

impacts of goods movement, while also allowing for the efficient and safe movement of goods throughout the region with the integration of advanced technologies that have benefits such as air quality improvements, energy security, and economic growth opportunities. This plan reaffirms zero and near-zero emission technologies as a priority, describes progress to date, and outlines a framework and key action steps to reach that goal.[63] The process, framework, and action steps of this strategy as well as specific details of goods movement challenges are found in the Goods Movement Technical Report of the RTP/SCS.[64] The RTP/SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the CARB. However, the RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to government and developers to take actions consistent with the plan.

Local

Air Quality Improvement Plan

The Airport has developed a voluntary Air Quality Improvement Plan (AQIP)[65] as part of a collaborative effort with SCAQMD and the other major commercial airports in the Air Basin (i.e., Long Beach Airport, John Wayne Airport, Hollywood Burbank Airport, and Los Angeles International Airport, collectively Air Basin airports) to minimize and reduce air emissions related to mobile source activities at the Airport. The AQIP was developed specifically as it relates to the Facility-Based Measure for Mobile Sources Measure for the Emissions Reductions at Commercial Airports (MOB-04) in the 2016 AQMP and carried forward to the 2022 AQMP. The AQIP is an additional document that identifies the efforts related to MOB-04 and is an additional effort relative to other airport programs to address air quality and related issues. As it relates to GHG emissions, the AQIP includes GSE and Fuel Truck Operation Policies (RM1 and RM2), which would likely result in a reduction of GHG pollutants.

Under RM1, the Airport will establish a GSE policy that will promote the use of newer, cleaner equipment. The goal of the GSE Policy is to achieve a reduction in the overall fleet average NOx emissions. Although RM1 applies exclusively to NOx emissions, actions taken to comply with

63 SCAG. *Connect SoCal: 2020-2045 RTP/SCS*.

64 SCAG. *Connect SoCal: 2020-2045 RTP/SCS*.

65 Alta Environmental. *Air Quality Improvement Plan, Ontario International Airport*. September 17, 2019. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/facility-based-mobile-source-measures/draft-aqip-ont.pdf?sfvrsn=7. Accessed November 2022.

RM1 (e.g., replacing or repowering equipment) will likely have the effect of reducing emissions of pollutants such as particulate matter (PM), volatile organic compounds (VOCs), and GHGs.

Under RM2, the Airport plans to develop a second jet fuel loading rack located on the south side of the air operations area (AOA). The additional loading rack will reduce emissions in two ways:

- Reduction of VMT by fuel trucks with destinations on the south side of the AOA.
- Reduction in the time required per delivery to the south side of the airfield.

This may reduce the total number of fuel trucks required at the Airport, which in turn would have the potential to eliminate trucks from the fleet. A reduction in total fuel truck VMT will result in a reduction of all criteria and GHG pollutants. In addition, if the truck fleet can be reduced, older trucks may be retired, which will result in reduced fleet-wide emission factors in terms of emissions per VMT.

The Ontario Plan

The Ontario Plan[66] (serves as the City's General Plan) states long-term goals, principles and policies for achieving the City's vision. It guides growth and development to achieve optimum results from the City's physical, economic, environmental, and human resources. The Environmental Resources Element of the Ontario Plan defines the ethic to guide management of the City's environmental resources, establishes goals for environmental infrastructure, and establishes policies that support system integration, resource conservation and regeneration, and energy independence. The Environmental Resources Element includes the following goal and policies related to GHG:

Goal ER4: Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.

Policy ER4-1: Land Use. Reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.

Policy ER4-3: Greenhouse Gases Emissions Reductions. Reduce GHG emissions in accordance with regional, state and federal regulations.

66 City of Ontario. "Policy Plan." https://www.ontarioca.gov/Ontarioplan/Policyplan. Accessed November 2022.

Policy ER4-5: Transportation. Promote mass transit and non-motorized mobility options (e.g. walking, biking) to reduce air pollutant emissions.

5.7.3 ENVIRONMENTAL IMPACT ANALYSIS

5.7.3.1 Thresholds of Significance

The potential for the proposed Project to result in impacts associated with greenhouse gas emissions is based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Section 15064.7 of the State CEQA Guidelines defines a threshold of significance as an identifiable quantitative, qualitative, or performance level of a particular environmental effect, compliance with which determines the level of impact significance. CEQA leaves the determination of significance to the reasonable discretion of the lead agency and encourages lead agencies to develop and publish thresholds of significance to use in determining the significance of environmental effects.

When using thresholds of significance, a lead agency may consider thresholds adopted or recommended by other public agencies. In this instance, neither the State of California, SCAQMD, OIAA, the County, nor the City has established specific quantitative (numeric) significance thresholds for GHG emissions.

In order to identify a definitive quantitative basis by which to evaluate the proposed Project's impacts in light of the first GHG threshold of significance presented above, (i.e., generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment), the criterion used in this analysis is whether Project construction and operations would result in a net increase in GHG emissions over Baseline Conditions. This threshold reflects the fact that neither the State of California, SCAQMD, OIAA, the County, nor the City has developed a non-zero quantitative (numeric) threshold for determining the significance of GHG emissions.

In order to determine the Project-related operations GHG impacts, the total GHG emissions associated with the proposed Project that would occur during Phase 1 (2025) and Phase 2 (2029)

were compared to the Baseline Conditions. The difference between these conditions was used to determine the significance of Project-related GHG emissions.

5.7.3.2 Methodology

The assumptions used to estimate GHG emissions from construction and operational sources are the same as those discussed in **Section 5.2: Air Quality** (see *Section 5.2.3.2, Methodology*, for details). The discussion below provides a description of methodological elements that are specific to analyzing GHG emissions.

Various guidance documents, such as The Climate Registry General Reporting Protocol (version 3.0, May 2019);[67] the joint CARB, California Climate Action Registry (CCAR), and International Council for Local Environmental Initiatives (ICLEI) Local Government Operations Protocol (LGOP) (version 1.1, May 2010);[68] the Association of Environmental Professionals (AEP) Community-wide GHG Emissions Protocol;[69] and the ACI ACA program propose generally consistent methodologies for preparing GHG inventories.[70] These methodologies were developed for varying purposes, and not specifically for CEQA. Relying on these guidance documents, this analysis addresses both direct and indirect GHG emissions from the proposed Project.

CARB believes that consideration of so-called indirect emissions provides a more complete picture of the GHG footprint of a facility: "As facilities consider changes that would affect their emissions – addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example – the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Additionally, the Governor's Office of Planning and Research (OPR) guidance for lead agencies conducting GHG analyses in CEQA documents indicates that lead agencies should "make a good-faith effort, based on available information, to calculate, model,

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67 The Climate Registry. *General Reporting Protocol, Version 3.0*. May 2019. https://www.theclimateregistry.org/protocols/General-Reporting-ProtocolV3.pdf. Accessed November 2022.

68 CARB. *Local Government Operations Protocol, Version 1.1*. May 2010. https://theclimateregistry.org/wp-content/uploads/2022/11/2010-05-06-LGO-1.1.pdf. Accessed November 2022.

69 Association of Environmental Professionals (AEP). *Forecasting Community-Wide Greenhouse Gas Emissions and Setting Reduction Targets*. Draft: May 2012. https://califaep.org/docs/Forecasting_and_Target_Setting.pdf. Accessed November 2022.

70 Airport Carbon Accreditation. "Greenhouse Gas Protocol." https://www.airportcarbonaccreditation.org/about/6-levels-of-accreditation/mapping.html?id=63. Accessed November 2022.

or estimate … GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[71]

In light of this guidance, direct and indirect emissions have been calculated for the proposed Project. Because potential impacts from GHG emissions are long-term, GHG emissions are calculated on an annual basis. The analysis considers those GHG emissions resulting from the proposed Project that would lead to a net change (increase or decrease) in incremental emissions compared to Baseline Conditions.

Emissions Inventory Modeling

Development of the proposed Project would generate GHG emissions from a number of individual sources during both construction and operational use. Construction emissions that occur from activities such as demolition, site-grading, concrete construction, and other activities are evaluated. Emissions from operation of the proposed Project are also evaluated. Regulatory models used to estimate GHG emissions include:

- California Air Pollution Officers Association (CAPCOA) CalEEMod (California Emissions Estimator Model Version 2020.4.0)[72] land use emissions model estimates emissions due to demolition and construction activities and operations for land use development. CalEEMod Version 2020 was used for the air quality analysis, as it was the available model version on issue of the Notice of Preparation.
- California Air Resources Board's (CARB) EMFAC[73] emissions inventory model. EMFAC is the latest emission inventory model that calculates emission inventories and emission rates for motor vehicles operating on roads in California. This model reflects CARB's current understanding of how vehicles travel and how much they emit. EMFAC can be

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71 State of California. Office of Planning and Research. *Technical Advisory. CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*. June 19, 2008. p. 5. https://opr.ca.gov/docs/june08- ceqa.pdf. A draft update to this guidance was released in December 2018 with similar advice. http://opr.ca.gov/docs/20181228-Discussion_Draft_Climate_Change_Advisory.pdf. Accessed November 2022.

72 California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model® User's Guide.* May 2021. http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6. Accessed November 2022.

73 CARB. *EMFAC2021 User's Guide*. January 15, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-01/EMFAC202x_Users_Guide_01112021_final.pdf. Accessed November 2022.

used to show how California motor vehicle emissions have changed over time and are projected to change in the future.

- CARB OFFROAD[74] emissions inventory model. OFFROAD is the latest emission inventory model that calculates emission inventories and emission rates for off-road equipment such as loaders, excavators, and off-road haul trucks operating in California. This model reflects CARB's current understanding of how equipment operates and how much they emit. OFFROAD can be used to show how California off-road equipment emissions have changed over time and are projected to change in the future.
- FAA's Aviation Environmental Design Tool (AEDT, Version 3d) was used to prepare airport operational emission estimates for aircraft, auxiliary power units (APU), GSE, and stationary sources.[75,76] Since the Notice of Preparation, the FAA released an updated version of AEDT (Version 3e, released May 9 of 2022). A review of the new features of Version 3e indicate that the updated model would not provide aircraft air quality results that would differ greatly from those derived using Version 3d. AEDT uses airport-specific information and aircraft fleet databases. The aircraft fleet database contains more than 3,000 aircraft (airframe and engine combinations).

5.7.3.3 Project Design Features

As detailed within **Section 5.2: Air Quality**, the Project includes several Project Design Features (PDF) which would result in emissions reductions during construction and operation.

Construction

The following PDF from **Section 5.2: Air Quality** would also serve to reduce GHG emissions during construction and are quantified within the GHG analysis:

PDF AQ-2: The Applicant shall conduct concrete/asphalt demolition on-site to reuse concrete/asphalt generated during construction.

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74 CARB. "MSEI – Off-Road Documentation." https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation-0. Accessed November 2022.

75 FAA. *Aviation Environmental Design Tool (AEDT), Version 3d, User Manual*. March 2021. https://aedt.faa.gov/Documents/AEDT3d_UserManual.pdf. Accessed November 2022.

76 FAA. *AEDT, Version 3d, User Manual*.

During Phase 1, demolition would involve removal of approximately 2,047,320 square feet of asphalt/concrete, which would be recycled within the project site and not require offsite haul truck trips (i.e., avoiding 2,616 haul truck trips). During Phase 2, demolition would involve removal of approximately 1,045,440 square feet of asphalt/concrete, which would be recycled within the project site and not require offsite haul truck trips (i.e., avoiding 910 haul truck trips). This PDF results in the avoidance of 106 metric tons of CO_2e during the entire construction period.

Operation

Section 3.0: Project Description of this EIR includes a description of the sustainable project features included as part of the proposed Project (See *Section 3.4.4, Sustainable Project Features*).

The following PDFs from **Section 5.2: Air Quality** would also serve to reduce GHG emissions during operation and are quantified within the GHG analysis:

PDF AQ-3: The Ground Support Equipment (GSE), including (but not limited to) aircraft tugs, baggage tugs, belt loaders, cargo loaders, forklifts, and ground power units, ramp support carts/vans, servicing aircrafts shall be electric.

This PDF results in the avoidance of 920 metric tons of CO_2e annually compared to the use of diesel fueled ground support equipment.

PDF AQ-4: A portion of the proposed Project shall utilize electric cargo aircraft. (See **Table 3.4** in **Section 3.0: Project Description**).

This PDF results in the avoidance of 4,400 metric tons of CO_2e annually compared to the use of jet fueled aircraft similar to the project fleet.

PDF AQ-5: All new aircraft parking positions shall be equipped with ground power and pre-conditioned air therefore, reducing the need to operate auxiliary power units.

This PDF results in the avoidance of 1,164 metric tons of CO_2e annually compared to without the gate infrastructure.

The following PDFs would also serve to reduce GHG emissions during operation and are quantified within the GHG analysis:

PDF GHG-1: The Air Cargo Sort Building shall be all-electric (no natural gas usage).

This PDF results in the avoidance of 260 metric tons of CO_2e annually.

PDF GHG-2: The proposed Project shall include a 1.5-Megawatt Solar PV Panel System on the rooftop of the Air Cargo Sort Building and Parking Structure.

This PDF results in the avoidance of 3,750 metric tons of CO_2e annually.

Moreover, additional PDFs not quantified within the GHG analysis include:

PDF AQ-7: The Air Cargo Sort Building shall meet Leadership in Energy and Environmental Design (LEED) certification standards, shall include enhanced building automation systems, and shall utilize advanced low energy HVAC systems.

PDF AQ-8: The visitor parking lot shall include 29 parking stalls, 6 of which shall have access to electric charging points. The employee parking structure shall include 932 parking stalls, 300 of which shall have access to electric charging points.

5.7.3.4 Project Impacts

Would the Project:

GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

The GHG emissions generated during construction of the proposed Project are presented in **Table 5.7-3: Estimated Construction GHG Emissions for the Proposed Project**. As shown, the estimated construction GHG emissions for the proposed Project total 7,248 $MTCO_2e$. As indicated, the 30-year amortized construction related GHG emissions would be approximately 242 $MTCO_2e$ per year.

TABLE 5.7-3
ESTIMATED CONSTRUCTION GHG EMISSIONS FOR THE PROPOSED PROJECT

Construction Year	$MTCO_2e$
2023	2,161
2024	1,737
2025	469
2026	166
2027	1,213
2028	1,501

TABLE 5.7-3 ESTIMATED CONSTRUCTION GHG EMISSIONS FOR THE PROPOSED PROJECT	
Construction Year	**$MTCO_2e$**
Total Construction Emissions	7,248
Total 30-Year Amortized Construction Emissions	242

Source: RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*. February 2023. (**Appendix 5.2-1**).

Operational Emissions

Table 5.7-4: Estimated Annual Operational GHG Emissions from ONT Aircraft Activity – Baseline presents the GHG emissions from aircraft for the Baseline Condition. As shown, baseline emissions would be 115,733 $MTCO_2e$ per year.

TABLE 5.7-4 ESTIMATED ANNUAL OPERATIONAL GHG EMISSIONS FROM ONT AIRCRAFT ACTIVITY – BASELINE	
Source	**MTCO2e**
Baseline	115,733

Source: RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*. February 2023. (**Appendix 5.2-1**).

Table 5.7-5: Estimated Annual Operational GHG Emissions – Baseline Plus Project presents the GHG emissions from aircraft and other project-related sources with the Proposed Project plus Baseline emissions from **Table 5.7-9**. As shown, Phase 1 emissions would be 195,289 $MTCO_2e$ per year, and Phase 2 emissions would be 243,548 $MTCO_2e$ per year with the Proposed Project.

TABLE 5.7-5 ESTIMATED ANNUAL OPERATIONAL GHG EMISSIONS – BASELINE PLUS PROJECT	
Source	**$MTCO_2e$**
Phase 1	195,289
Phase 2	243,548

Source: RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*. February 2023. (**Appendix 5.2-1**).

In order to determine the Proposed Project-related operational impacts associated with GHG emissions, the total emissions associated with the Proposed Project that would occur in Phase 1 and Phase 2 including other aircraft operations not associated with the Proposed Project were compared to the baseline emissions. The difference between these two conditions was used to determine the significance of the Proposed Project.

Table 5.7-6: Estimated Annual Operational GHG Emissions ($MTCO_2e$) – With Project Compared to Baseline presents the annual increase in GHG emissions resulting from the proposed Project during Phase 1 and 2 when compared to Baseline Conditions. The proposed Project's construction and operations would result in GHG emissions of 79,798 $MTCO_2e$ annually for Phase 1 and 128,057 $MTCO_2e$ annually for Phase 2.

TABLE 5.7-6
ESTIMATED OPERATIONAL GHG EMISSIONS
FOR THE PROPOSED PROJECT ($MTCO_2E$) – WITH PROJECT COMPARED TO BASELINE

Source	Phase 1	Phase 2
Aircraft	62,283	103,019
APU	994	1,592
GSE	82	-
Employee Motor Vehicles	3,902	3,622
Delivery Trucks	1,528	2,064
Emergency Generators	353	494
Area Sources	<1	<1
Electrical	9,525	15,770
Waste	317	446
Water	574	807
Total Operational Emissions	**79,556**	**127,815**
Total 30-Year Amortized Construction Emissions	**242**	**242**
Grand Total Construction and Operations Emissions	**79,798**	**128,057**

Source: RCH Group. *Air Quality Technical Report for the Ontario International Airport Cargo Development Project*. February 2023. (**Appendix 5.2-1**).

As indicated in **Table 5.7-6**, the majority (i.e., more than 75 percent) of the GHG emissions associated with future operation of the proposed Project are related to aircraft sources (i.e.,

aircraft, APU, and GSE). The OIAA does not have the authority to regulate aircraft operations or emissions from aircraft engines.[77]

The proposed Project's net increase in GHG emissions during Phase 1 and Phase 2 compared to Baseline Conditions is considered a significant impact on the environment.

Appendix 5.2-1 contains an evaluation of the Project's GHG impacts relative to "Without Project" conditions at the Airport. As shown therein, the Project is less impactful when compared to the Without Project conditions (rather than the Baseline Condition), as the former comparison eliminates growth in aircraft operations which is not related to the proposed Project. This comparison is provided in **Appendix 5.2-1** for informational purposes only and is not the comparison used for purposes of determining the significance of the proposed Project's impacts.

GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Table **5.7-7: Proposed Project Consistency with Plans, Policies, and Regulations Adopted to Reduce Greenhouse Gas Emissions**, identifies the various plans, policies, and regulations described in *Section 5.7.2.3* adopted for the purpose of reducing GHG emissions that are applicable to the proposed Project, summarizes the proposed Project's relationship to them, and identifies whether the proposed Project would conflict.

As shown in **Table 5.7-7**, implementation of the proposed Project would not conflict with many of the plans, policies, and regulations that have been adopted for the purpose of reducing GHG emissions. However, the Project may conflict with some plans, policies, and regulations, including Executive Orders S-3-05, B-30-15, and B-55-18; and the 2022 Climate Change Scoping Plan that are targeting overall reductions in California's emissions profile and carbon neutrality due to its incremental contribution of additional GHG emissions to the atmosphere.

As discussed under **Impact GHG-1**, with implementation of the proposed Project, Airport-related annual GHG emissions would increase by approximately 79,798 $MTCO_2e$ annually from Phase 1 of the Project and 128,057 $MTCO_2e$ annually from Phase 2 of the Project when compared to Baseline GHG emissions.

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77 Section 233 of the federal Clean Air Act exclusively vests the authority to promulgate emission standards for aircraft and aircraft engines with the USEPA; states and other municipalities are preempted from adopting or enforcing any standard with respect to aircraft engine emissions unless such standard is identical to USEPA standards.

TABLE 5.7-7
PROPOSED PROJECT CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS ADOPTED TO REDUCE GREENHOUSE GAS EMISSIONS

Regulatory Framework	Plan, Policy, or Regulation	Project's Relationship	Is the Project in Conflict with Plan, Policy, or Regulation?
State			
Title 24 Energy Standards	Ensures new and existing buildings achieve energy efficiency.	As a matter of regulatory compliance, the proposed Project would comply with applicable provisions of the Title 24 Energy Standards. Further, as discussed previously, the proposed Project incorporates sustainable project design features and technology in both design and operation. The Air Cargo Sort Building would meet LEED certification standards and would be all-electric (no natural gas usage). A 1.5-Megawatt Solar PV Panel system also would be installed on the rooftop of the Cargo Sorting Building and the parking structure.	No
California Green Building Standards	Ensures new and existing buildings achieve various sustainable design parameters.	As a matter of regulatory compliance, the new buildings proposed as part of project would be constructed in accordance with applicable provisions of the CALGreen Code.	No
Executive Order S-3-05	Establishes statewide GHG reduction targets for California, including reducing GHG emissions to 1990 levels by 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050.	Statewide GHG reduction targets are not directly applicable to individual projects. However, the proposed Project would increase emissions at the Airport when compared to Baseline Conditions. Further, the Airport does not have the authority to regulate aircraft operations or emissions from aircraft	**Yes**

TABLE 5.7-7
PROPOSED PROJECT CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS ADOPTED TO REDUCE GREENHOUSE GAS EMISSIONS

Regulatory Framework	Plan, Policy, or Regulation	Project's Relationship	Is the Project in Conflict with Plan, Policy, or Regulation?
		engines. In light of the proposed Project's increase in GHG emissions above Baseline Conditions, the proposed Project may conflict with the State's ability to achieve statewide GHG reduction targets.	
Executive Order B-30-15	Establishes a statewide GHG reduction target of 40 percent below 1990 levels by 2030.	Same as above.	**Yes**
Executive Order B-55-18	Establishes a statewide GHG reduction target of carbon neutrality by 2045.	Same as above.	**Yes**
2022 Climate Change Scoping Plan	Sets a statewide strategy to achieve targets for carbon neutrality and a reduction in anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045.	Same as above.	**Yes**
SB 375	Requires each MPO in the state to develop a Sustainable Communities Strategy through integrated land use and transportation planning in order to attain per capita GHG reduction targets for passenger vehicles set by CARB for 2020 and 2035.	The RTP/SCS includes an Aviation and Ground Access appendix. The RTP/SCS notes that SCAG has no authority over airports or airport activity and that the FAA has this authority. SCAG is interested in how traffic going and coming from airports affects the roads, highways and transit systems in the region. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts and SCAG modeling	No

TABLE 5.7-7
PROPOSED PROJECT CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS ADOPTED TO REDUCE GREENHOUSE GAS EMISSIONS

Regulatory Framework	Plan, Policy, or Regulation	Project's Relationship	Is the Project in Conflict with Plan, Policy, or Regulation?
		estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. The Project would generate 450 additional truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. As such, the proposed Project would accommodate the regional movement of goods per SCAG projections.	
Zero-Emission Airport Shuttle Bus Regulation - CARB Rule	Requires fixed route airport shuttles serving the state's 13 largest airports to transition to 100 percent zero-emission vehicles (ZEVs) by 2035	The proposed Project would not directly affect the number or type of shuttle buses in operation at the Airport.	No
		Regional	
Southern California Association of Governments (SCAG) RTP/SCS	Identifies land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern	As indicated above relative to SB 375, emissions from forecasted activity levels proposed Project would accommodate the regional movement of goods per SCAG projections.	No
2021 San Bernardino County Regional	Includes an inventory of GHG emissions and evaluation of reduction	As it relates to the Airport, the 2021 San Bernardino County Regional Greenhouse Gas Reduction Plan	No

TABLE 5.7-7
PROPOSED PROJECT CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS ADOPTED TO REDUCE GREENHOUSE GAS EMISSIONS

Regulatory Framework	Plan, Policy, or Regulation	Project's Relationship	Is the Project in Conflict with Plan, Policy, or Regulation?
Greenhouse Gas Reduction Plan	measures to be adopted by 25 Partnership Cities within the County.	includes goals to include multimodal transit services near the Airport. This would encourage employees and visitors to utilize transit services more and reduce on-road vehicle usage. Therefore, this would reduce VMTs and subsequent GHG emissions generated by vehicles. As discussed in further detail in **Section 5.12: Transportation** of this EIR, local bus stops are located along the Airport Terminals 2 and 4 on East Terminal Way, at the Ontario-East Metrolink Station west of Mission Boulevard and South Haven Avenue, at Francis Street at Vineyard Avenue, and at the at Ontario Mills Mall. The proposed Project would not substantially change or eliminate bus facilities or transit routes, nor would it conflict with a policy or program related to transit access. New transit trips are anticipated to be generated by the proposed Project, but the proposed Project would not modify transit stop locations or change transit headways. The proposed Project would not conflict with the Ontario Plan policies regarding transit access and would not	

TABLE 5.7-7
PROPOSED PROJECT CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS ADOPTED TO REDUCE GREENHOUSE GAS EMISSIONS

Regulatory Framework	Plan, Policy, or Regulation	Project's Relationship	Is the Project in Conflict with Plan, Policy, or Regulation?
		conflict with RTP/SCS policies regarding transit access and reliability.	
		Local	
2019 Ontario International Airport AQIP	Includes measures to minimize and reduce emissions from mobile source activities at the Airport	As it relates to GHG emissions, the AQIP includes GSE and Fuel Truck Operation Policies (RM1 and RM2), which would result in a reduction of GHG pollutants. As discussed previously, under RM1, the Airport will establish a GSE policy that will promote the use of newer, cleaner equipment, which will likely have the effect of reducing emissions of pollutants such as NOx, PM, VOCs and GHGs. Under RM2, the Airport plans to develop a second jet fuel loading rack located on the south side of the AOA. This would reduce VMT of fuel trucks and possibly result in older trucks being retired. These measures would be applicable to the proposed Project as the proposed Project would utilize GSE and fuel trucks during operation. The proposed Project would not prevent the implementation of such measures. As such, the proposed Project would not conflict with the 2019 Ontario International Airport AQIP.	No

As also indicated under **Impact GHG-1**, the majority (i.e., over 75 percent) of the GHG emissions associated with future operation of the proposed Project are related to aircraft sources (i.e., aircraft, APU, and GSE). As discussed above, the federal Clean Air Act exclusively vests the authority to promulgate emission standards for aircraft and aircraft engines with the USEPA; states and other municipalities are preempted from adopting or enforcing any standard with respect to aircraft engine emissions unless such standard is identical to USEPA standards.

It is anticipated, however, that future aircraft-related GHG emissions will be lower than currently projected based on the continuing trend of improvements in aircraft engine design and lighter, more fuel-efficient aircraft, and use of cleaner aviation fuels, which would serve to reduce GHG emissions, even though these improvements are beyond the scope of the proposed Project and are not within the control of the OIAA. Moreover, future growth in activity at the Airport is acknowledged and included in SCAG's 2020-2045 RTP/SCS.

Notwithstanding these considerations, the proposed Project would nevertheless increase GHG emissions over baseline levels. As discussed under **Impact GHG-2** above, implementation of the proposed Project would have no conflicts with many of the plans, policies, and regulations that have been adopted for the purpose of reducing GHG emissions. However, the Project may conflict with some plans, policies, and regulations, including Executive Orders S-3-05, B-30-15, and B-55-18; and the 2022 Climate Change Scoping Plan due to its incremental contribution of additional GHG emissions to the atmosphere. As such, the proposed Project may conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Impacts would be significant.

5.7.4 CUMULATIVE IMPACTS

The GHG impacts addressed in this section are treated exclusively as cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. In its notice of proposed amendments to the CEQA Guidelines pertaining to GHG, the California Natural Resources Agency (CNRA) noted that the impacts of GHG emissions should be considered in the context of a cumulative impact, rather than a project impact. The public notice states:[78]

> *"While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact*

78 California Natural Resources Agency. *Notice of Public Hearings and Notice of Proposed Amendment of Regulations Implementing the California Environmental Quality Act*. August 2009. https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Notice_of_Proposed_Action.pdf. Accessed November 2022.

> *on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable."*

It is the accumulation of GHGs in the atmosphere that may result in global climate change. Climate change impacts are cumulative in nature and, thus, no typical single project would result in emissions of such a magnitude that it, in and of itself, would be significant on a project basis. A typical single project's GHG emissions will be small relative to total global or even statewide GHG emissions. The analysis of the significance of potential impacts from GHG emissions related to a single project is already representative of the long-term impacts on a cumulative basis. As such, the assessment of significance under CEQA is based on a determination of whether the incremental GHG emissions from the proposed Project represent a cumulatively considerable contribution to global climate change impacts. (See State CEQA Guidelines Section 15064.4(b)).

As indicated above, implementation of the proposed Project would result in a significant and unavoidable impact related to GHG emissions; hence, the proposed Project's incremental contribution of GHG emissions, both before and after mitigation, is considered to be cumulatively considerable.

5.7.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

As discussed under **Impact GHG-1** above, with implementation of the proposed Project, Airport-related annual GHG emissions would increase by approximately 79,798 $MTCO_2e$ annually for Phase 1 and 128,057 $MTCO_2e$ annually for Phase 2 when compared to Baseline GHG emissions. As such, the proposed Project would result in a net increase over Baseline Conditions and impacts would be significant.

As discussed under **Impact GHG-2** above, implementation of the proposed Project would have no conflicts with many of the plans, policies, and regulations that have been adopted for the purpose of reducing GHG emissions. However, the Project may conflict with some plans, policies, and regulations, including Executive Orders S-3-05, B-30-15, and B-55-18; and the 2022 Climate Change Scoping Plan due to its incremental contribution of additional GHG emissions to the atmosphere. As such, the proposed Project may conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Impacts would be significant.

5.7.6 MITIGATION MEASURES

As discussed above, GHG emissions from the proposed Project would result in an increase over Baseline Conditions during Phase 1 and Phase 2. As also indicated in **Table 5.7-6**, the majority (i.e., over 75 percent) of the GHG emissions associated with future operation of the proposed Project are related to aircraft sources (i.e., aircraft, APU, and GSE). The Airport does not have authority to regulate aircraft operations or emissions from aircraft engines as aircraft are a federal source regulated by the USEPA. **Section 5.2: Air Quality**, includes **Mitigation Measures AQ-1** through **AQ-7**, and **Section 5.12: Transportation**, includes **Mitigation Measures TRANS-1** through **TRANS-5**, which would also serve to reduce GHG emissions.

MM AQ-1: The Applicant shall require that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export with a gross vehicle weight rating of at least 14,001 pounds), that meet CARB's 2010 engine emissions standards or newer, cleaner trucks. The OIAA shall confirm that the Applicant includes this requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards and make the records available for inspection.

MM AQ-2: The Applicant shall require that construction equipment such as concrete/industrial saws, pumps, aerial lifts, light stands, air compressors, and forklifts be electric or alternative-fueled (i.e., non-diesel), where feasible. Pole power shall be utilized at the earliest feasible point in time and shall be used to the maximum extent feasible in lieu of generators.

MM AQ-3: The Applicant shall support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such as bulletin boards or email announcements. The Applicant also shall partially subsidize transit fares or passes for the construction crew members who can feasibly use transit. The Applicant shall set a goal to achieve ten percent total construction worker participation in ridesharing programs and transit use.

MM AQ-4: The Applicant shall require, in addition the GSE noted within **PDF AQ-3**, all other on-site cargo-handling equipment, such as yard trucks, holsters, yard goats, pallet jacks, and similar equipment, to be electric, with the necessary electrical charging stations provided.

MM AQ-5: The Applicant shall require, where feasible, the use of zero-emission project-related delivery trucks as part of business operations beginning in 2025 (within at least 25 percent of the Project fleet).

The Applicant also shall require, where feasible, the use of zero-emission project-related delivery trucks as part of the business operations beginning in 2029 (within at least 50 percent of the Project fleet).

MM AQ-6: The Applicant shall include in the design requirements for the Project that a cool roof be installed at the parking structure to reduce energy use and urban heat island effects. This requirement shall not apply if solar panels are installed on the parking structure.

MM AQ-7: The Applicant would encourage the use of single engine taxi operations for project aircraft.

There are no additional feasible mitigation measures that would reduce the proposed Project's GHG emissions to below significance because the majority of the GHG emissions associated with the Project would be generated by aircraft operations.

5.7.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

As discussed above, there are no feasible mitigation measures that would reduce the proposed Project's GHG emissions to less than significant levels, because the majority of the GHG emissions associated with the Project would be generated by aircraft operations and the federal Clean Air Act exclusively vests the authority to promulgate emission standards for aircraft and aircraft engines with the USEPA; states and other municipalities are preempted from adopting or enforcing any standard with respect to aircraft engine emissions unless such standard is identical to USEPA standards. For these reasons, there are no additional feasible mitigation measures that would reduce the proposed Project's GHG emissions to below significance and impacts would remain significant and unavoidable.

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5.8 HAZARDS AND HAZARDOUS MATERIALS

5.8.1 INTRODUCTION

This section evaluates the potential impacts of the proposed Project on the environment and human health due to exposure to hazardous materials or conditions associated with the Project site, proposed Project construction, and proposed Project operations. Potential Project impacts and appropriate mitigation measures are identified, as needed. The analysis in this section is based in part on the following technical reports:

- GSI Environmental. Phase I Environmental Site Assessment, Proposed 97-Acre Project Magellan Airport Cargo Distribution Center. December 10, 2021. Revised November 3, 2022. ("Phase I ESA"; DEIR **Appendix 5.8-1**).
- GSI Environmental. Phase II Environmental Site Assessment. Proposed 97-Acre Project Magellan Airport Cargo Distribution Center. October 5, 2022. Revised November 3, 2022. ("Phase II ESA"; DEIR **Appendix 5.8-2**).

5.8.2 ENVIRONMENTAL SETTING

5.8.2.1 Existing Conditions

The Project site sits within the Airport boundaries at the southern portion of the Airport. The Project site is approximately 97 acres in size and consists of the five parcels identified below and shown in **Figure 5.8-1: Existing Project Site Parcel Map**.

- Parcel 61/APN 011326106
- Parcel 62/APN 011326107
- Parcel 63/APN 011326108
- Parcel 67/APN 011327101
- Parcel 68/APN 011327102

The Project site includes existing buildings and hangars, ancillary structures, and parking facilities. Additional discussion of existing conditions on the Project site are included in *Section 5.8.3.2* below.

Past Uses of the Project Site

Operations at the Airport began in 1921 when the Ontario Aircraft Corporation was organized.[1] In 1929, it moved to a 30-acre parcel near the corner of Mission Boulevard and Grove Avenue in the southwestern corner of the airport. In 1940, an additional 405 acres were added to the Airport property. Until the mid to late 1950s, the Project site was primarily agricultural. In the 1940s, some vineyards were removed to construct portions of the airport. The Airport was utilized in support of World War II and, after the war, it was returned to the City of Ontario.

Parcel 61

Parcel 61 encompasses the western portion of the Project site, the central portion just north of East Avion Street, between Parcel 62 and Parcels 67 and 68, and the portion across East Avion Street to the south. Parcel 61 consists of approximately 48 acres. Parcel 61 is the largest parcel within the investigation area and as such, has been broken up into three sections – the western portion, designated as 61W herein; the central portion, designated as 61C herein; and the southern portion, designated as 61S herein (discussed below). Four hangars exist on the western portion of Parcel 61. Hangars 1 and 2 were constructed in the late 1940s and in 1950. Northrop Aircraft Company (Northrop) reportedly began manufacturing operations in Hangar 1. Hangar 3 was constructed in 1951. Sometime before 1953, Douglas Aircraft began operations in Hangar 2 or 3. In 1953, Hangar 4 was constructed, which Lockheed Aircraft occupied between 1955 and 1980. In approximately 1955, GE Engine Services, Inc. (GEES) moved operations to the site and Northrop vacated Hangar 1. GEES moved to Hangar 4 once Lockheed vacated the building in 1980. The former Los Angeles Police Department (LAPD) Emergency Vehicle Operations Course (EVOC) was previously located in the center of the Project site along the western border of Parcel 62.

Parcel 62

Parcel 62 encompasses the central portion of the Project site, surrounded by Parcel 61 to the west, south, and east. Parcel 62 consists of approximately 21 acres. This portion of the Project site was primarily agricultural use through the 1970s. In 1983, a hangar and office building were developed on Parcel 62 and by 1987, a second hangar was in use. By 1994, an outbuilding maintenance area was constructed and put into service. Additionally, previous record searches indicated that a fuel farm previously existed on the southwestern corner of the Project site and at least two clarifiers and a maintenance shop were also documented at the Project site.

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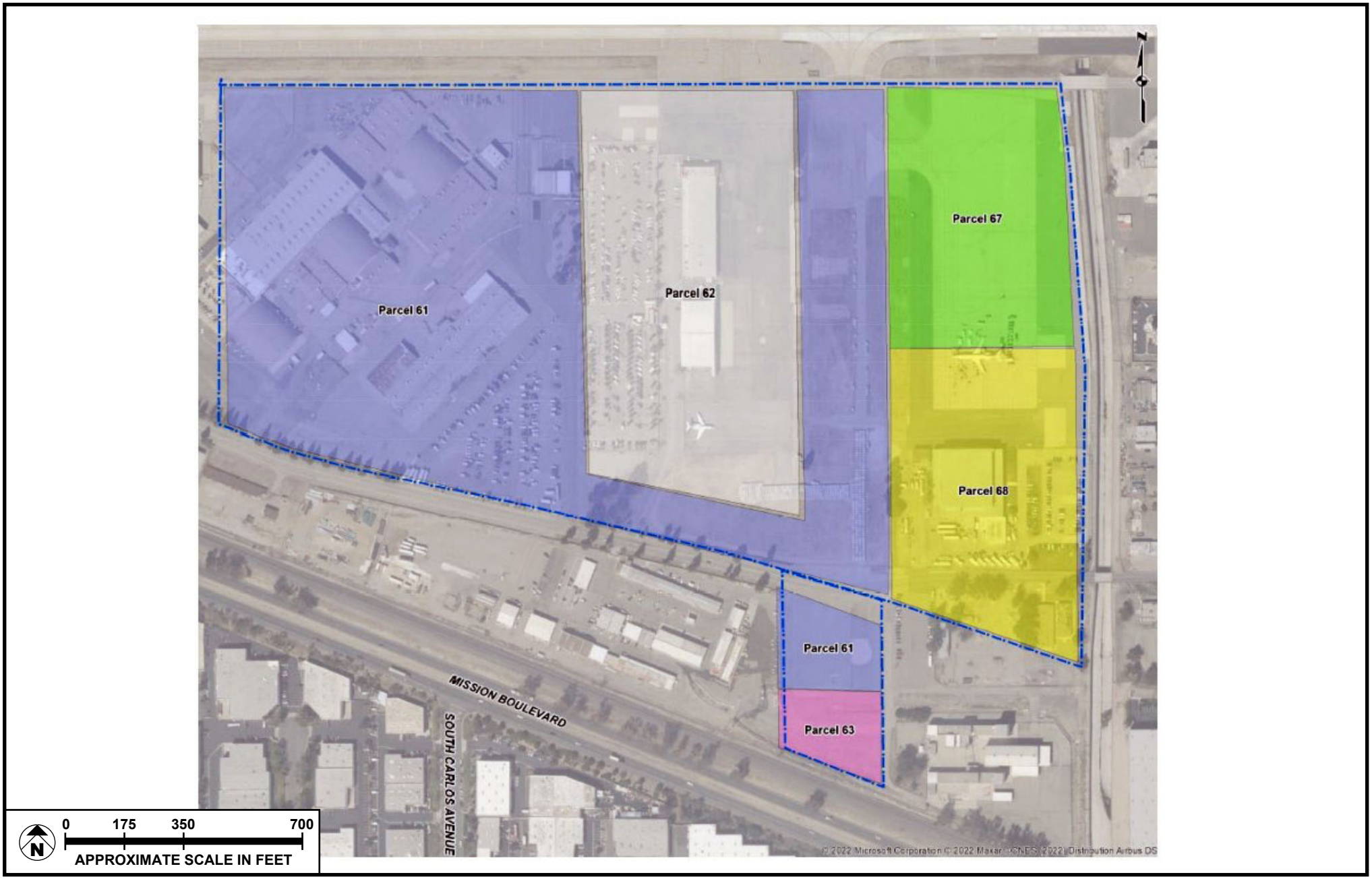
1 GSI Environmental. *Phase I Environmental Site Assessment*. December 10, 2021. Revised November 3, 2022. (see **Appendix 5.8-1**).



SOURCE: GSI Environmental - November 2022

FIGURE **5.8-1**

Meridian Consultants

Existing Project Site Parcel Map

332-001-21

The former LAPD EVOC was previously located in the center of the Project site along the western border of Parcel 62. Between 2002 and 2008, Parcel 62 did not change significantly.

Parcels 67 and 68

Parcels 67 and 68 are the eastern-most parcels of the Project site. Parcel 67 is adjacent to the Airport runway and north of Parcel 68. Parcel 68 is just north of East Avion Street. Parcel 67 consists of approximately 12 acres and Parcel 68 consists of approximately 14 acres. The area around Parcel 67 and 68 included a skeet-shooting range in the mid-1940s. The Ontario Air National Guard Station (ANGS) was located on Parcel 68 with ancillary structures to the south and east. From 1943 to 1948, the army maintained the area and in 1952, the 196th Tactical Air Support Group was assigned to the Airport. The facilities were updated at this time and the operations included maintenance of aircraft, vehicles, and aerospace ground equipment. In the 1950s, a hangar, fire station, fueling station, and wash rack were constructed over the skeet-shooting range. A munitions bunker was constructed in the 1950s and later used by Lockheed in the 1990s for storage of ammunition and explosives. The 196th Tactical Air Support Group vacated the site in 1983 and the 148th Combat Communications Squadron (CBCS) occupied the Site from 1984 through 1998. The ANGS was closed in September 1998.

Southern Parcels 61 and 63

Parcel 61S and 63 are located just south of East Avion Street and north of the railroad. The southern portion of the site is comprised of small portions of Parcel 61 and Parcel 63. Parcel 63 consists of approximately 2 acres. This location has been previously used for agriculture and parking. It is the possible location of a former bunker and includes a large storm drain outlet.

5.8.2.2 Regulatory Background

The regulations governing the storage and handling of hazardous materials are complex, with a varying degree of overlap associated with existing federal, State, and local programs. In general, applicable laws and regulations are aimed at hazardous materials inventory and emergency response planning, risk planning and accident prevention, employee hazard communication, public notification of potential exposure to specific chemicals, and storage of hazardous materials, including aboveground storage tanks (ASTs) and underground storage tanks (USTs). A description of the major regulations, policies, and programs regulating hazardous materials storage and handling applicable to activities at the Project site is provided below.

Federal

The US Environmental Project Agency (USEPA) is the primary federal agency that regulates hazardous materials and waste. In general, the USEPA works to develop and enforce regulations

that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs, as well as delegates to states and tribes the responsibility for issuing permits, for monitoring, and enforcing compliance. USEPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Under the authority of the Resource Conservation and Recovery Act (RCRA), and in cooperation with State and tribal partners, the Waste Management Division manages a hazardous waste program, an underground storage tank program, and a solid waste program that includes development of waste reduction strategies, such as recycling.

Regulations

Resource Conservation and Recovery Act (RCRA)

The RCRA of 1976 is the principal federal law that regulates the generation, management, and transportation of waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste. Treatment is any process that changes the physical, chemical, or biological character of the waste to reduce its potential as an environmental threat. Treatment can include neutralizing the waste, recovering energy or material resources from the waste, rendering the waste less hazardous, or making the waste safer to transport, dispose of, or store.

The RCRA gave the USEPA the authority to control hazardous waste from "cradle to grave," that is, from generation to transportation, treatment, storage, and disposal. The RCRA also set forth a framework for the management of nonhazardous wastes. It should be noted that RCRA focuses only on active and future facilities, and does not address abandoned or former sites.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—better known as Superfund—provides federal funds to clean up uncontrolled or abandoned hazardous waste sites, accidents, spills, discharges, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, USEPA was given authority to seek out those parties responsible for any hazardous release and ensure their cooperation in the cleanup.

Superfund Amendments and Reauthorization Act

Superfund Amendments and Reauthorization Act (SARA) reauthorized CERCLA to continue cleanup activities throughout the country. Several site-specific amendments, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities.

Emergency Planning and Community Right-to-know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986,[2] commonly known as Title III of the SARA, was enacted by Congress as national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. The primary purpose of EPCRA is to inform communities and citizens of chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored on site to State and local agencies. These reports help communities prepare response strategies for chemical spills and similar emergencies. Section 313.1 of EPCRA requires manufacturers to report releases to the environment (air, soil, and water) of more than 600 designated toxic chemicals; report off-site transfers of waste for treatment or disposal at separate facilities; implement pollution prevention measures and activities; and participate in chemical recycling. These annual reports are submitted to the USEPA and State agencies. The USEPA maintains and publishes a database that contains information on toxic chemical releases and other waste management activities by certain industry groups and federal facilities. This online, publicly available, national digital database is called the Toxics Release Inventory (TRI) and was expanded by the Pollution Prevention Act of 1990.

To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC) to coordinate planning and implementation activities associated with hazardous materials. The SERCs were required to divide their states into emergency planning districts and to name a local emergency planning committee (LEPC) for each district. The federal EPCRA program is implemented and administered in California, by the California Governor's Office of Emergency Services (Cal OES), a SERC, 6 LEPCs, and 83 Certified Unified Program Agencies (CUPAs). Cal OES coordinates and provides staff support to the SERC and LEPCs.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976[3] was enacted by Congress to give the USEPA the ability to track the approximately 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and can require reporting or testing of any that may pose an environmental or human health hazard. It can ban the manufacture and import of chemicals that pose an unreasonable risk. Also, the USEPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. It was given the authority to control these

2 42 USC sec. 11001 et seq., *Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986*.

3 *Toxic Substances Control Act of 1976*. 15 USC sec. 2601 et seq.

chemicals as necessary to protect human health and the environment. Within that authority, the Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos-containing materials (ACMs), radon, and lead-based paint. The act supplements other federal statutes, including the Clean Air Act and the TRI under EPCRA.

Lead Renovation, Repair, and Painting Program

USEPA's Lead Renovation, Repair, and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, childcare facilities and pre-schools, built before 1978 have their firm certified by USEPA (or an USEPA authorized state), use certified renovators who are trained by USEPA-approved training providers, and follow lead-safe work practices.

Hazardous Materials Transportation Act

The transportation of hazardous materials by air, including packaging, labeling, and reporting, is regulated under the Hazardous Materials Transportation Act. The U.S. Department of Transportation (USDOT), in conjunction with the USEPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The Code of Federal Regulations (CFR) Title 49, Sections 171–180, regulate the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials. The Hazardous Materials Transportation Act specifies restrictions on the type of hazardous materials that may be carried on aircraft and requires notification of airports where a transfer of the materials is planned.

International Air Transport Association (IATA)

In addition to complying with federal regulations, air carriers operating at the Airport also comply with the guidelines of the International Air Transport Association (IATA). IATA has developed and issued detailed transport guidelines for association members worldwide that categorically prohibit air transport of certain hazardous materials that are considered too dangerous to be transported by air and that provide detailed instructions for transporting those materials that are allowed on aircrafts. Restrictions on the type of hazardous materials that may be carried on an aircraft vary between passenger and cargo flights. Prohibited goods include most explosives, any substance that could evolve heat or gas under conditions of normal transport, inhalation poisons, many flammable materials, and a long list of other chemicals. The IATA guidelines are recognized worldwide and are reviewed and updated annually. Individual air cargo carriers also have health and safety guidelines that cover handling of hazardous materials, employee health and safety, and specific in-flight storage for each make and model of aircraft.

Disaster Mitigation Act of 2000

Disaster Mitigation Act (42 USC § 5124) provides the legal basis for the Federal Emergency Management Agency (FEMA) mitigation planning requirements for State and local governments as a condition of mitigation grant assistance. The Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and the streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include funding pre-disaster mitigation activities; developing experimental multi-hazard maps to better understand risk; establishing State and local government infrastructure mitigation planning requirements; defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program; and adjusting ways in which management costs for projects are funded.

State

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was created in 1991 with the signing of Executive Order W-5-91 by Governor Pete Wilson. Several State regulatory boards, departments, and offices were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment, as well as to assure the coordinated deployment of State resources. Among those responsible for hazardous materials and waste management include the Department of Toxic Substance Control (DTSC), Department of Pesticide Regulation, the State Water Quality Control Board and its Regional Water Quality Control Boards (RWQCB), and Office of Environmental Health Hazard Assessment. CalEPA also oversees the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which consolidates, coordinates, and makes consistent the following six programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans);
- Underground Storage Tank (UST) Program;
- Aboveground Petroleum Storage Tank Act;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs;
- California Uniform Fire Code: Hazardous Material Management Plans and Inventory Statements; and
- California Accidental Release Prevention (CalARP) Program.

In addition, in compliance with California Public Resources Code Section 3229, before commencing any work to abandon any oil well, the owner or operator shall file with the California Geologic Energy Management Division (CalGEM), formerly known as the Division of Oil, Gas, and Geothermal Resources, a written notice of intention to abandon the well (California State Division of Oil, Gas and Geothermal Resources form OG108).

Department of Toxic Substances Control

DTSC is authorized by CalEPA to administer the hazardous waste laws and oversee remediation of hazardous waste sites. Regulations require that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: (1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (HSC)."[4]

The DTSC regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff ensure that companies and individuals handle, transport, store, treat, dispose of, and clean up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment. DTSC's role is limited to projects with State funding.

The waste facilities identified in HSC Section 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under the HSC, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.

Unified Program and Certified Unified Program Agency

Under the Unified Program, (Chapter 6.11, Division 20, Section 25404 of the Health and Safety Code), hazards/hazardous materials management is addressed locally through the CUPA. The CUPA for the County is the San Bernardino County Fire Department (SBCFD). As a CUPA, San Bernardino County Fire Department manages the following six hazardous material and hazardous waste programs:

- Business Plan;

4 California Government Code. Section 65962.5.

- CalARP;
- USTs;
- Aboveground Petroleum Storage Act (APSA)/Spill Prevention, Control, and Countermeasure Plan (SPCC Plan);
- Hazardous Waste Generation and On-site Treatment; and
- Hazardous Materials Management Plans and Inventory Statements under Uniform Fire Code Article 80.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) has set forth work requirements for disturbance of ACMs, including removal operations for all types of ACMs. In addition, the agency has developed standards for general industry and the construction industry's hazardous waste operations, and emergency response. Cal/OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous materials and oversees an informational program describing any exposure during operations and the inspection of drums and containers prior to removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations.

Regulations

Senate Bill 14: California Hazardous Waste Source Reduction and Management Review Act of 1989

The California Hazardous Waste Source Reduction and Management Review Act of 1989, also known as Senate Bill (SB) 14, requires large-quantity generators—those that annually produce more than 13.2 tons of hazardous waste or 26.4 pounds of extremely hazardous waste—to periodically conduct a source evaluation of their facilities and develop plans to reduce their volume of hazardous waste through measures such as changes in raw materials production methods, product reformulations, and employee training.[5] The primary objective of the legislation was to reduce the quantity of hazardous waste generated in California and thereby promote public health and improve environmental quality. Generators that exceed the

[5] California Department of Toxic Substances Control (DTSC). "SB14 Introduction and Overview" (July 2012). Available at: https://dtsc.ca.gov/sb14/sb14-introduction-and-overview/. Accessed May 2021.

aforementioned waste volume thresholds are required to file waste minimization reports with DTSC every 4 years.

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, local governments, and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by Cal OES, which coordinates the responses of other agencies, including CalEPA, the California Highway Patrol, the RWQCB, and the SBCFD.

Hazardous Waste Control Act

The Hazardous Waste Control Act (HWCA) is the State equivalent of RCRA and regulates the generation, treatment, storage, and disposal of hazardous waste.[6] This act implements the RCRA "cradle-to-grave" waste management system in California but is more stringent in its regulation of non-RCRA wastes, spent lubricating oil, small-quantity generators, and transportation and permitting requirements, as well as in its penalties for violations. HWCA applies to the proposed Project because contractors would be required to comply with its hazardous waste requirements to reduce the possibility of spills.

Hazardous Materials Management Plans

In January 1996, CalEPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program).[7] As noted previously, the six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment; underground storage tanks; aboveground storage tanks; hazardous material release response plans and inventories; risk management and prevention programs; and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency, the CUPA, which is responsible for consolidating the administration of the six program elements within its jurisdiction.

State and federal laws require detailed planning to (1) ensure that hazardous materials are properly handled, used, stored, and disposed of; and (2) in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

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6 DTSC. *California Hazardous Waste and Hazardous Substances Law*. California Code of Regulations. Title 22. Division 4.5. Environmental Health Standards for the Management of Hazardous Waste.

7 CalEPA. "Unified Program." Available at: https://calepa.ca.gov/cupa/. Accessed October 2022.

California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act)

The Business Plan Act requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (HSC, Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State. Local agencies are responsible for administering these regulations. Several State agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including CalEPA and Cal OES. The California Highway Patrol and California Department of Transportation (Caltrans) enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways. The Business Plan Act applies to this Project because contractors will be required to comply with the associated handling, storage, and transportation requirements that would reduce the possibility of spills, as well as to prepare an emergency response plan to respond to accidental spills.

California Government Code Section 65962.5: Cortese List

California Government Code Section 65962.5 identifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. While Section 65962.5 makes reference to the preparation of a list, information regarding the Cortese List is now compiled on the websites of the DTSC, the State Water Resources Control Board, and CalEPA. The DTSC maintains the EnviroStor database, which includes sites on the Cortese List and also identifies potentially hazardous sites where cleanup actions or extensive investigations are planned, are currently underway, or have occurred. The database provides a listing of federal Superfund sites, State response sites, voluntary cleanup sites, and school cleanup sites. The EnviroStor database provides access to detailed information on hazardous waste permitted sites and corrective action facilities, as well as existing site cleanup information. EnviroStor also provides information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted, or have been completed under DTSC's oversight. The RWQCB maintains the GeoTracker database which manages sites that impact, or have the potential to impact, water quality in California. The GeoTracker database includes sites

that require cleanup, are under current investigation/remediation, or have been closed with a status not requiring further investigation.

Lead Based Paint Regulations

Lead-based paint (LBP) is defined as any paint, varnish, stain, or other applied coating that has a one milligram per square centimeter (mg/cm^2) (5,000 microgram per gram or 0.5 percent by weight) or more of lead. The US Consumer Product Safety Commission (16 CFR 1303) banned paint containing more than 0.06 percent lead for residential use in 1976. Buildings built before 1978 are much more likely to have LBP.

The demolition of buildings containing LBPs is subject to a comprehensive set of California regulatory requirements developed to ensure the safe handling and disposal of these materials. Cal/OSHA has established limits for exposure to lead contained in dusts and fumes. These regulations also mandate good working practices for workers that may be exposed to lead during demolition of buildings containing LBP, including requiring respiratory protection devices for workers. Lead-contaminated debris and other wastes must also be managed and disposed of in accordance with applicable provisions of the California Health and Safety Code.

Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) regulates asbestos through Rule 1403, Asbestos Emissions from Renovation/Demolition Activities. Rule 1403 regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and cleanup procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of asbestos-containing structures, asbestos storage facilities, and waste disposal sites. SCAQMD also regulates volatile organic compound (VOC) emissions from contaminated soil through Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil. Rule 1166 sets requirements to control the emission of VOCs from excavating, grading, handling, and treating soil contaminated with VOCs as a result of leakage from storage or transfer operations, accidental spillage, or other deposition.

Regulations

San Bernardino County Hazardous Materials Release Response Plans and Inventory Program

In San Bernardino County, the Business Emergency/Contingency Plan (Business Plan) is also used to satisfy the contingency plan requirement for hazardous waste generators. Any business subject to any of the CUPA permits is required in San Bernardino County to file a Business Emergency/Contingency Plan using the California Environmental Reporting System. This submission is used as the basis for the permit application. A new business going through the process of obtaining planning or building approval is required to comply with the Business Emergency/Contingency Plan requirement prior to obtaining final certificate of occupancy and prior to bringing hazardous materials onto the property.

The quantities that trigger disclosure are based on the maximum quantity on site at any time, excluding materials under active shipping papers or for direct retail sale to the public. The basic quantities are hazardous materials at, or exceeding, 55 gallons, 500 pounds, or 200 cubic feet at any time in the course of a year; this includes specified amounts of radioactive and extremely hazardous substances above the threshold planning quantity.[8]

San Bernardino County Hazardous Waste Management Plan

Assembly Bill 2948 (Chapter 1504, Statutes of 1986), commonly known as the Tanner Bill, authorized counties to prepare Hazardous Waste Management Plans (HWMP) in response to the need for safe management of hazardous wastes. The County of San Bernardino HWMP was adopted by the County Board of Supervisors and approved by the California Department of Health Services in February 1990. The County HWMP serves as the primary planning document for the management of hazardous waste in the County. It identifies the types and amounts of wastes generated in the County; establishes programs for managing these wastes; identifies an application review process for the siting of specified hazardous waste facilities; identifies mechanisms for reducing the amount of waste generated in the county; and identifies goals, policies, and actions for achieving effective hazardous waste management. Hazardous materials and waste are managed by the San Bernardino County Fire Department Hazardous Materials Division (HMD).

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8 San Bernardino County Fire Protection District. "Hazardous Materials Release Response Plans and Inventory." Available at: https://sbcfire.org/hazmatbusinessplan/. Accessed July 2022.

Hazardous Materials Disclosure Programs

Both the federal government (Code of Federal Regulations, USEPA, SARA, and Title III) and the State of California (California State Health and Safety Code, Division 20, Chapter 6.95, Sections 25500–25520; Title 19 California Code of Regulations, Chapter 2, Sub-Chapter 3, Article 4, Sections 2729–2734) require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials, termed a reporting quantity, to submit a Hazardous Materials Business Plan to its local CUPA.

According to the San Bernardino County Fire Department HMD guidelines, the preparation, submittal, and implementation of a business plan is required by any business that handles a hazardous material, or a mixture containing a hazardous material, in quantities equal to, or greater than, those outlined below:

- Any business that uses, generates, processes, produces, treats, stores, emits, or discharges a hazardous material in quantities at or exceeding 55 gallons, 500 pounds, or 200 cubic feet (compressed gas) at any one time in the course of a year.
- All hazardous waste generators, regardless of quantity generated.
- Any business that handles, stores, or uses Category I or II pesticides, as defined by the federal Insecticide, Fungicide, and Rodenticide Act, regardless of amount.
- Any business that handles USDOT Hazard Class 1 (explosives, found in 49 CFR Part 173), regardless of amount.
- Any business that handles extremely hazardous substances in quantities exceeding the threshold planning quantity. Extremely hazardous substances are designated pursuant to the EPCRA Section 302 and are listed in 40 CFR Part 355.
- Any business subject to the EPCRA, also known as SARA Title III. Generally, EPCRA includes facilities that handle hazardous substances above 10,000 pounds or extremely hazardous substances above threshold planning quantities. There are some exceptions, including retail gas stations with up to 75,000 gallons of gasoline or 100,000 gallons of diesel fuel in USTs that meet the 1998 upgrade requirements.
- Any business that handles radioactive material that is listed in Appendix B of Chapter 1 of 10 CFR.

Businesses are required to update their business plan with the San Bernardino County Fire Department HMD annually. The entire plan must be reviewed and recertified every three years. In addition, the plan must be revised within 30 days of change of owner, business address,

business name, emergency contact information, inventory, or other site conditions that may significantly impact emergency response.

City of Ontario Hazard Mitigation Plan

The City of Ontario developed a Hazard Mitigation Plan to make the City infrastructure, business and residents less vulnerable to future incidents. The plan was prepared in accordance with the requirements of the Disaster Mitigation Act of 2000. A risk assessment was conducted to identify and profile natural and man-made hazards that pose a risk to the City, assess the City's vulnerability to these hazards, and examine the capabilities in place to mitigate them. Based on the risk assessment, goals and objectives for reducing the City's vulnerability to hazards were identified. The four goals of the multi-hazard mitigation plan are:[9]

- Minimize loss of life and property from natural and man-made hazard events
- Protect public health and safety
- Increase public awareness of risk from natural and man-made hazards
- Enhance emergency systems including warning systems

The Ontario Plan

The following goal and policies contained in the Safety Element (Hazardous Materials and Waste) of the Ontario Plan are relevant to the proposed Project:

Goal S6: Reduce potential for hazardous materials exposure and contamination.

- **S6-1, Disclosure and Notification.** We enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport.
- **S6-2, Response to Hazardous Materials Releases.** We respond to hazardous materials incidents and coordinate these services with other jurisdictions.
- **S6-4, Safe Storage and Maintenance Practices.** We require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.

9 City of Ontario. *Hazard Mitigation Plan (2018).* Available at: https://www.ontarioca.gov/sites/default/files/Ontario-Files/Fire/Ready%20Ontario/city_of_ontario_2018_hmp.pdf. Accessed July 2022.

- **S6-5, Location of Hazardous Material Facilities.** We regulate facilities that will be involved in the production, use, storage, or disposal of hazardous materials, pursuant to federal, state, county, and local regulations, so that impacts to the environment and sensitive land uses are mitigated.
- **S6-9, Remediation of Methane.** We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.

City of Ontario Municipal Code

Municipal Code Section 7-3.07. Safety devices, lights, and barricades. Any activity or encroachment on a right-of-way which is hazardous, creates a hazard, or is in conflict with the normal use of a right-of-way, shall be adequately safeguarded as required by the City. In the conduct of such activity or encroachment, materials, supplies, excavated material, and equipment shall be properly placed, and the permittee shall provide and maintain such safety devices, including, but not limited to, lights, barricades, signs, and guards, as are necessary to protect the public.

Ontario International Airport Land Use Compatibility Plan

The Ontario International Airport Land Use Compatibility Plan (ALUCP) was adopted by Ontario City Council on April 19, 2011, and most recently updated in July of 2018. As discussed in **Section 4.0: Environmental Setting** of this EIR, the Ontario Airport Land Use Compatibility Plan (ALUCP) does not impose any zoning restrictions or other regulations relating to the aviation or aeronautical operations and development at the Airport.[10,11,12,13,14,15] The Project site is

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10 City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan*, *Chapter 1 Background and Methodology*. Functions of the Compatibility Plan. Page 1-2. July 2018 Amendment. Available at: https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

11 City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan, Chapter 2 Procedural and Compatibility Policies*. Section 1.3.1. Page 2-4. July 2018 Amendment. Available at: https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

12 City of Ontario. "Ontario International Airport – Inter Agency Collaborative." Available at: https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

13 California Public Utilities Code. Section 21674(e).

14 Height restrictions within the boundaries of ONT are governed only by Federal Aviation Administration Regulations Part 77.

15 California Department of Transportation (Caltrans). *California Airport Land Use Planning Handbook*. October 2011. Page 6-7.

located at the Airport in an area identified for Future Aeronautical Development on the Airport Layout Plan included as Exhibit 1-6 in the ALUCP. The proposed Project includes aircraft apron areas and a fixed base air cargo facility, which is an anticipated and allowed aviation-related use under the ALUCP.

However, the ALUCP designates the airport influence area, safety zones, noise impact zones, airspace protection zones, and overflight notification zones. Height and noise restrictions for future land uses are established for the airport approach safety zones. All development shall be constructed or reconstructed in accordance with Federal Aviation Regulations Part 77.

Figure 5.8-2: Ontario Airport Safety Zones shows the Project site within the Airport's Influence Area (AIA), partially within Safety Zone 5 in the ALUCP.[16] Safety Zone 5 compatibility area (Sideline Zone) is located primarily on Airport property, adjacent to the runway, approximately 500 to 1000 feet from centerline.

OIAA Design and Construction Handbook

Section 15 Fire & Life Safety Requirements

C. City of Ontario Fire Department

1. Contractor is responsible for meeting City of Ontario laws, rules, and regulations and obtaining a fire permit.
2. Contractor shall coordinate inspection by a City of Ontario, Fire Code Official to confirm compliance with local rules and regulations.
3. Contractor shall review City of Ontario Fire Department standards forms at https://www.ontarioca.gov/fire/fire-prevention/standards-forms and confirm necessary fire plan requirements and submittals.

D. OIAA Fire and Life Safety Requirements

1. Class 1.1 explosives and any explosives not acceptable for transportation under applicable federal regulations are not permitted at the Airport, unless written authorization is granted by OIAA.
2. Contractor shall not transport Class 1.3 explosives in or upon the Airport unless Contractor has received prior authorization from the OIAA and is in compliance with:

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16 Ontario International Airport. *Airport Land Use Compatibility Plan* (Updated July 2018). Available at: https://www.ont-iac.com/airport-land-use-compatibility-plan/. Accessed March 2022.

a. FAA ONT Air Traffic Control, ONT ARFF, Airport Police, and ONT Airport Operations are notified in advance of the type and amount whenever these explosives are in transit throughout the Airport.
b. Contractor shall not store explosives at ONT, unless prior authorization by OIAA permits the storage of such materials.
c. Contractor shall not store, keep, handle, use, dispense, or transport, in or upon the Airport, the following including but not limited to any explosives, blasting agents, flammable liquids, combustible liquids, flammable solids, oxidizers, organic peroxides, corrosive materials, flammable gases, nonflammable gases and poisons, unless prior authorization is given by OIAA.

3. Poisons B, irritating materials (ORM A, B, C, D, and E), or cryogenic liquids shall not be stored, kept, handled, used, dispensed, or transported, in or upon the Airport, at such time, place, or in such a manner as to endanger unreasonable persons or property. For purposes of his hazardous class scheme, 49 CFR, Parts 171-177, as amended, shall be utilized.

4. Regulated hazardous materials at ONT include, but are not limited to, those regulated in:

a. 49 CFR, Parts 100 through 199, as amended.
b. The Director's List, as amended, issued by the Director of the California Department of Industrial Relations in Title 8, California Code of Regulations, Section 339.
c. Sections 66680 and 66685 of Title 22 of the California Administrative code, as amended.
d. Environmental Protection Agency (USEPA) pollutants, 40 CFR, Section 401.15, as amended.
e. The list of hazardous materials prepared by the San Bernardino County Director of Health pursuant to the SBSO Health Code. Hazardous materials regulated shall also include any material which has been determined to be hazardous based upon any appraisal or assessment by or on behalf of the party storing this material in compliance with USEPA or California Department of Health Services requirements, or which should have been but was not determined to be hazardous due to the deliberate failure of the party storing the material.

LEGEND

Boundary Lines

- Airport Property Line
- County Line
- City Limits
- Street
- Existing Runways } Runway 8L-26R
- Future Runways } Runway 8R-26L

Policy Boundaries

- Airport Influence Area (beyond map view)

Safety Zones[1]

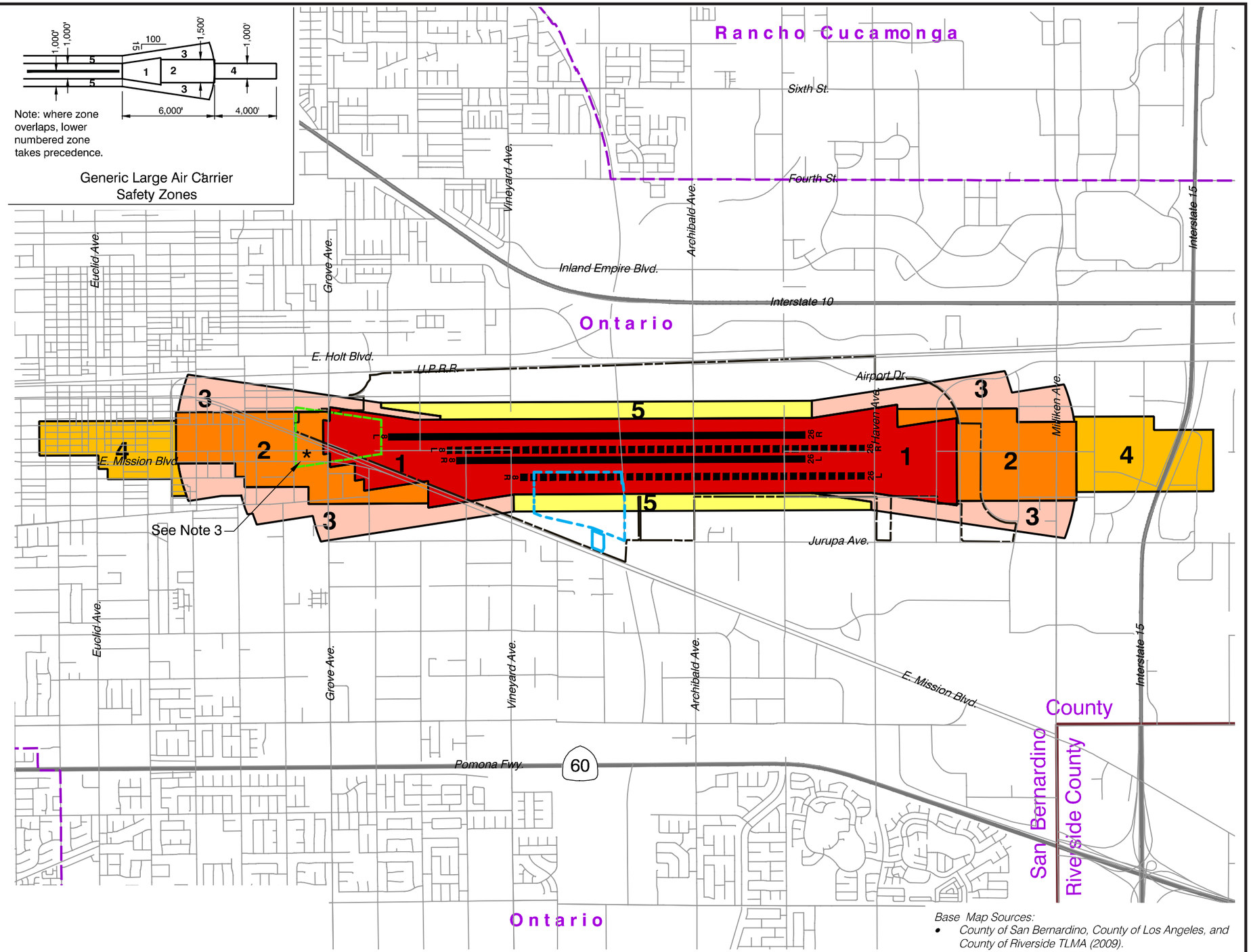
- Zone 1 - Runway Protection Zone (RPZ)
- Zone 2 - Inner Approach/Departure Zone
- Zone 3 - Inner Turning Zone
- Zone 4 - Outer Approach/Departure Zone
- Zone 5 - Sideline Zone
- Overlay Safety Zone 1A[3]

NOTES

1. See **Section 6.1** and **Table 2-2** for safety policies and criteria. Policies apply only to City of Ontario.
2. Avigation easement dedication required within all safety zones (see **Policy S7** and **SP1**).
3. See **Section 6.1.5 (c)** for Zone 1A explanation.

Note: where zone overlaps, lower numbered zone takes precedence.

Generic Large Air Carrier Safety Zones



Legend

- Project Site

0 1500 3000 6000

APPROXIMATE SCALE IN FEET

Base Map Sources:

- *County of San Bernardino, County of Los Angeles, and County of Riverside TLMA (2009).*

SOURCE: Mead&Hunt - 2022

FIGURE **5.8-2**

Meridian Consultants

Ontario Airport Safety Zones

332-001-21

5. Contractor shall adhere to all applicable regulations governing explosives which are acceptable for transportation. Any other material subject to federal or state regulations governing hazardous materials must be handled in strict compliance with those regulations and any additional regulations deemed necessary by OIAA. Any waiver of such regulations by the FAA or other competent authority shall not be a waiver to this rule.
6. Contractor shall give an advance notice of at least twenty-four (24) hours to OIAA through ONT Airport Emergency Dispatchers for any operations requiring permission pursuant to this rule.

Ontario International Airport Rules and Regulations

Section 6 Fire Safety

6.2 Handling of Explosives and Other Hazardous Materials

1. Class 1.1 explosives and any explosives not acceptable for transportation under applicable federal regulations are not permitted at ONT, unless a written waiver authorizing such materials is granted by the ONT CEO or his/her authorized representative.
2. No person shall transport Class 1.3 explosives in or upon the Airport unless in compliance with the following:
    a. The FAA ONT Air Traffic Control Tower (ATCT), OFD Station 10, OPD Airport Bureau, and ONT Airside Operations are notified in advance of the type and amount whenever these explosives are in transit through the Airport.
    b. All federal, state and city laws are adhered to by the operator of the aircraft.
    c. Aircraft with an in-flight malfunction shall attempt to land at a military installation before continuing to ONT for landing.
    d. No person shall store explosives at ONT, unless a prior written waiver authorizing the storage of such materials is granted by the ONT CEO or his/her authorized representative.
    e. No person shall store, keep, handle, use, dispense, or transport, in, or upon the Airport, any explosives, blasting agents, flammable liquids, combustible liquids, flammable solids, oxidizers, organic peroxides, corrosive materials, flammable gases, nonflammable gases and poisons.
3. Poisons B, irritating materials (ORM A, B, C, D and E), or cryogenic liquids shall not be stored, kept, handled, used, dispensed or transported, in, or upon the Airport at

such time or place or in such a manner or condition as to endanger unreasonable or as to be likely to endanger unreasonable persons or property. For purposes of this hazardous class scheme, the USDOT definitions as contained in 49 CFR, Parts 171-177, as amended, shall be utilized.

4. Hazardous Materials regulated at ONT shall include, but not be limited to, those materials enumerated in:

    a. Regulations of the U. S. Department of Transportation published in 49 CFR, Parts 100 through 199, as amended.
    b. The Director's List, as amended, issued by the Director of the California Department of Industrial Relations in Title 8, California Code of Regulations, Section 339.
    c. Sections 66680 and 66685 of Title 22 of the California Administrative Code, as amended, as a hazardous and/or extremely hazardous material or hazardous and/or extremely hazardous waste or non-waste form.
    d. The list of USEPA) pollutants, 40 CFR, Section 401.15, as amended.
    e. A list of hazardous materials prepared by the San Bernardino County Director of Health pursuant to the SBSO Health Code. Hazardous materials regulated shall also include any material which has been determined to be hazardous based upon any appraisal or assessment by or on behalf of the party storing this material in compliance with the requirements of the USEPA or the California Department of Health Services, or which should have been but was not determined to be hazardous due to the deliberate failure of the party storing the material to comply with the requirements of the USEPA and/or the Department of Health Services.

5. All applicable regulations governing explosives, which are acceptable for transportation, must be strictly adhered to. Any other material subject to federal or state regulations governing hazardous materials must be handled in strict compliance with those regulations and any other more restrictive regulations that the ONT CEO or an authorized representative might deem necessary to impose. Any waiver of such regulations or any part thereof by the FAA or by any other competent authority shall not constitute, or be construed to constitute, a waiver of this rule.

6. Advance notice of at least twenty-four (24) hours shall be given to the ONT CEO or his/her authorized representative through OFD Dispatch, (909) 983-5911, for any operations requiring permission pursuant to this rule.

7. Permission may be given for the movement of radioactive materials only when such materials are packaged, marked, labeled, and limited as required by regulations applying to transportation of explosives and other dangerous articles and which do

not create undue hazard to life or property at ONT. OFD Station 10 shall provide the ONT CEO or his/her authorized representative with information relative to the hazards of any material subject to this Section.

8. All Airport tenants involved with the handling of hazardous materials must provide the Airport with a Hazardous Materials Removal Plan. The plan will include the name of the company used for removal of hazardous materials and the names and 24-hour telephone numbers of tenant staff authorized to handle such removals. The plan will be updated annually.

6.8 Control of Contaminants

1. No fuel, oil, grease, flammable liquids, or contaminants of any kind; including, detergents, polishing compounds or metal etching agents, used to dry wash aircraft or other surfaces, shall be allowed to flow into or be placed in any sewer system, storm drain, or open water area, not equipped with an OIAA permitted separator, clarifier, or industrial waste system.
2. Equipment used to scrub pavement surfaces must have the capability of picking up all cleaning water for disposal at a location equipped with a permitted clarifier authorized for such use.

6.9 Fueling Operations

As part of the OIAA Stormwater Pollution Prevention Program (SWPPP), the OIAA has developed Best Management Practices (BMP) related to aircraft, vehicle, and equipment fueling, they are:

1. Aircraft refueling is prohibited when the aircraft being refueled engine(s) are running. Aircraft Auxiliary Power and Ground Power Units are exempt.
2. Per NFPA Section 407 guidelines for fueling operations during lightning activity, refueling operations shall be discontinued when lightning ground strike frequency and intensity occurring within 5 statute miles of ONT indicates refueling safety is compromised, as determined by ONT Airfield Operations, (909) 214-7682 or (909) 214-7683.

6.10 Fuel Spills

1. In the event of a fuel spill of any type (Jet A, 100 Octane Low Lead gas, or Automobile Gasoline), in any amount, the fueling operator, or individual responsible, shall immediately notify OFD Dispatch, (909) 983-5911; additionally, the individual

(company) shall also immediately notify ONT Airside Operations, (909) 2 1 4 – 7682 or (909) 214 -7683.

2. Should passengers evacuate an aircraft while at a passenger terminal due to a fuel spill, passengers shall not be re-admitted to the Passenger Boarding Bridge or the aircraft until permitted by OFD Station 10 personnel.

3. In the event of fuel spillage, when there is no apparent presence of fire, fuel delivery units shall not be moved until the spillage is dispersed or removed. Spilled fuel must be cleaned up immediately and the area secured. No aircraft or vehicular movement shall be allowed in the area until authorized by OFD Station 10 personnel.

6.11 Aviation Fuel Delivery Permits

All Petroleum Product delivery companies or brokers, who engage in fuel delivery (by hydrant or tanker truck) to the OIAA and tenants' storage facilities, or buy and sell fuel from storage facilities, shall be required to obtain a Fuel Delivery Permit. All companies who provide plane fueling are required to obtain a Non-Exclusive License Agreement issued by the ONT CEO or his/her authorized representative, through the OIAA. See Section 8, Operating Permits/Fees.

6.12 Tenant Fueling Agents

1. ONT Tenants, who perform Fueling Agent services, must have for their employees, an approved training program conforming to FAA, Part 139.321, regulatory standards.

2. At least one Fueling Supervisor, employed onsite by an ONT permitted Fueling Agent, must have completed an FAA certificated aviation fuel training course, in fire safety, prior to commencing fueling operations.

   Recurrent supervisory training, in aviation fuel fire safety, must be completed within every 24 calendar months.

3. ONT Fueling Agents must provide annual written certification to the ONT CEO or his/her authorized representative, through OFD Station 10, (909) 544-5490, that all required training within this Section has been accomplished.

6.13 Aircraft Parts Cleaning Materials

Cleaning of aircraft parts and other equipment shall be done preferably with non-flammable cleaning agents. When flammable combustibles must be used, only liquids having flash points in excess of 100 degrees Fahrenheit (38 degrees Celsius) shall be used

and special precautions shall be taken to eliminate ignition sources in compliance with good practice recommendations of the uniform fire code and the NFPA.

6.14 Paint, Varnish, and Lacquer Use

For paint, varnish, or lacquer spraying operations, the arrangement, construction, ventilation, and protection of spraying booths, as well as the storing and handling of materials, shall be in accordance with the standards of the California State Fire Code, Air Resources Board – Air Quality Management District regulations.

6.15 Sewage, Industrial Waste, Toxic and Hazardous Waste

1. Tenants shall comply with the requirements of OIAA Hazardous Materials Management Policy regarding the discharge of sewage and industrial waste.
2. No person shall generate, store, keep, handle, transport, treat or dispose of hazardous waste (as defined by the Resource Conservation and Recovery Act, Title 40, CFR Part 261 or succeeding legislation) in or upon the Airport.

6.16 Methanol Storage

1. Methanol shall be treated in the same manner as automobile gasoline.
2. A maximum of two containers of methanol may be stored at gate positions in areas not in or under buildings or stairways.
3. The bulk storage of methanol will be on leaseholds only.

9.39 Transportation of Dangerous Goods and Hazardous Material (HAZMAT)

1. Dangerous Goods and Hazardous Material (HAZMAT) spills can adversely impact airport operations and the overall safety of the traveling public and airport employees alike. Exceptional care must be exercised when transporting HAZMAT at ONT.
2. Transportation of approved FAA explosives on the ONT AOA requires prior written permission from OPD Airport Bureau. Possession of USDOT Class 1.1 explosives are strictly prohibited at ONT and are subject to Federal prosecution and imprisonment.
3. OFD Station 10, and City of Ontario Fire Department Fire Inspectors, have the right to conduct inspections of all airport property (public, leased and private) for the safe use and storage of HAZMAT. Any HAZMAT violation shall be reported to the OIAA for review and further administrative action.

5.8.3 ENVIRONMENTAL IMPACT ANALYSIS

5.8.3.1 Thresholds of Significance

The potential for the proposed Project to result in impacts associated with hazards and hazardous materials is based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

5.8.3.2 Methodology

Phase I ESA

A Phase I Environmental Site Assessment (ESA) was completed for the Project site. The Phase I ESA was conducted in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) International, Inc., Standard E 1527-13, *Standard Practice for*

Environmental Site Assessments and the standards of care and diligence normally practiced by recognized consulting firms in performing services of a similar nature. The assessment included:

- Review of the physical setting and Project site reconnaissance;
- Review of historical information from Sanborn fire insurance maps, topographic maps, aerial photographs, and city directories;
- Review of prior Project site reports provided by OIAA or obtained from regulatory agencies;
- Information obtained from owner and/or user interviews;
- Review of available agency files;
- Review of regulatory agency database information for the Project site and surrounding properties.

The purpose of the Phase I ESA was to identify recognized environmental conditions (RECs) as defined in the ASTM Standard. The Project site was assessed for the following: hazardous substances and petroleum products used or stored at the site; potential USTs; ASTs; evidence of releases; PCBs; strong, pungent, or noxious odors; pools of liquid; drains, sumps, and clarifiers; pits, ponds, and lagoons; and stressed vegetation.

A three-day site reconnaissance was performed in October 2021 to observe current site conditions and identify and document potential notable environmental conditions. A hazardous waste storage shed was found on the Project site but was empty at the time of survey. Another hazardous waste storage structure was found next to Hangar 4 and flammable material storage cabinets were observed throughout the site.

Previous documents identified and reported the removal of multiple Aboveground Storage Tanks (ASTs) and USTs throughout the history of the Project site. A previous report identified seven USTs associated with the Beechcraft West fuel farm and the removal of five USTs adjacent to the former California Air National Guard (ANG) Hangar.[17] Both areas had been backfilled with soil and gravel. A UST closure report from 1992 identified five USTs to the west of the OIAA administration building; two USTs to the north of Hangar 1 and its ancillary structures, one UST northeast of Hangars 1 and 2; two USTs southwest of Hangar 2; and one UST south of the current Air Museum. Three concrete secondary containment structures were observed where ASTs had

17 GSI Environmental. *Phase I Environmental Site Assessment*. (see **Appendix 5.8-1**).

been held. Two ASTs were observed in secondary containers inside a shed at the former ANG maintenance yard.

Multiple storage drums were observed throughout the Site. A waste oil drum (<55-gallon) within a secondary containment drip pan was observed as well as a larger drum (approximately 85 gallons) inside the boiler room. A 55-gallon drum labeled EA-200 was observed inside a shed within the former maintenance yard. Four oil drums for waste and Jet-A fuel, two gas and oil drums with absorbent pads on top, and a poly drum with unknown liquid were observed inside the Guardian Jet Center southern building. An empty 55-gallon drum labeled 1A2/Y1.2/100 was observed inside the hazardous storage hangar adjacent to Hangar 4. Two diesel 55-gallon drums and one 55-gallon waste coolant drum in secondary containers were observed inside Building 5.

Based on the age of the existing buildings, it is possible that PCBs were used at the Project site, including in electrical transformers. Based on a 1997 Phase I ESA conducted by Encorp, PCBs were identified in the lighting fixtures at the former ANG Hangar. A 1990 Phase I by CDM recommended the sampling of soil around the former transformer pad near the Beechcraft West Fuel Farm for PCBs, as well as the sampling of soil at a former electrical box on the eastern edge of the National Guard lease area. However, no PCBs were reported. The observed exterior transformers did not show indications of spillage or staining during the Site reconnaissance.

Other observations included a single groundwater monitoring well, multiple clarifiers found on-site, soil stockpiles, and instances of concrete staining.

Phase II ESA

A Phase II ESA was also completed for the Project site.[18] The purpose of the Phase II ESA was to address the RECs identified in the Phase I ESA by assessing soil and soil vapor conditions at the Project site, and to establish a baseline understanding of the existing subsurface conditions and potential risk to human health in the future structures in connection with the proposed Project.

Phase II ESA investigation activities were conducted between February 23 and March 23, 2022, to provide further evaluation of site conditions identified in the Phase I ESA. These investigations included drilling 143 soil borings on Parcels 61, 62, 63, and 68, and collecting soil and soil vapor samples to evaluate subsurface conditions. The soil borings were advanced to depths between approximately 3 to 15 feet below ground surface (bgs). Borings were collected at approximately

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18 GSI Environmental. *Phase II Environmental Site Assessment*. October 5, 2022. Revised November 3, 2022. (see **Appendix 5.8-2**).

5 feet using a hand auger followed by truck- and/or track-mounted direct-push drilling equipment, in order to minimize soil disruption and cross-contamination. Recovered borings were screened in the field for the presence of volatile organic compounds (VOCs) (see **Appendix 5.8-2** for results of in-field screening). Samples were then transported following chain-of-custody protocols to Advanced Technology Laboratories (ATL) of Signal Hill, California, and/or Vista of El Dorado Hills, California, which are State environmental laboratory accreditation program (ELAP) certified laboratories, and analyzed for one or more of the following:

- Title 22 metals including mercury using USEPA Methods 6010B/7471A;
- VOCs using USEPA Method 8260B;
- Total petroleum hydrocarbons (TPH) quantified as C4-C12, C13-C23, and C23-C32 using USEPA Method 8015B;
- Semi-Volatile Organic Compounds (SVOCs) using USEPA Method 8270C;
- Polycyclic Aromatic Hydrocarbons (PAHs) using USEPA Method 8270SIM;
- PCBs using USEPA Method 8082;
- Organochlorine Pesticides (OCPs) using USEPA Method 8081A;
- Chlorinated Herbicides using USEPA Method 8051A; and
- Per- and Polyfluoroalkyl Substances (PFAS) using the Vista PFAS Isotope Dilution Method for the 23 PFAS analytes. This method is compliant with Department of Defense (DoD) Table B-15 of Quality Systems Manual (QSM), dated 2017, version 5.1 or later.

Temporary soil vapor probes were installed at 23 boring locations at depths of approximately 5 and 15 feet. The probes were installed according to the CalEPA Advisory for Active Soil Gas Investigations. Soil vapor sampling activities were conducted between April 18 and April 21, 2022, and consisted of performing a "shut-in test"[19] as well as collecting samples. The soil vapor samples were analyzed in the field in a mobile laboratory for VOCs (see **Appendix 5.8-2** for results of in-field screening).

Samples collected were analyzed and compared to screening levels, including CalEPA, Department of Toxic Substances Control (DTSC) modified screening levels (SLs), USEPA regional screening levels (RSLs), San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFBRWQCB ESLs) and background levels. SFBRWQCB ESLs were used since

[19] To achieve a minimum vacuum of 100 inches of water maintained in the sampling train for a minimum duration of 1 minute.

the SFBRWQCB has adopted standards for two PFAS analytes, while the Santa Ana RWQCB has not yet adopted standards for PFAS.

5.8.3.4 Project Impacts

Would the Project:

HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact.

Construction Impacts

Project-related construction activities would involve the use of some standard materials classified as hazardous including fuels, lubricants, and greases in construction equipment and coatings used in construction. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. Activities requiring use of hazardous materials would also be short term in nature or single-use instances and would cease upon completion of the proposed Project's construction phase. Project construction workers would also be trained in safe handling and hazardous materials use.

Additionally, the use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations to ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Furthermore, strict adherence to all emergency response plan requirements set forth by San Bernardino County Fire Protection District (SBCFPD) and the Ontario Fire Department would be required through the duration of the proposed Project construction phase. Therefore, hazards to the public or the environment arising from the routine use of hazardous materials during proposed Project construction would be less than significant.

Operational Impacts

Operation of the Air Cargo Sort Building would involve the use of materials common to airport uses that are labeled hazardous, such as solvents, commercial cleansers, and petroleum

products, and would include the limited use of pesticide and herbicides for landscape maintenance. The aircraft apron would include underground hydrant fueling system infrastructure for fueling aircrafts at the parking positions, north of the Air Cargo Sort Building. Trucks accessing the Project site would contain oil, gasoline, and diesel fuel to power their engines, which could have the potential to result in minor releases of such substances through drips or leaks from truck loading areas.

These activities associated with the proposed Project would not involve the use of unusually high quantities of any materials identified as hazardous. Consistent with existing and former Airport operations for the delivery of fuel for aeronautical activities, project operation would involve ground transport of fuels and other materials related to air cargo transport. Because suppliers and transporters are required to follow Department of Transportation regulations for packaging and handling, the regulatory requirements are such that containers would be unlikely to release their contents in the event of an accident. Requirements for waste containers are more stringent than requirements for incoming non-waste materials containers.

An existing aviation fuel line currently serves the Airport. Fuel is provided by fuel trucks to the areas of the Airport that do not have a connection to the fuel line. The OIAA plans to construct a new fuel storage facility immediately northwest of the existing Airport boundary and add a new fuel supply line and supporting fuel infrastructure to provide hydrant fueling capabilities. OIAA anticipates that construction will take 18 to 24 months and proposes operations will begin by the fourth quarter of 2025. As part of the overall upgrade, the Project site would have access to the fuel supply line, along with other operations on the south side of the Airport. The planned fuel line would connect to the Project site at the northeast corner. Aircraft fuel would be delivered to the Project site via trucks until this fuel supply line is available. Trucks would stay within the Airport boundaries and would not travel outside onto public streets. Additionally, the completion of the underground fuel pipeline and fueling hydrants for aircraft would limit the need to transport fuels via tanker trucks, thereby eliminating the potential risk of truck accidents. For Phase 1, while the underground fuel pipeline and fueling hydrants are being completed, fuel trucks would be utilized to transport aircraft fuel from the existing Airport fuel farm to the proposed Project site. Aircraft fuel trucks would operate in compliance with the fueling operations and fuel spills rules set forth in the Ontario International Airport Rules and Regulations to minimize the risk of fuel release.

The proposed Project would be reviewed by the SBCFPD for hazardous material use, safe handling, and storage of materials. Prior to the issuance of grading permits, construction plans for the proposed Project would be reviewed and approved by the SBCFPD to reduce hazardous material impacts and ensure that any hazardous waste that is generated on site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and

federal law. Further, as described above, consistency with regulatory requirements, facilities, equipment, and procedures currently in place to respond to an accidental release of hazardous substances would result in minimal risk of release during proposed Project operation. Therefore, implementation of the proposed Project would result in less than significant impacts related to the routine transport, use, or disposal of hazardous materials; no mitigation is required.

HAZ-2: **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Less Than Significant with Mitigation Incorporated.

No evidence of RECs in connection with the Project site were observed in the Phase I ESA, with the exception of those identified in **Table 5.8-1: RECs Identified**.[20] RECs are defined in the ASTM Standard as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."[21]

TABLE 5.8-1
RECs IDENTIFIED

Parcel	Map Feature Number	Explanation of REC
61 W	1	**General Electric Hangar 4 Area** – Historical use, including the use of chlorinated solvents as well as storage and dispensing of fuel in the vicinity of the GE Leasehold throughout the 1980s and early 1990s was likely to have released containments to the environment. Historical use of this area is indicative of a release to the environment and is considered a REC.
		Hangar 4 (Outside) – A maintenance/storage shed is located in the northwest corner surrounded with a chain-link fence. Historical maintenance/storage sheds can often store leaking and damaged

20 GSI Environmental. *Phase I Environmental Site Assessment*. (see **Appendix 5.8-1**).

21 American Society for Testing and Materials (ASTM). "Standard Practice for ESAs." Available at: https://www.astm.org/e1527-21.html. Accessed July 2022.

TABLE 5.8-1
RECs IDENTIFIED

Parcel	Map Feature Number	Explanation of REC
		equipment that release contaminants to the environment. Historical use of this area is indicative of a release to the environment and is considered a REC.
		Hangar 4 (Inside) – Release of chemicals to the environment were observed from multiple stored chemical buckets, including buckets that may contain PFAS chemicals that are commonly used in AFFF fire suppression foam. Observed release to the environment is considered a REC.
		Hangar 4 Inside Haz Storage Building (61W-23) – This area contained an empty 55-gallon drum labeled 1A2/Y1.2/100. Historical drum storage areas are indicative of sources of containment release to the environment. Historical use of this area also included hazardous waste storage which is indicative of a release to the environment and is considered a REC.
61W	10	**Hazardous Waste Storage Structure** – Historical hazardous waste storage buildings often have stored damaged containers that release contaminants to the environment indicative of sources of contaminant release to the environment. This structure has a drain located in the middle of the concrete slab, which may have provided a direct path to the subsurface for any hazardous waste that was released within the structure. Historical use of this area for hazardous waste storage is indicative of a release to the environment and is considered a REC.
61W	10	**Second Storage Awning** – This drum storage area was identified as a Hazardous Waste Management Unit (HWMU) in historical documents. Historical drum storage areas are indicative of sources of containment release to the environment. Historical use of this area for hazardous waste storage is indicative of a release to the environment and is considered a REC.
61W	17A	**Hangar 5** – Facilities utilized to repair and clean parts are often sources of contaminant release to the environment. Historical records have identified poor housekeeping with chemicals spilled to the ground surface. Historical use and documentation of release to the environment is considered a REC
61W	23	**Hazardous Waste Storage Building** – See 61W-1
61W	24	**Maintenance/storage shed** – See 61W-1

TABLE 5.8-1
RECs IDENTIFIED

Parcel	Map Feature Number	Explanation of REC
61W	26	**Hazardous Waste Storage Area** – A hazardous waste storage area was identified in historical reports but was not observed during the Site Reconnaissance. Historical hazardous waste storage buildings often have stored damaged containers that release contaminants to the environment. Documented historical use of this area for hazardous waste storage is indicative of a release to the environment and is considered a REC.
61W	29	**Historical AST and Waste Treatment Area –** A historical AST and waste treatment area was identified in historical documents, but the ASTs were not observed during the Site Reconnaissance. Historical ASTs and the associated waste treatment area could be a source of contaminant release to the environment. Documented historical use of this area for waste and the presence of a sump is indicative of a release to the environment and is considered a REC.
61W	30	**Hangar1 –** This area has historically been used for hazardous waste storage, and evidence of release to the environment has been identified. A sump is present in the vicinity of the area of release. Historical sumps and drains often funnel waste and contaminants and release contaminants to the environment, and the presence of hydraulic oil leaking from equipment in the area is indicative of a release to the environment and is considered a REC.
61W	30	**4 Garages North of Hangar 1 –** Parts cleaning equipment and drum rinsing area and associated sump are indicative of a release to the environment and are considered a REC.
61W	32	**Building 5 – Structure 4 –** A leaking aircraft cart, a power pack cart leaking oil, an anti-freeze container open with contents inside, and 3 totes of empty lubricant oil in the back of a golf cart were observed. The observed release to the environment of hazardous substances or petroleum products is a REC.
61W	32	**Building 5 – Outside Storage Area –** Portable airplane hydraulic repair lifts, airplane equipment, crane lifts, batteries, possible oil tank trailer, and Air Force portable air conditioner trailers with air compressors inside. The observed release to the environment of hazardous substances or petroleum products within Building 5, Structure 4 is a REC.

TABLE 5.8-1
RECs IDENTIFIED

Parcel	Map Feature Number	Explanation of REC
61W	37, 38, 39, 40, 41, 43, 44	**Historical USTs –** Documentation of the removal and/or subsurface sampling in the vicinity of the USTs has not been identified. Subsurface USTs often leak and are indicative of a release to the environment. The historical presence of USTs with no closure documentation is a REC.
61C	4	**Historical Clarifier with Wash Racks and Surface Staining –** Clarifiers and wash racks are known to leak contents to the subsurface and impact the vadose zone with petroleum products. Additionally, red staining indicates that fire retardant was released to the environment from historical ASTs. An observed release to the environment and conditions indicative of a release to the environment are a REC.
61C	8	**Historical Clarifier –** Clarifiers are known to leak contents to the subsurface and impact the vadose zone with petroleum products or other waste. The former presence of a clarifier is indicative of a possible release to the environment and is a REC.
62	2	**Historical Clarifier –** Clarifiers are known to leak contents to the subsurface and impact the vadose zone with petroleum products. Evidence of rust or corrosion to the clarifiers indicates that these may have released contaminants to the environment. The presence of a clarifier is indicative of a release to the environment and is a REC.
62	5	**Guardian Jet Center East –** An above ground AFFF fire suppression tank and three 250-gallon-capacity Ansulite totes containing AFFF were observed. AFFF Fire Suppression chemicals and equipment may release PFASs to the environment. The observation of fire suppression equipment is a condition indicative of a release to the environment and is a REC.
62	8	**Guardian Jet Center (southern building) –** Unmarked drums, drums that were missing screw caps, used oil filters, general staining on the floor, and staining on the AFFF were observed. AFFF fire suppression chemicals and equipment will release PFASs to the environment and generally poor housekeeping is a source of impact to the environment. The observation of fire suppression equipment as well as generally poor housekeeping in the vicinity of waste storage are conditions indicative of a release to the environment and considered a REC.

TABLE 5.8-1
RECs IDENTIFIED

Parcel	Map Feature Number	Explanation of REC
62	9	**Historical Clarifier –** Clarifiers are known to leak contents to the subsurface and impact the vadose zone with petroleum products. Evidence of rust or corrosion to the clarifiers indicates that these may have released contaminants to the environment. The presence of a clarifier is indicative of a release to the environment and is a REC..
62	13	**Former Beechcraft West Fuel Farm –** Historical documents identify the former Beechcraft West Fuel Farm contained seven USTs with a capacity of 88,000 gallons. The USTs were reported to have been removed. Some remaining impact appears to have been left below the area of UST T7. No closure documents were identified during this investigation. The removal of USTs without closure documentation and documented impact remaining in the subsurface beneath a former UST is a REC.
68	2	**Historical Clarifier and Wash Rack –** Clarifiers and wash racks are known to impact the subsurface with the chemicals washed from the equipment. The presence of a wash rack and potential clarifier is indicative of a release to the environment and is a REC.
68	6, 7	**Historical USTs –** The USTs were closed and no further action was recommended. However, no documentation of regulatory closure of the UST area was identified during this investigation, so this area is considered a REC.
68	12	**Historical Autoshop and Fire House –** Although documented use of fire suppression chemicals was not observed during the reconnaissance, fire suppression chemicals are a source of contaminant release to the environment. The observation of fire suppression equipment is a condition indicative of a release to the environment and is a REC.
68	17	**Boiler Room –** An observed leaking waste drum located within a containment drip pan is representative of historical use and indicative of release to the environment and is a REC.
68	20	**Historical USTs –** The USTs were closed and no further action was recommended. However, no documentation of regulatory closure of the UST area was identified during this investigation. In addition, a 2001 Phase I ESA indicated that a second UST was present in this area and was not accounted for during the removal of the USTs. The potential presence of a

TABLE 5.8-1 RECs IDENTIFIED		
Parcel	Map Feature Number	Explanation of REC
		remaining UST as well as the lack of documented closure for the UST that was removed in this area is a REC.
68	22-1	**Historical Clarifier –** Clarifiers are known to leak contents to the subsurface and impact the vadose zone with petroleum products or other waste. The former presence of the clarifier is indicative of a release to the environment and is a REC.

Source: GSI Environmental. *Phase I Environmental Site Assessment*. December 10, 2021. Revised November 3, 2022. (see **Appendix 5.8-1**).

As identified in the Phase I ESA based on former uses of the Project site, the constituents of concern include: metals, petroleum hydrocarbons, volatile organic compounds (VOCs), semi-volatile compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), herbicides, per- and polyfluoroalkyl substances (PFAS), asbestos containing materials, and lead-based paint.

As discussed above, the Phase II ESA was conducted to assess soil and soil vapor conditions at the Project site, as well as to establish a baseline understanding of the existing subsurface conditions and potential risk to human health by drilling 143 soil borings on Parcels 61, 62, 63, and 68, and collecting soil and soil vapor samples to evaluate subsurface conditions. Results of soil and soil vapor sampling at the Project site are provided below.

Soil

- SVOCs, PCBs, and chlorinated herbicides were not detected above laboratory reporting limits in soil samples collected.
- Metals, total petroleum hydrocarbons (TPH), VOCs, PAHs, and OCPs, were detected above laboratory reporting limits but below their respective commercial/industrial DTSC SLs and SFBRWQCB ESLs screening levels.
- One or more per- and polyfluoroalkyl substances (PFAS) analytes were detected in 18 of the 28 samples analyzed at a concentration above their respective laboratory reporting limits. The PFAS detections were identified in the vicinity of the Guardian Jet Center and southern hangar buildings, and the former fire house building adjacent to the former National Guard hangar. Four of the 18 samples had reported concentrations that

exceeded their respective screening levels (SFBRWQCB ESL) for PFOS and Perfluorooctanoic acid (PFOA).

The Phase II ESA noted the presence of PFAS impacted materials where Aqueous Film-Forming Foam (AFFF) is currently stored and in soils within the northern and southern Guardian Jet Center hangars, and former fire house associated with the former ANG facility.

PFAS are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Fluoropolymer coatings can be in a variety of products including furniture, adhesives, food packaging, heat-resistant non-stick cooking surfaces, and the insulation of electrical wire.[22] Although PFAS are not currently regulated under the CERCLA as a hazardous waste and PFAS analyte concentrations were below established USEPA RSLs, caution when handling materials and soils contaminated with PFAS is recommended due to their human health risks, which are still being developed/assessed by regulatory authorities. On August 26, 2022, USEPA released a proposed rule designating two PFAS analytes – PFOA and PFOS as "hazardous substances" under CERCLA. This proposed rule is currently out for public comment and the USEPA may list additional PFAS as hazardous substances. As the potential human health risks of PFAS are currently under study by regulatory authorities, avoidance of contact with soils containing PFAS during construction is recommended. Based on these results, impacts related to the release of PFAS into the environment are potentially significant.

Mitigation Measure HAZ-1, development, approval, and implementation of a Soil Management Plan (SMP) would be required by the OIAA reduce the potential for accidental exposure to hazardous materials that may be present in soil that may be disturbed by construction of the Project to a less than significant impact.

Soil Vapor

Trichloroethylene (TCE) and chloroform were the only two VOC constituents with concentrations exceeding their respective commercial/industrial USEPA attenuation factor (AF) SLs and only TCE exceeded the commercial/industrial DTSC AF SL. TCE soil vapors exceeded the commercial/industrial USEPA AF SL in 13 samples and exceeded the commercial/industrial DTSC AF SL in four samples. All TCE exceedances were either within the General Electric leasehold building, also identified as Hangar 4, or within the proposed western building footprint.

22 Centers for Disease Control and Prevention. "Per- and Polyfluorinated Substances (PFAS) Factsheet." Available at: https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html#:~:text= s, Accessed June 2022.

Based on the results of the additional investigations conducted for the Phase II ESA, **Mitigation Measure HAZ-2** includes installation of a vapor intrusion mitigation system (VIM system) under the proposed Air Cargo Sort Building to prevent potential vapor intrusion from the subsurface. Installation of the VIM would reduce the potential for this exposure to a less than significant impact. With implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, impacts would be less than significant.

HAZ-3: **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Less Than Significant Impact.

There are no schools located within 0.25 miles of the Project site. The nearest school to the Project site is Bon View Elementary School, located approximately two (2) miles southwest. The proposed Project would not emit hazardous emissions or include the handling of hazardous or acutely hazardous materials, substances, and/or wastes within one-quarter mile of an existing or proposed school. Any transport of hazardous substances or materials to-and-from the Project site that may occur during construction and operation of the Project would comply with applicable federal, State, and local regulations intended to reduce public safety hazards.

Refer to **Section 5.2: Air Quality** for analysis pertaining to human health risks associated with the proposed Project's air pollutant emissions. An air quality analysis was conducted to determine the ambient concentrations at nearby receptors which would result from project construction and operations. As concluded in **Section 5.2: Air Quality**, concentrations of toxic air contaminant emissions (and their associated health risks) would be less than significant to all sensitive receptors, including schoolchildren near the Project site and the primary truck travel routes to/from the Project site.

The proposed Project would not pose a significant risk of hazardous emissions, or significant handling of hazardous materials or substances, within one-quarter mile of an existing or proposed school. Therefore, impacts would be less than significant.

HAZ-4: **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Less Than Significant Impact.

As discussed above, California Government Code Section 65962.5 identifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. These lists include the DTSC EnviroStor database and the RWQCB GeoTracker. As part of the Phase I ESA, a review of the DTSC EnviroStor database was conducted to determine listed sites in the vicinity of the Project site. The Project site is not on the list of solid waste disposal sites identified by the SWQCB, list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO), or list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTS.[23] The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The search results also identified six sites within the Project's vicinity; three sites were listed as "inactive-needs evaluation," one listed as "no further action," one listed as "certified closed," and the last site is listed as "refer: RWQCB." For the sites that were determined to be ongoing or have not been officially closed, the appropriate lead agency and responsible parties would continue to oversee the implementation and completion of the identified cleanup action items. Construction and operation of the Proposed project on the Project site does not have the potential to affect the contamination on these sites due to the distance between the Project Site and these sites, as well as the type and extent of contamination on these sites.

The search results also included the SWQCB GeoTracker database. The search results found eight sites listed within the vicinity of the Project site; one site was listed as "open-site" as of 2019, one site was listed as "open-verification" as of 2010, and all others were noted as "completed-case closed." As with the DTSC system, the SWQCB assigns a lead agency to manage each listed site and control the undertaking of remediation. The appropriate lead agency controls the cleanup of each listed site. Construction and operation of the Proposed Project on the Project site do not have the potential to affect the contamination on these sites due to the distance between the Project Site and these sites.

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would also not be affected or impacted by contamination identified in the general vicinity of the proposed Project site. For these reasons,

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23 GSI Environmental. *Phase I Environmental Site Assessment*. (see **Appendix 5.8-1**).

the Project would not create a significant hazard to the public or the environment. Impacts would be less than significant.

HAZ-5: **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

Less Than Significant with Mitigation Incorporated.

Construction Impacts

The ALUCP designates the airport influence area, safety zones, noise impact zones, airspace protection zones, and overflight notification zones. Height and noise restrictions for future land uses are established for the airport approach safety zones. All construction activities would comply with applicable aviation-related regulations safeguards, including the Hazardous Materials Transportation Act Code of Federal Regulations Part 77 – Safe, Efficient Use, and Preservation of Navigable Airspace; ALUCP; and requirements in the OIAA Design and Construction Handbook. Compliance with these regulations would ensure the proposed Project would not create a safety hazard for construction workers or future employees, nor result in development incompatible with Airport operations. In addition, exposure of construction workers to a safety hazard would be minimized by implementing the measures required by Occupational Safety and Health Administration (OSHA) 29 CFR Section 1926.65, Appendix C, and CalOSHA standards under Title 8, CCR Section 3203 and 29 CFR 1910.1200. Compliance with these regulations would establish exposure limits for workers, require protective equipment or other protective measures when warranted, and require employers to provide a written health and safety program, worker training, emergency response training, and medical surveillance. Compliance would ensure that construction workers are appropriately trained for the identification of contaminated soils and that contaminated materials encountered or generated during construction, and ensure they are properly stored, remediated, and disposed of. Impacts associated with exposure of construction workers to hazardous materials in excess of OSHA and CalOSHA permissible exposure limits would be less than significant.

As stated in **Section 5.10: Noise**, construction noise levels would not exceed the 85 dBA (Leq-1hour) threshold at nearby sensitive receptors, nor would construction result in excessive noise for people residing or working in the proposed Project area. Therefore, although the proposed Project would be located at a public airport, construction of the proposed Project would not result in a safety hazard or excessive noise for people residing or working in the project area.

Impacts related to a safety hazard or excessive noise for people residing or working in the Project area during construction would be less than significant.

Operational Impacts

As discussed above, the ALUCP designates the airport influence area, safety zones, noise impact zones, airspace protection zones, and overflight notification zones. Height and noise restrictions for future land uses are established for the airport approach safety zones. As discussed above, the proposed Project is an aviation-related use that is allowed under the ALUCP.

As indicated in the ALUCP, the Project site is also within the Airport's Influence Area (AIA), which contains the safety zones within the Airport. The Project site is partially within Safety Zone 5.[24] The Safety Zones are determined based upon the generic safety zones provided in the California Airport Land Use Planning Handbook and take into account historic aircraft accidents, existing aircraft flight patterns and aircraft characteristics, as well as the pattern of accidents. Safety Zone 5 is located primarily on airport property, adjacent to the runway, approximately 500 to 1000 feet from centerline. As a proposed aeronautical development, the proposed Project is consistent with the aeronautical development identified as allowed on the Airport Layout Plan (ALUCP, Chapter 1, Exhibit 1-6) and generally under the ALUCP. The proposed Project is consistent with the applicable safety provisions for Safety Zone 5 in the ALUCP and the proposed Project would not result in a safety hazard for people residing or working in the Project area.

Additionally, as discussed in **Section 5.10**, operational roadway noise was determined based on Phase 1 and Phase 2 of Project operation. During Phase 1, the maximum noise level increase along the studied roadway segments would be 1.82 dBA CNEL along Vineyard Avenue between East Avion Street and Mission Boulevard while the maximum noise level increase along the studied roadway segments would be 1.81 dBA CNEL along Vineyard Avenue between East Avion Street and Mission Boulevard during Phase 2. Roadway noise levels would not create a readily perceptible increase of 5 dBA or greater at locations where ambient noise levels are less than 60 dBA; a barely perceptible increase of 3 dBA or greater at locations where ambient noise levels from 60 to 65 dBA; or a community noise level impact increase of 1.5 dBA or greater at locations where ambient noise levels already exceed 65 dBA. Roadway noise levels during Phase 1 and Phase 2 of the proposed Project would not result in excessive noise for people residing or working in the Project area and impacts would be less than significant.

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24 Ontario International Airport. *Airport Land Use Compatibility Plan*. Chapter 1. Exhibit 1-8: Compatibility Factors – Safety. Available at: https://www.ont-iac.com/airport-land-use-compatibility-plan/. Accessed March 2022.

Related to aircraft noise, aircraft noise levels as a result of the proposed Project would increase noise levels for people residing or working in the Project area. **Section 5.10** states in the year 2025, with the proposed Project, there would be 2 additional residential units within the CNEL 65-69 dBA contour that have not been mitigated to attenuate noise from Airport operations through the noise mitigation program previously implemented for the Airport, or subject to an avigation easement. No additional housing units would be included within the CNEL 70+ dBA contour when compared to the baseline condition. By the year 2029, it is estimated that there would be 12 additional residential units within the CNEL 65-69 dBA contour that have not been mitigated to attenuate noise from Airport operations through the noise mitigation program previously implemented for the Airport or subject to an avigation easement, and no housing units or persons within the CNEL 70+ dBA contour. The noise impact from aircraft operations is a potentially significant impact. Implementation of **Mitigation Measure NOI-1** would require a residential sound insulation program (RSIP) for housing units within the future 65-69 dBA which have not been provided with an opportunity to install sound attenuation. With implementation of **Mitigation Measure NOI-1,** impacts related to aircraft noise would be reduced to less than significant levels. Therefore, implementation of the proposed Project would result in less than significant impacts with mitigation incorporation related to a safety hazard or excessive noise for people residing or working in the Project area.

HAZ-6: **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less Than Significant Impact.

The City manages disaster preparedness through the Office of Emergency Management. The role of the Office of Emergency Management is to support the Fire Chief, Police Chief, City Manager, Mayor and Councilmembers, along with all City staff to coordinate response and recovery efforts. OIAA would follow Office of Emergency Management protocol.

According to the City's Hazard Mitigation Plan, interstates would serve as major emergency response and evacuation routes.[25] Major interstates within the Project area include Interstate 10 (I-10), located approximately 1.0-mile north, and I-15, located approximately 2.75 miles east of the Project site. I-10 travels east to west while I-15 travels north to south. The proposed Project is not located along these interstates that would serve as major emergency response and evacuation routes. The Project site currently contains the Ontario Police Department's K-9

25 City of Ontario. *2018 Hazard Mitigation Plan*. Available at: https://www.ontarioca.gov/sites/default/files/Ontario-Files/Fire/Ready%20Ontario/city_of_ontario_2018_hmp.pdf. Accessed March 2022.

facility, which would be relocated to a vacant hangar on the north side of the Airport as part of the proposed Project, but does not contain any emergency facilities.[26] During construction and long-term operation of the proposed Project, adequate emergency access for emergency vehicles would be maintained along public streets that abut the Project site. The proposed Project would not, therefore, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

HAZ-7: **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

No Impact.

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire hazard severity zones throughout the State. Designations include Unzoned (the lowest wildland fire risk), Moderate, High, and Very High. The Project site is in a Local Responsibility Area and classified by CAL FIRE as non-VHFHSZ (non-very high fire hazard severity zone).[27]

The site and surrounding areas are flat and developed with urban uses that would not contribute to the uncontrolled spread of wildfire or exacerbate potential wildfire risks, including downslope flooding and landslides caused by runoff, slope instability, or drainage changes from wildfire. Furthermore, as further discussed above, the proposed Project would not impair adopted emergency response and evaluation plans. Therefore, the proposed Project would not result in, or be subject to, significant effects related to wildfire risk. No impact would occur.

5.8.4 CUMULATIVE IMPACTS

The project vicinity is either existing airport uses or is largely urbanized with residential, commercial, and industrial uses. As the area continues to develop, the addition of more development could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Although some of the related projects listed also have potential impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are site

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26 City of Ontario. *The Ontario Plan*. "Safety Element." Figure S-5: Critical Facilities. Available at: https://www.ontarioplan.org/wp-content/uploads/sites/4/2015/05/critical-facilities.pdf. Accessed July 2022.

27 CAL Fire - Office of the State Fire Marshal. "Fire Hazards Severity Zones." Available at: https://egis.fire.ca.gov/FHSZ/. Accessed July 2022.

specific. Each project is required to address any issues related to hazardous material or wastes. Like the proposed Project, the related projects would be required to comply with federal, State, and local regulations, and require proven mitigation to remediate or protect against site contamination by hazardous materials. Therefore, the Project's contribution to cumulative impacts related to hazards and hazardous materials would not be cumulatively considerable, and cumulative impacts would be less than significant.

5.8.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

No impact would occur to HAZ-7 with implementation of the proposed Project. The proposed Project would result in less than significant impacts to HAZ-1, HAZ-3, HAZ-4, and HAZ-6. Without mitigation, the following impacts would be potentially significant:

- Impact HAZ-2: Impacts related to accidental exposure to hazardous soil.
- Impact HAZ-5: Impacts related to excessive noise for people residing or working in the Project area.

5.8.6 MITIGATION MEASURES

The following mitigation measures as well as mitigation measure NOI-1 in Section 5.10: Noise, are recommended to reduce accidental exposure to hazardous soil.

MM HAZ-1: Soil Management Plan

A Soil Management Plan (SMP) containing soil criteria and soil management and construction risk management protocols to be implemented during proposed Project development shall be prepared prior to disturbance of soils on the site by construction activities and implemented during construction to address any soil containing or suspected to contain PFAs on the Project site and any previously undetected contamination encountered during construction. Special attention shall be made to soils disturbed in the Guardian Jet Center, southern hangar and structure previously housing fire prevention equipment due to the known presence of PFAs in these areas. Additional soil sampling shall be conducted as necessary to delineate the extent of PFAs contamination to enable segregation and proper disposal of any contaminated soil during construction.

MM HAZ-2: Vapor Intrusion Mitigation System

A vapor intrusion mitigation system (VIM system) shall be installed under Phase II of the proposed Air Cargo Building to address the potential for vapor intrusion

from the subsurface. Alternatively, a soil vapor extraction remediation system could be utilized to reduce trichloroethene (TCE) and chloroform vapor concentrations through removal of volatile organic compounds (VOCs) in Phase II development area.

5.8.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation Measure HAZ-1 would mitigate potentially significant impacts related to the accidental exposure of PFAS in soil on the Project site to a less than significant level. **Mitigation Measure HAZ-2** would mitigate potentially significant impacts related to accidental vapor intrusion exposure to a less than significant level. Implementation of **Mitigation Measure NOI-1** will mitigate impacts related to aircraft noise to less than significant. Therefore, implementation of the proposed Project would result in less than significant impacts with mitigation incorporation related to a safety hazard or excessive noise for people residing or working in the Project area. Therefore, no significant and unavoidable adverse impacts related to hazards and hazardous materials would occur from Project implementation.

5.8.8 REFERENCES

15 USC sec. 2601 et seq. *Toxic Substances Control Act of 1976*.

42 USC sec. 11001 et seq. *Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986*.

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City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan*. "Chapter 2 Procedural and Compatibility Policies." Section 1.3.1. Page 2-4. July 2018 Amendment. https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

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Ontario International Airport. *Airport Land Use Compatibility Plan*. "Chapter 1." Exhibit 1-8: Compatibility Factors – Safety. https://www.ont-iac.com/airport-land-use-compatibility-plan/. Accessed March 2022.

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5.9 HYDROLOGY AND WATER QUALITY

5.9.1 INTRODUCTION

This section of the DEIR evaluates the potential impacts of the proposed Project on hydrology and water quality conditions within the vicinity of the Ontario International Airport (Airport) which is located within the City of Ontario (City). Hydrology is the scientific study of the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface and groundwater with regard to the amount of suspended solids, presence and concentrations of contaminants, bacteria levels, and concentration of dissolved oxygen. The analysis in this section is based in part on the following technical reports and information:

- CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission*. January 31, 2022 (Updated December 2022). (See **Appendix 5.9-1.**)
- City of Ontario Engineering Department. *Preliminary Water Quality Management Plan* (PWQMP). For compliance with Santa Ana Regional Water Quality Control Board Order Number R8-2010-0036 (NPDES Permit No. CAS618036) for South Airport Cargo Center. (See **Appendix 5.9-2.**)
- Meridian Consultants, LLC. *Water Supply Assessment (WSA) Ontario South Airport Cargo Center Project*. July 2022. (See **Appendix 5.9-3.**)
- Guida Surveying Inc. ALTA/NSPS Land Title Survey SACC Ontario International Airport. November 2021. (See **Appendix 5.9-4.**)

5.9.2 ENVIRONMENTAL SETTING

5.9.2.1 Existing Conditions

Regional Setting

The Santa Ana Region includes the upper and lower Santa Ana River watersheds, where the City is located within the Upper Santa Ana Valley Basin.[1] Streams in the watershed flowing north–south include the San Antonio, West Cucamonga, Deer Creek, Day Creek, and Etiwanda Creek

[1] California Department of Water Resources. California's Groundwater (Bulletin 118). "Basin Boundaries Data Viewer." https://www.arcgis.com/home/webmap/viewer.html?url=https://gis.water.ca.gov/arcgis/rest/services/Geoscientific/i08_B118_CA_GroundwaterBasins/FeatureServer. Accessed October 2022.

Channels, and the Cucamonga Creek Flood Control Channel.[2] The Santa Ana Region covers parts of southwestern San Bernardino County, western Riverside County, and northwestern Orange County. The Santa Ana River Watershed includes portions of San Bernardino, Orange, and Riverside Counties and covers approximately 2,800 square miles. The total length of the Santa Ana River, and the streams that drain into it, is approximately 700 miles. This network includes natural and channelized concrete waterways. The Santa Ana River is the main surface drainage course in the region, and the largest river in the Santa Ana River Basin . The river originates in the San Bernardino Mountains, travels southwest, and terminates at the Pacific Ocean near the boundary between the cities of Huntington Beach and Newport Beach. Water flow in the river is regulated by the Prado Dam, the Seven Oaks Dam, and other flood-control facilities along the river and its tributaries.

Local Setting

Surface Water

The Airport is located within the Chino Creek Watershed and the Chino Creek Sub-Basin, which is part of the larger Santa Ana River Basin. The Chino Creek SubBasin consists of a majority of the Upper Santa Ana River Valley, portions of the San Gabriel Mountains and Puente and Chino Hills.[3] The Chino Watershed drains from the San Gabriel Mountains south to the Santa Ana River. North-south streams included in the watershed consist of the San Antonio, West Cucamonga, Deer Creek, Day Creek, and Etiwanda Creek Channels, as well as the Cucamonga Creek Flood Control Channel. All of these, except for the San Antonio Channel, pass through the City, and all of the channels in the City are engineered concrete channels. West Cucamonga Channel and Deer Creek Channel discharge into the Cucamonga Creek Flood Control Channel, while the Cucamonga Creek Flood Control Channel and San Antonio Channel each discharge into the Santa Ana River.

The Airport lies in the western portion of the Santa Ana River watershed, upstream of the Prado Flood Control Basin.[4] It is in a 277-square-mile area referred to as Zone 1 by the San Bernardino

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2 City of Ontario. *The Ontario Plan 2050 Final Supplemental Environmental Impact Report.* "Hydrology and Water Quality." Pages 5.10-9 & 10. August 2022. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/The%20Ontario%20Plann/EIR/Final_DraftSEIR_TOP2050.pdf. Accessed October 2022.

3 City of Ontario. *The Ontario Plan 2050.* "Hydrology and Water Quality."

4 City of Ontario. *Master Plan of Drainage*. March 2012. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Engineering/Design%20Guidelines/Final%20Report%20%28March%202012%29%20with%20Notes%20%20Rev.%2010-29-19.pdf. Accessed June 2022.

County Flood Control District (SBCFCD). Zone 1 generally slopes towards the south. Four major regional channel systems traverse Zone 1 in a north-south direction; they include San Antonio Channel, Cucamonga Channel, Day Creek Channel and San Sevaine Channel.

The City is divided into two distinct areas: the Old Model Colony (OMC) and the New Model Colony (NMC), which is generally divided by Riverside Drive with the OMC to the north and the NMC to the south. The Airport is located within the eastern portion of the OMC. The City presently owns and maintains over 136 miles of storm drains, mostly serving the OMC area of the City.[5] In addition to the City-owned storm drains, there are the State-owned storm drains along Caltrans' I-10 and SR-60 corridors. All of the City and State storm drain facilities discharge to regional backbone facilities owned and operated by San Bernardino County Flood Control District that are tributary to the US Army Corps of Engineers' Prado Flood Control Basin. The nearest surface water bodies within the vicinity of the Airport include the Cucamonga Creek Reach 1 located eastern adjacent to the Project site and Deer Creek located approximately 1.1 miles north of the Project site.[6]

Surface Water Quality

Section 303(d) of the 1972 Federal Clean Water Act requires States to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each State must submit an updated list, called a 303(d) list, to the U.S. Environmental Protection Agency (EPA) every two years. In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment and establishes a priority for developing a control plan to address the impairment. The list identifies State water bodies where 1) a Total Maximum Daily Load (TMDL) has been approved by the U.S. EPA , but water quality standards are not yet met, and 2) water bodies where the water quality impairment is being addressed by an action other than a TMDL and water quality standards are not yet met.

California's Water Resources Control Board (State Board) and nine Regional Water Quality Control Boards (Regional Boards) are responsible for monitoring, assessing, and reporting under CWA Sections 303(d) and 305(b), and TMDL development for the State of California. The State Board and Regional Boards cooperate in developing Section 305(b) and Section 303(d) listing

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5 City of Ontario. *Master Plan of Drainage*.

6 California Department of Water Resources. "California Basin Plan Beneficial Use Viewer." https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=116f7daa9c4d4103afda1257be82eb16. Accessed October 2022.

reports. TMDLs are normally developed by Regional Boards, and then approved by the State Board and State Office of Administrative Law before being submitted for EPA approval.

The Santa Ana River Water Quality Control Board addresses regionwide water quality issues through the creation and triennial update of the Santa Ana River Basin Plan (Basin Plan). The Basin Plan was adopted in 1995 and most recently amended June 2019.[7] It designates beneficial uses of the State waters in Region 8; describes the water quality that must be maintained to support such uses; and provides programs, projects, and other actions necessary to achieve the standards it established.

Currently, stormwater from the proposed Project site discharges to the Cucamonga Channel (Cucamonga Creek Reach 1), which eventually discharges into Prado Park Lake (encompassed within Prado Basin Management Zone (PBMZ)).[8] Nearby surface water bodies also include, Deer Creek, which connects to Cucamonga Creek Reach 1. The Cucamonga Creek Reach 1, Prado Park Lake, and PBMZ are part of the Sana Ana Regional Water Basin, which is currently in the process of updating to the 2024 Integrated Report of listed waters.[9] However, Cucamonga Creek Reach 1, Prado Park Lake, and PBMZ are listed on the most recent 2020-2022 Integrated Report Appendix (303(d) List/305(b) Report).[10] The water quality impairments listed for Cucamonga Creek Reach 1 include cadmium, copper, lead, and zinc; PBMZ includes pH; and Prado Park Lake includes nutrients and indicator bacteria (pathogens). The available information from the most

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7 Santa Ana Regional Water Quality Control Board (RWQCB). "Santa Ana River Basin Plan." https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/. Accessed January 2023.

8 State Water Resources Control Boards. "California 2020-2022 Integrated Report Map." https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=6cca2a3a18154655992012663 73cbb7b. Accessed October 2022.

9 State Water Resources Control Boards. "Integrated Report Cycles – Clean Water Act Sections 303(d) and 305(b)." https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/integrated_report_cycles.ht ml. Accessed September 2022.

10 State Water Resources Control Boards. *2020-2022 California Integrated Report*. "Final Revised Appendix A: Recommended 2020-2022 303(d) List of Impaired Waters." https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_rep ort.html. Accessed October 2022.

recent 2014 and 2016 Integrated Report for the Basin, indicates a TMDL for nutrients was completed in 2019 and the TMDL for pathogens has not been determined.[11]

Groundwater

The City obtains its groundwater from the Chino Groundwater Basin. The Chino Basin is located within the Upper Santa Ana Valley, which is located in San Bernardino County. The surface area of the Chino Basin is approximately 154,000 acres (or 240 square miles).[12] The San Antonio Creek and Cucamonga Creek drain the Chino Basin area southward and flow into the Santa Ana River. The State Department of Water Resources (DWR) identifies the Chino Basin as Basin No. 8-002.01, which is a sub-basin of the Upper Santa Ana Valley.[13] It is estimated the Chino Basin has approximately 5 million acre-feet (AF)[14] of water in storage and an estimated 1 million AF of additional unused storage capacity.[15] The Chino Basin is divided into five management zones, based on similar hydrologic conditions. The City is located approximately in the center of the Chino Basin.

The total storage capacity of the Chino Basin is approximately 18.3 million AF.[16] Total extraction from the Chino Basin between 2019-2020 consisted of 149,190 AF.[17] Prior to 1978, the Chino

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11 State Water Resources Control Boards. "Final California 2014 and 2016 Integrated Report for Clean Water Act Sections 303(d) and 305(b). Supporting Information." https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/00483.shtml#33893. Accessed August 2022.

12 Stetson Engineers. *City of Ontario 2020 Urban Water Management Plan* (UWMP). June 2021. https://wuedata.water.ca.gov/public/uwmp_attachments/7937833487/FINAL%20City%20of%20Ontario%202020%20UWMP.pdf. Accessed August 2022.

13 DWR collects, summarizes, and evaluates groundwater data in the previously named "Bulletin 118" series, which has been updated and is now referred to as California's Groundwater Update 2020 (CalGW). This report presents the results of basin evaluations and defines the boundaries of California's 515 alluvial groundwater basins. The report was finalized on November 16, 2021.

14 One acre-foot equates to approximately 326,000 gallons.

15 The 2020 Safe Yield Recalculation Final Report (May 15, 2020) indicates the estimated total volume of water in storage was 12.6 million AF in July 2018 (WEI 2020, p. 6-15).

16 Stetson Engineers. *City of Ontario 2020 UWMP*.

17 Chino Basin Watermaster (CBWM). *Fiscal Year 2019-20 43rd Annual Report*. Appendix H. http://www.cbwm.org/docs/annualrep/43rd%20Annual%20Report.pdf. Accessed November 2021.

Basin was in overdraft. After 1978, the Chino Basin has been managed via adjudication by the Chino Basin Watermaster.

The Chino Basin Optimum Basin Management Program (OBMP) was developed pursuant to a judgment entered in the Superior Court of the State of California for the County of San Bernardino,[18] which required implementation of a strategy that provides for enhancing the yield of the Chino Basin while providing reliable, high-quality water supplies for the development that is expected to occur within the Chino Basin. The OBMP Implementation Plan is the court-approved governing document for achieving the goals defined in the OBMP. The Chino Basin Watermaster administers and enforces provisions of the court ruling determining adjudication of the Chino Basin and developed the OBMP.

The Ontario Municipal Utilities Company (OMUC) is the water supplier within the City, including the area of the Airport. As of 2020, approximately 46 percent of OMUC's water supply came from groundwater, 34 percent from imported water, and 20 percent of supply was recycled water.[19] During a single dry year (FY 2017-18), the City met about 60 percent of its total demand with supplies from the Chino Basin. During a five-consecutive-year drought multiple-dry-year period (FY 2011-12 to FY 2015-16), the City met between 42 and 63 percent of its total demand with supplies from the Chino Basin. The Chino Basin is actively managed under the Chino Basin adjudication. Each year the Chino Basin Watermaster reviews water supply conditions including local rainfall, groundwater levels, local stormwater runoff available for replenishment, imported water availability, and the amount of water stored in the groundwater basin for future demands, to ensure the Chino Basin is responsibly managed.

The City owns 17 active groundwater wells located throughout the OMUC service area within the Chino Basin. There are no existing wells within the proposed Project site used for extracting groundwater .[20] As of FY 19/20, OMUC produced 18,395.3 AF from the basin.[21] Over the past five years, the City has produced 18,395 acre feet per year (AFY) to 26,109 AFY, with an average

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18 West Yost. Chino Basin Optimum Basin Management Program (OBMP). *2020 State of the Basin Report.* June 2021. http://www.cbwm.org/docs/engdocs/State_of_the_Basin_Reports/SOB%202020/2020%20State%20of%20the%20Basin%20Report.pdf. Accessed October 2022.

19 Stetson Engineers. *City of Ontario 2020 UWMP*.

20 California Department of Conservation. "Well Finder CalGEM GIS." https://maps.conservation.ca.gov/doggr/wellfinder/#/-117.59478/34.04813/16. Accessed December 2021.

21 Stetson Engineers. *City of Ontario 2020 UWMP*.

of 22,306 AFY from the Chino Basin. Recorded groundwater use has generally decreased over the years. The recorded groundwater production has generally decreased from 36,842 AFY in 2000.[22, 23, 24, 25]

Groundwater Quality

The Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) is responsible for monitoring the groundwater quality of the basin. The Chino Basin Watermaster also routinely and proactively collects groundwater quality data from well owners that perform sampling at their own wells, such as municipal producers and government agencies. Groundwater-quality data are also obtained from special studies and monitoring that takes place under the orders of the Regional Board, the DTSC, the USGS, and others.[26] These data are collected from well owners and monitoring entities twice per year. In 2020, data from over 890 wells were compiled as part of the Chino Basin Data Collection (CBDC) program.[27]

Groundwater quality in Chino Basin is better in the northern portion of the basin, where recharge occurs, than in the southern portion, where total dissolved solids (TDSs) and nitrate-nitrogen concentrations are higher.[28] The constituents characterized within the Chino Basin include TDS, nitrate, and other constituents of concern (including a suite of hazardous chemicals that could potentially enter either surface or groundwater). The City has deactivated or abandoned several wells (Wells 3, 4, 9, 15, and 50) due to high nitrate and perchlorate concentrations detected above the maximum contaminant levels (MCL). Groundwater quality in portions of the Chino Basin exceeds EPA drinking water standards for nitrates and TDS and water quality objectives

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22 City of Ontario. *Domestic Water Master Plan*. 2000-2009 data. https://www.ontarioca.gov/Engineering/DesignGuidelines. Accessed August 2022.

23 AKM Consulting Engineers. *City of Ontario 2010 UWMP*. https://cadwr.app.box.com/s/6e6b4fr5orcqulf2pbu8v23ep4mo93ar/file/457610465987. Accessed August 2022.

24 Stetson Engineers. *City of Ontario 2020 UWMP*.

25 CBWM. *Approved 2021/2022 Assessment Package* (*Production Year 2020/2021).* November 18, 2021. Page 8.1. http://www.cbwm.org/docs/financdocs/All%20Assessment%20Packages/2021-22%20Assessment%20Package.pdf. Accessed August 2022.

26 CBWM. *2020 State of the Basin Report*. Chapter 5.0 Groundwater Quality. http://www.cbwm.org/docs/engdocs/State_of_the_Basin_Reports/SOB%202020/2020%20State%20of%20the%20Basin%20Report.pdf. Accessed October 2022.

27 CBWM. *2020 State of the Basin Report*.

28 CBWM. *2020 State of the Basin Report*.

listed in the Basin Plan for these constituents.[29] Other contamination of the groundwater basin occurs from point sources, such as industrial uses, that have released hazardous chemicals discussed above directly onto the soil.

Site Hydrology and Drainage

Surface drainage at the Airport flows generally to the south towards catch basins which discharge into three drainage area channels: West Cucamonga Channel, Cucamonga Channel, and Deer Creek.[30] The Cucamonga Channel extends from north to south across the Airport, between Airport Drive and Mission Boulevard. This is where the existing Project site drainage connects to. This channel drains the majority of industrial areas of the Airport. The drainage area discharging into Cucamonga Channel covers 928 acres of industrial and commercial tenant facilities, runways, and taxiways at the Airport. Storm water runoff flows into dozens of catch basins around the perimeter.

The proposed Project site includes approximately 97 acres located south of the Airport airfield and west of the Cucamonga Channel. The entire site has been graded and is largely developed with paved areas and buildings. The proposed Project site slopes gently to the south and west with elevations ranging from approximately 894 feet on the south end of the site, near East Avion Street, to approximately 919 feet on the north end near Taxiway 'S'.[31] The Project site is also partially located within a 100-year floodplain on the southeastern portion as shown in **Figure 5.9-1: Project Site Flood Zones**.

The proposed Project site contains four existing drainage areas, each with a different flow path.[32] Drainage Area #1 (DA-1) is the largest drainage area consisting of the entire western half of the proposed Project site and a portion of the eastern half. This area generally conveys stormwater in a northwest to southeast direction. As water flows southeast, it eventually flows across East

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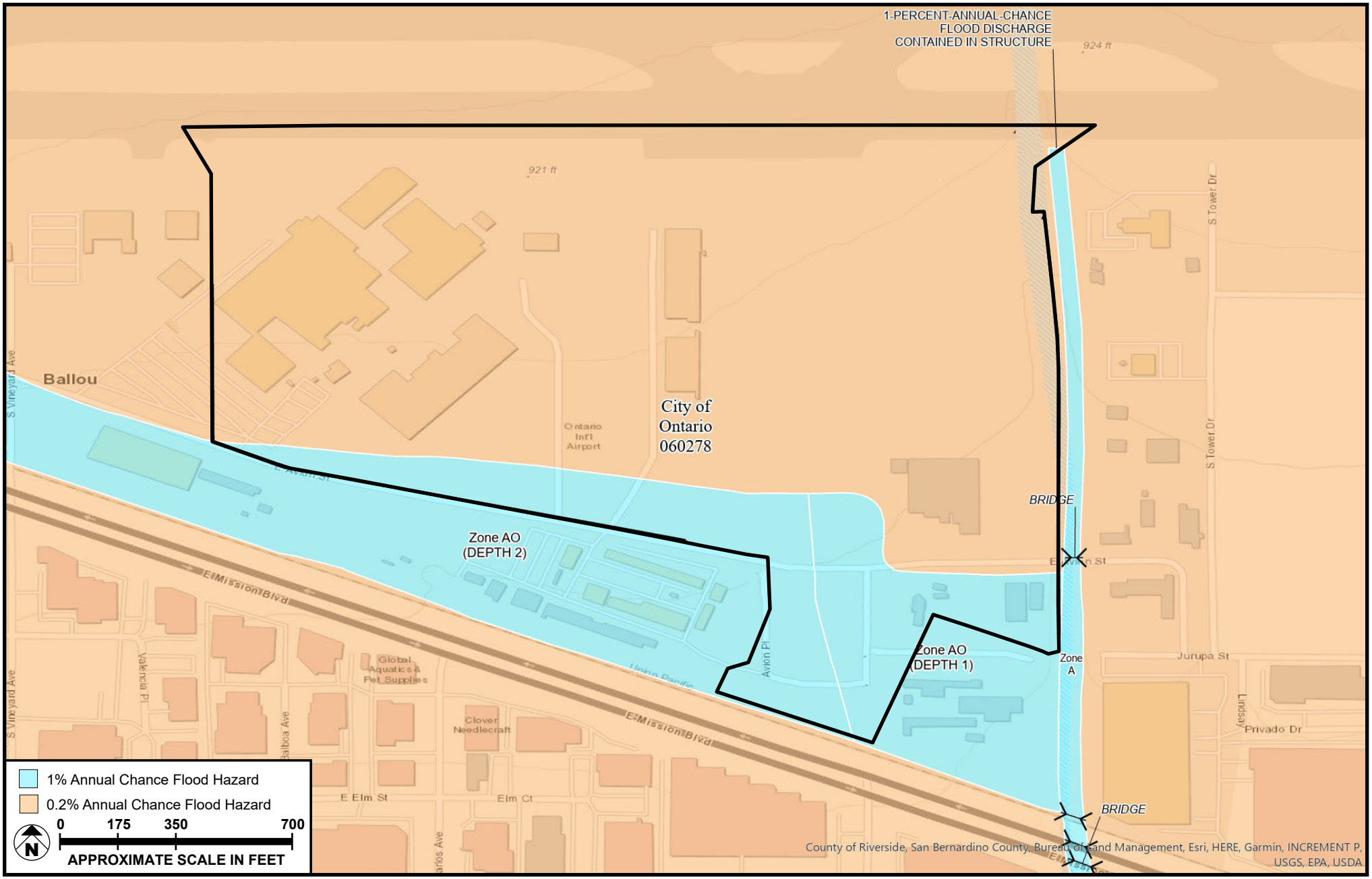
29 State Water Resources Control Boards. California RWQCB, Santa Ana Region. *Resolution No. R8-2004-0001. Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate an Updated Total Dissolved Solids (TDS) and Nitrogen Management Plan for the Santa Ana Region*. https://www.waterboards.ca.gov/rwqcb8/board_decisions/adopted_orders/orders/2004/04_001.pdf. Accessed October 2022.

30 Ontario International Airport. *Storm Water Pollution Prevention Plan* (SWPPP) *Associated with Industrial Activities*. https://www.flyontario.com/sites/default/files/ontario_swppp_10_31_2016-amended_02-2018_final_0.pdf. Accessed March 2022.

31 Cotton, Shires, and Associates, Inc. *Geotechnical Investigation*. June 2022. (See **Appendix 5.6-1.**)

32 CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission*. January 31, 2022. Updated December 2022. (See **Appendix 5.9-1.**)



SOURCE: FEMA's National Flood Hazard Layer (NFHL)" - 2022

FIGURE **5.9-1**

Meridian Consultants

Project Site Flood Zones

332-001-21

Avion Street to a small swale adjacent to the Cucamonga Channel. This swale eventually overtops the western wall of Cucamonga Channel near the abandoned buildings south of E. Avion Street. Drainage Area #2 (DA-2) generally conveys stormwater via a small swale in a north to south direction adjacent to the Cucamonga Channel from Taxiway 'S' to East Avion Street. Drainage Area #3 (DA-3) is between DA-1 and DA-2 and consists mostly of the existing airfield apron area. This area generally conveys stormwater on the airfield apron pavement from Taxiway 'S' to four different stormwater catch basins located on the east side of the apron. Drainage Area #4 (DA-4) is located south of E. Avion Street adjacent to Avion Place. Stormwater sheet flows to a collection area and is conveyed westward to the Cucamonga Channel through a series of culverts.

The majority of the Project site is within DA-1, DA-2, and DA-3 (Main Project Site), while the proposed parking garage site is within DA-4 (Parking Garage Site). Since all drainage areas ultimately discharge into the Cucamonga Channel, an analysis was performed on the three drainage areas comprising the Main Project site and DA-4 for the Parking Garage Site separately, in the Preliminary Hydrology study (see **Appendix 5.9-1**). Hydraflow Hydrograph Modeling software was used to calculate the combined peak runoff rate and combined total runoff volume for the storm frequency events as shown in **Table 5.9-1: Project Site Existing Conditions – DA-1, DA-2, and DA-3 (Main Project Site)** and **Table 5.9-2: Project Site Existing Conditions – DA-4 (Parking Garage Site)**.

TABLE 5.9-1
PROJECT SITE EXISTING CONDITIONS – DA-1, DA-2, AND DA-3 (MAIN PROJECT SITE)

Storm Event Frequency	Total Peak Flow Rate (cfs)[a]	Total Runoff Volume (cu. ft.)[b]
2-Year[c]	**105.1**	**715,034**
5-Year	143.5	985,054
10-Year	173.6	1,200,157
25-Year	212.5	1,480,449
50-Year	241.0	1,687,071
100-Year	268.9	1,890,661

Notes:

[a] *cfs – cubic feet per second*

[b] *cu.ft – cubic feet*

[c] *Per San Bernardino County Technical Guidance Document for Water Quality Management Plans (WQMP), only the 2-year storm is used to conduct analysis for comparing pre-development versus post-development.*

Source: CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission.* January 31, 2022 (Updated December 2022) (see **Appendix 5.9-1**).

TABLE 5.9-2 PROJECT SITE EXISTING CONDITIONS – DA-4 (PARKING GARAGE SITE)		
Storm Event Frequency	Total Peak Flow Rate (cfs)[a]	Total Runoff Volume (cu.ft.)[b]
2-Year[c]	**10.5**	**21,827**
5-Year	14.6	30,950
10-Year	17.8	38,284
25-Year	21.9	47,893
50-Year	25.0	55,002
100-Year	27.9	62,022

Notes:

[a] *cfs – cubic feet per second*

[b] *cu. ft – cubic feet*

[c] *Per San Bernardino County Technical Guidance Document for Water Quality Management Plans (WQMP), only the 2-year storm is used to conduct analysis for comparing pre-development versus post-development.*

Source: CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission.* January 31, 2022 (Updated December 2022) (see **Appendix 5.9-1**).

5.9.2.2 Regulatory Background

Federal

Clean Water Act and National Pollution Elimination Discharge System

The Clean Water Act establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters (US Code, Title 33, §§ 1251 et seq.). Under the act, the U.S. EPA is authorized to set wastewater standards and administers the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are issued only to direct point-source discharges. Permits are required for all new developments and significant redevelopments that discharge directly into Waters of the United States. The federal Clean Water Act requires wastewater treatment of all effluent before it is discharged into surface waters. NPDES permits for such discharges in the project region are issued by the Santa Ana RWQCB.

Safe Drinking Water Act

The Federal Safe Drinking Water Act (SDWA) provides regulations on drinking water quality in the City of Ontario. The SDWA gives the U.S. EPA the authority to set drinking water standards, such as the National Primary Drinking Water Regulations (NPDWRs or primary standards). The NPDWRs protect drinking water quality by limiting the levels of specific contaminants that are

known to occur or have the potential to occur in water and can adversely affect public health. All public water systems that provide service to 25 or more individuals are required to satisfy these legally enforceable standards. Water purveyors must monitor for these contaminants on fixed schedules and report to the EPA when an MCL has been exceeded. MCL is the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. Drinking water supplies are tested for a variety of contaminants, including organic and inorganic chemicals (e.g., minerals), substances that are known to cause cancer, radionuclides (e.g., uranium and radon), and microbial contaminants (e.g., coliform and *Escherichia coli*). Changes to the MCL list are typically made every three years, as the EPA adds new contaminants or, based on new research or new case studies, revised MCLs for some contaminants are issued. The California Department of Health Services, Division of Drinking Water and Environmental Management, is responsible for implementation of the SDWA in California.

Federal Emergency Management Agency

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA. The Flood Disaster Protection Act requires owners of all structures in identified special flood hazard areas to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members in designated areas are able to participate in the National Flood Insurance Program afforded by FEMA. FEMA's minimum level of flood protection for new development is the 100-year flood event, also described as a flood that has a 1 percent chance of occurring in any given year. The Project site is partially located within a 100-year floodplain on the southeastern portion as shown in Figure 5.9-1.

State

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.), the State Water Resources Control Board (SWRCB) has authority over State water rights and water quality policy. This Act divided the State into nine regional basins, each under the jurisdiction of a RWQCB, to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs

regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. The City, including the proposed Project site, are within the jurisdiction of the Santa Ana RWQCB.

State Water Resources Control Board General Construction Permit

The SWRCB has adopted a statewide Construction General Permit (Order No. 2012-0006-DWQ) for stormwater discharges associated with construction activity. These regulations prohibit the discharge of stormwater from construction projects that include one acre or more of soil disturbance. Construction activities subject to this permit include clearing, grading, and other disturbance to the ground, such as stockpiling or excavation, that results in soil disturbance of at least one acre of total land area. Individual developers are required to submit Permit Registration Documents (PRDs) to the SWRCB for coverage under this general permit prior to the start of construction. The PRDs include a Notice of Intent (NOI), risk assessment, site map, Stormwater Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement. The PRDs are submitted electronically to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTS) website. This general Construction General Permit requires all dischargers to (1) develop and implement a SWPPP, which specifies best management practices (BMPs) to be used during construction of the project; (2) eliminate or reduce non-stormwater discharge to stormwater conveyance systems; and (3) develop and implement a monitoring program of all specified BMPs. The two major objectives of the SWPPP are to (1) help identify the sources of sediment and other pollutants that affect the water quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges.

State Water Resources Control Board Trash Amendments

On April 7, 2015, the State Water Board adopted an Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan). Together, they are collectively referred to as "the Trash Amendments." The purpose of the Trash Amendments is to reduce trash entering waterways Statewide, provide consistency in the SWRCB's regulatory approach to protect aquatic life and public health beneficial uses, and reduce environmental issues associated with trash in State waters. There are two compliance tracks:

- Track 1: Permittees install, operate, and maintain a network of certified Full Capture Systems (FCS) to capture trash in storm drains, located in priority land use areas for municipal systems, and the entire facility for industrial and commercial permit holders.

- **Track 2:** Permittees install, operate, and maintain any combination of controls (structural and/or institutional) anywhere in their jurisdiction as long as they demonstrate that their system performs as well as Track 1.

The Trash Amendments provide a framework for permittees to implement its provisions. Full compliance must occur within 10 years of the permit and permittees must also meet interim milestones such as average load reductions of 10 percent per year.

Senate Bill 92

On June 27, 2017, Governor Jerry Brown signed Senate Bill (SB) 92 into law, which set forth new requirements focused on dam safety. As part of this legislation, dam owners must now submit inundation maps to the Department of Water Resources (DWR). After the maps are approved, the dam owner must submit an emergency action plan to the California Office of Emergency Services (Cal OES). The dam owner must submit updated plans and inundation maps every 10 years, or sooner under certain conditions. Cal OES will review and approve the emergency action plans. This legislation set forth additional provisions for the emergency action plans including compliance requirements, exercises of the plan, and coordination with local public safety agencies (Cal OES 2019).

California Water Code

The California Water Code Section 10910 requires any city or county that determines a "project," as defined below, be subject to the California Environmental Quality Act (CEQA).[33] "Project" means any of the following:

1) A proposed residential development of more than 500 dwelling units.
2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4) A proposed hotel or motel, or both, having more than 500 rooms.
5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

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33 California Water Code. Division 6, Part 2.10, Section 10910 (a) & Section 10912 (a).

6) A mixed-use project that includes one or more of the projects specified in this subdivision.

7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Section 15155 of the State CEQA Guidelines requires that the lead agency conducting environmental review of a proposed project request the governing body of each public water system that will serve the project to determine whether the projected water demand was included in the most recently adopted urban water management plan. Furthermore, the lead agency shall prepare and approve a water supply assessment (WSA) for any proposed project that meets the definition of a water demand project, as listed above.

Regional

Santa Ana River Basin Water Quality Control Plan

The Basin Plan establishes water quality standards for the ground and surface waters of the region and includes an implementation plan describing the actions by the Regional Board and others that are necessary to achieve and maintain the water quality standards. The Regional Board regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under various programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes of the water quality problems, if known. For waterbodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects amendments approved by the SWRCB, the California Office of Administrative Law, and/or the U.S. EPA through 2019. The proposed Project would be required to implement and comply with Santa Ana RWQCB, water quality protection policies and mandates.

San Bernardino County Regional Municipal Separate Stormwater Sewer System (MS4) Permit

Within the San Bernardino County area of the Santa Ana River Basin, management and control of the municipal separate storm sewer system (MS4) is shared by a number of agencies, including the San Bernardino County Flood Control District, San Bernardino County, and the cities of Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Highland, Lom a Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa.

The San Bernardino County Flood Control District, the County, and the 16 incorporated cities in the Santa Ana River watershed are Co-permittees under a stormwater discharge permit, issued

by the State of California through the Santa Ana RWQCB. The San Bernardino County Flood Control District has been designated "Principal Permittee" under the MS4 Permit, and administers and coordinates many of the permit requirements on behalf of all the Permittees. On January 29, 2010, the Santa Ana RWQCB, issued an area wide MS4 permit to the County and municipalities in San Bernardino County. Waste discharge requirements for stormwater entering municipal storm drainage systems are set forth in the MS4 permit, Order No. R8-2010-0036, NPDES No. CAS618036.[34] This permit expired on January 29, 2015. On August 1, 2014, the San Bernardino County Flood Control District submitted a Report of Waste Discharge (ROWD) on behalf of San Bernardino County and the 16 incorporated cities within San Bernardino County. The submitted ROWD serves as the permit renewal application for the fifth term MS4 permit for San Bernardino County.[35]

Local

City of Ontario

The City adopted a Preliminary Water Quality Management Plan (PWQMP) to implement the MS4 permit, which requires, as needed on a project-by-project basis, the integration stormwater management, water conservation, rainwater harvesting and re-use, and flood management to meet water quality standards. The San Bernardino County MS4 Permit requires project-specific Water Quality Management Plans (WQMP) to be prepared for all priority new development and significant redevelopment projects as specified in the City's PWQMP.

Ontario Policy Plan

The City's Policy Plan contains policies addressing stormwater infrastructure, groundwater quality, and other policies related to water resources within the Environmental Resources Element.[36]

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34 State Water Resources Control Boards. California RWQCB, Santa Ana Region. *ORDER NO. R8-2010-0036. NPDES NO. CAS618036. NPDES Permit and Waste Discharge Requirements*. https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010/10_036_sbc_ms4_permit_01_29_10.pdf. Accessed August 2022.

35 San Bernardino County Santa Ana Region MS4 Stormwater Program. *Application for Renewal of the Municipal NPDES Stormwater Permit.* July 31, 2014. https://www.sawpa.org/wp-content/uploads/2018/04/2014_ROWD_San-Bernardino-County-MS4-Program.pdf. Accessed August 2022.

36 City of Ontario. *The Ontario Plan*. "Environmental Resources Element." https://www.ontarioca.gov/about-ontario-ontario-plan-policy-plan/environmental-resources. Accessed October 2022.

Goal ER-1: A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.

- ER-1.3: *Conservation and Sustainable Water Supply.* We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability.
- ER-1.5: *Water Resource Management.* Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.
- ER-1.6: *Urban Run-off Quantity.* We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.
- ER-1.7: *Urban Run-off Quality.* We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.

The Ontario Plan also provides policies that require assessment for flooding hazards and other hydrologic issues within the Safety Element:[37]

Goal S2: Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.

- S-2.1: *Entitlement and Permitting Process.* We require hydrological studies prepared by a state-certified engineer when new development is located in a 100-year or 500-year floodplain to assess the impact that the new development will have on the flooding potential of existing development down-gradient.
- S-2.2: *Floodplain Mapping.* We require any new development partially or entirely in 100-year flood zones to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.
- S-2.3: *Facilities that Use Hazardous Materials.* We comply with state and federal law and do not permit facilities using, storing, or otherwise

37 City of Ontario. *The Ontario Plan*. "Safety Element." https://www.ontarioca.gov/about-ontario-ontario-plan-policy-plan/safety. Accessed October 2022.

involved with substantial quantities of onsite hazardous materials to be located in the 100-year flood zone or 500-year flood zone unless all standards of elevation, floodproofing, and storage have been implemented to the satisfaction of the Building Department.

- S-2.5: *Stormwater Management.* We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces.
- S-2.6: *Use of Flood Control Facilities.* We encourage joint use of flood control facilities as open space or other types of recreational facilities.

City of Ontario Master Plan of Drainage

The City's Master Plan of Drainage is a planning level drainage study that includes the following:[38]

- Update and evaluation of inventory and capacities of the existing City-owned storm drain facilities.
- Preparation of hydrology studies to quantify peak flow rates for runoffs during major storm events that are based on built-out conditions as per the Land Use Plan adopted by City Council on January 27, 2010, and the Ontario Plan.
- Identification and quantification of upgrades to existing City-owned storm drain systems to provide adequate flood protection and mitigate development impacts, based on the City's latest policies and goals.
- Evaluation of alternatives to eliminate drainage deficiencies using the existing facilities to the maximum extent.
- Development of a master plan that establishes preliminary alignment and sizes for recommended future backbone drainage facilities that will ensure adequate flood protection.
- Development of Project costs and prioritization for the implementation of the recommended master plan facilities.

38 City of Ontario. *Master Plan of Drainage*.

City of Ontario Municipal Code

Title 8, Chapter 13: Flood Damage Prevention Program

The City's Flood Damage Prevention Program (FDPP) is included as Title 8, Chapter 13, of the Ontario Municipal Code. The FDPP applies to all areas of special flood hazards, areas of flood-related erosion hazards, and areas of mudflow hazards within the City, including the Airport. The FDPP includes standards for construction, utilities, subdivisions, manufactured homes, and floodways. Construction standards include requirements for anchoring, floodproofing, and minimum elevations of floors.

Title 6, Chapter 6 Article 5, Section 6-6.501: Stormwater Quality Management Plan (SWQMP)

The City requires the preparation and approval of a SWQMP prior to the issuance of any grading or building permit for qualifying projects. According to the list of qualifying development/redevelopment projects, the proposed Project would require completion and approval of a SWQMP.

Ontario International Airport Authority

Design and Construction Handbook – Stormwater Pollution Prevention Plan (SWPPP)

The OIAA Design and Construction Handbook has been established to standardize OIAA processes.[39] OIAA maintains a NPDES permit to comply with federal regulations requiring transportation facilities with discharges from vehicle maintenance shops, equipment cleaning operations, or airport de-icing to be covered under an industrial permit. The City is a Co-Permittee of the San Bernardino County Flood Control District (SBCFCD), which manages the NPDES Permit for the San Bernardino County. The San Bernardino County NPDES Permit, otherwise known as the San Bernardino County MS4 Permit, requires all priority projects[40] to complete the following:

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39 Ontario International Airport Authority (OIAA). *Design and Construction Handbook*. January 2019. https://www.flyontario.com/sites/default/files/oiaa_design_construction_handbook_final_january_2019_0.pdf. Accessed February 2022.

40 OIAA. *Design and Construction Handbook*.

a. WQMP in compliance with the regional MS4 Permit and Statewide General Construction Permit.

b. SWPPP in compliance with the regional MS4 Permit and Statewide General Construction Permit.

The MS4 Permit stipulates that the City require priority project applicants to submit a Preliminary project-specific WQMP, as early as possible, during the environmental review or planning phase of a development project and that the PWQMP be approved prior to the issuance of land use entitlement. As such, the required plans listed above are to be completed by all priority projects and submitted to the City as Co-Permittee.

Ontario International Airport Rules and Regulations

The Rules and Regulations Manual for the Airport is published under the authority of OIAA to make rules and regulations governing the use and control of the Airport. These rules and regulations are subject to the powers of the United States respecting commerce, and empowers the Airport Chief Executive Officer or his/her authorized representative, to enforce all Rules and Regulations adopted by the OIAA. Section 4 covers rules and regulations for airport facilities, aircraft parking, and passenger terminal gate use within the Airport. The following regulations apply specifically to the proposed Project:

4.12 Washing of Aircraft:

Wet washing of aircraft on Airport property (aircraft aprons, cargo ramps, aircraft parking positions, and tenant leaseholds) is prohibited. The Airport does permit dry washing and polishing of aircraft provided all aircraft aprons, cargo ramps, aircraft parking positions, and tenant leaseholds remain clean and free of debris resulting from the washing and/or polishing process.

5.9.3 ENVIRONMENTAL IMPACT ANALYSIS

5.9.3.1 Thresholds of Significance

The potential for the proposed Project to result in impacts associated with hydrology and water quality is based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

HYD-1: **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

HYD-2: **Substantially decrease groundwater supplies or interfere substantially**

with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i): result in substantial erosion or siltation on- or off-site?

(ii): Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

(iii): Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

(iv): Impede or redirect flood flows?

HYD-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

HYD-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

5.9.3.2 Methodology

Project impacts to hydrology and water quality are evaluated based on the conformance of the proposed Project with applicable local, regional, State, and federal standards; the proposed land uses and Project design; changes in pre- and post-Project stormwater flows; and the proposed BMPs for control of surface runoff and reduction of pollutants in stormwater runoff.

A Preliminary Hydrology Study was prepared for the proposed Project. Hydrological calculations and modeling were prepared using Autodesk Hydraflow Hydrograph Modeling software.[41] Regulatory and technical direction was provided by the San Bernardino County Technical Guidance Document for WQMPs.

5.9.3.3 Project Impacts

Would the Project:

HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

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41 CHA. *Preliminary Hydrology Study*. (See **Appendix 5.9-1.**)

Less Than Significant Impact.

Construction Impacts

Clearing, grading, excavation, and construction activities associated with the proposed Project have the potential to impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. Additionally, the use of construction materials, such as fuels, solvents, and paints, may present a risk to surface water quality. Finally, the refueling and parking of construction vehicles and other equipment on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into the storm drain system and/or soils.

The southern portion of the proposed Project site will be raised to match the elevation of the northern portion of the site adjacent to Taxiway 'S' while continuing to drain to the southeast corner of the site. Approximately 67,000 cubic yards of soil would be cut on this portion of the site and approximately 132,800 cubic yards of soil would be imported to raise the site for a total of approximately 200,000 cubic yards of earth moved to achieve the necessary grade.

To implement the San Bernardino County MS4 Permit issued by the Santa Ana RWQCB, the City maintains a PWQMP requirement in order for qualifying projects to plan for the integration of required water quality elements, stormwater management, water conservation, rainwater harvesting and re-use, and flood management.[42] As such, PWQMPs, are in compliance with the Santa Ana RWQCB and the San Bernardino County MS4 Permit. The San Bernardino County MS4 Permit requires project-specific WQMPs to be prepared for all priority new development and significant redevelopment projects specified in the City's PWQMP. The proposed Project qualifies as a "significant re-development project" according to the City's PWQMP, as the proposed Project would add or replace 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the Permittee.[43] The MS4 Permit stipulates that the City requires priority project applicants to submit a preliminary, project-specific WQMP, as early as possible, during the environmental review or planning phase of a development project and that the PWQMP be approved prior to the issuance of land use entitlement. The PWQMP for the proposed Project contains required site design/Low-Impact Design (LID) BMPs, source control BMPs, and treatment control BMPs. The PWQMP requires

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42 City of Ontario. *Preliminary Water Quality Management Plan*. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Engineering/environmental-services/preliminary_wqmp_s.pdf. Accessed June 2022.

43 City of Ontario. *Preliminary Water Quality Management Plan*. (See **Appendix 5.9-2.**)

projects to implement site design/LID BMPs utilizing either infiltration, harvest and use, evapotranspiration, or bio-treatment designs depending on the project. The Project proposes infiltration Site Design/LID BMPs. The treatment control BMPs are designed to control stormwater pollutants where it is not feasible to install site design/LID BMPs or where pretreatment of stormwater runoff is required, ahead of infiltration BMPs. The proposed Project would implement a gravity separator device for pretreatment of sediment, trash/litter, or oil and grease, to improve integration of required water quality elements (see **Appendix 5.9-2**). BMPs for both construction and operation are shown in **Table 5.9-3: PWQMP BMPs**, below.

TABLE 5.9-3
PWQMP BMPS

Site Design/LID BMPs
• Grade parking lot areas/drive aisles/roof drains to sheet flow runoff into landscaped swales, via curb cuts or zero-face curbs or otherwise disconnect direct drainage from MS4.
• Install surface retention basins or infiltration trenches to receive impervious area runoff.
• Install underground stormwater retention chambers where downstream landscaped areas are limited.
• Construct streets, sidewalks, and parking lot stalls to the minimum widths necessary.
Source Control BMPs
• Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.
• Site Owner(s)/Property Manager/HOA or POA will be familiar with the project WQMP and stormwater BMPs.
• Owner or HOA or POA to provide Education/Training of site occupants and employees on stormwater BMPs.
• Install stormwater placards/stenciled messages with a "No Dumping" message on all on-site/off-site storm drain inlets.
Treatment Control BMP
• Gravity Separator devices for pretreatment of sediment, trash/litter, or Oil & Grease

Source: City of Ontario Engineering Department. *Preliminary Water Quality Management Plan (PWQMP)* For compliance with Santa Ana Regional Water Quality Control Board Order Number R8-2010-0036 (NPDES Permit No. CAS618036) for South Airport Cargo Center (see **Appendix 5.9-2**).

OIAA maintains a NPDES permit to comply with federal regulations requiring transportation facilities with discharges from vehicle maintenance shops, equipment cleaning operations, or airport de-icing to be covered under an industrial permit. For landside projects affecting areas outside of OIAA management, contractors shall work with the City to obtain NPDES permit

coverage. The City is a Co-Permittee of the SBCFCD, which manages the NPDES Permit for San Bernardino County. To minimize potential impacts, the City requires the proposed Project to obtain coverage under the NPDES Construction General Permit (CGP) (Order No. 2009-0009-DWQ, as well as its subsequent amendments 2010- 0014-DWQ and 2012-0006-DWQ) pursuant to NPDES requirements.[44] In accordance with the State Construction General Permit Order No. 2009-0009-DWQ, a project-specific SWPPP would be developed and implemented prior to the construction of the proposed Project. The SWPPP would set forth BMPs, in this case BMPs from the California Storm Water Quality Association (CASQA), including but not limited to covering stockpiles; retaining eroded sediments and pollutants on site; proper storage for fuels, oils, solvents and other toxic materials; containing non-stormwater runoff at the proposed Project site; and proper concrete washout facilities to minimize the discharge of pollutants in stormwater runoff.[45]

The proposed Project would be required to submit a notice of intent to the Santa Ana RWQCB's Stormwater Multiple Application Report Systems (SMARTS). All BMPs would be installed before construction and may include, but would not be limited to, buffer strips, hydroseeding, mulching, geotextile swales, storm drain inlet protection, and silt fencing. During the rainy season, typically October through April, temporary stormwater basins would be installed and maintained with graded areas in accordance with the California Stormwater Association Fact Sheet Number SE-2.[46] The SWPPP would specify BMPs to target pollutants of concern and reduce or eliminate pollutants in stormwater discharges. Additionally, the NPDES requires a Standard Urban Storm Water Mitigation Plan (SUSMP) to be implemented to reduce the level of pollutants in stormwater and urban runoff. Any temporary dewatering system(s) would treat groundwater prior to discharge to the public storm drain system, as authorized by a NPDES General Permit issued by the Santa Ana RWQCB, and a storm drain connection permit issued by the City's Department of Public Works.

In addition, the City requires that an erosion and sediment control plan be submitted prior to grading plan approval and the issuance of a grading permit. Implementation of the erosion

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44 City of Ontario. Ontario Municipal Code. Article 5. Sec. 6-6.502.

45 City of Ontario. *Stormwater Pollution Prevention for Industrial Businesses*. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Engineering/environmental-services/industrial_outreach_pkt_050415.pdf. Accessed July 2022.

46 California Stormwater Quality Association (CASQA). "Fact Sheet SE-2: Sediment Basin." https://www.casqa.org/sites/default/files/casqa-handbook-construction/se-2_2019.pdf. Accessed August 2022.

control plan would address any potential erosion issues associated with the proposed grading and site preparation activities.

Submittal and implementation of the PWQMP, SWPPP, and the erosion control plan prior to the construction phase of the proposed Project would address the potential for construction of the Project to affect water quality. The proposed Project would comply with all applicable regional and local water quality standards and waste discharge requirements as stated above in the Regulatory Setting, including the MS4 permit and NPDES permit. As a result, with implementation of the regulatory requirements and standard conditions of the PWQMP, SWPPP, and the erosion control plan and compliance with applicable water quality standards and waste discharge requirements, water quality impacts associated with construction activities would be less than significant.

Operational Impacts

Once the proposed Project has been constructed, urban runoff could include a variety of contaminants that could impact water quality. Runoff from buildings and parking lots typically contain oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals), as well as suspended solids/sediment, fertilizers, herbicides, pesticides, and other pollutants associated with landscaping activities. Precipitation at the beginning of a storm season may result in an initial stormwater runoff (first flush) with high pollutant concentrations.

The Project has been designed to meet applicable LID requirements, which would include BMPs to treat stormwater. These BMPs would comply with standards as set forth by San Bernardino County, which comply with the CASQA. CASQA recommends three different types of stormwater quality treatment, as listed below in order of priority: infiltration, rainwater harvesting, and biotreatment.[47] The soil profile of the proposed Project site includes medium to very dense silty sand and sand with varying amounts of silt and gravel below approximately 30 feet.[48] Field tests resulted in high percolation rates of the sandy alluvial soils and deep groundwater, which concluded that infiltration onsite should be considered feasible. Based on methods used at nearby developments, underground stormwater storage has been identified as a typical practice for stormwater management (water quantity and water quality).

The drainage system would include a stormwater collection and conveyance system designed to collect and pre-treat stormwater in accordance with applicable LID standards in an underground

47 City of Ontario. *Stormwater Pollution Prevention for Industrial Businesses*.

48 Cotton, Shires, and Associates, Inc. *Geotechnical Investigation*.

storage/infiltration facility. The proposed aircraft apron would be graded to direct all stormwater runoff within the apron limits to catch basins installed along the east and west perimeters of the apron, along the nose of the aircraft stalls on the north side of the cargo building, and along the tail of the aircraft stalls to the west of the building. 31 catch basins (18 basins in Phase 1 and 13 basins in Phase 2) would be installed along the east and west perimeter of the aircraft apron to collect runoff which would be detained in an underground storage system, consisting of a series of connected pipes underground with stone and filter media surrounding the pipes. Runoff south of East Avion Street from the parking garage would be piped north under East Avion Street and into the apron treatment system. Apron pavement within 50 feet of the Air Cargo Sort Building would be sloped away from the building to direct stormwater to the catch basins. Each catch basin will have a two-foot sump to allow sediment in the stormwater to settle before being conveyed downstream through a series of underground pipes. Before stormwater enters the underground infiltration system, it will pass through a central oil-water separator and two main sediment chambers to further treat stormwater for water quality.

Based on Hydrological Conditions of Concern criteria, 467,800 cubic feet of stormwater from the Main Project Site and 17,600 cubic feet of stormwater from the Parking Garage Site, would need to be stored in the underground infiltration system before being discharged into the Cucamonga Channel.[49] The Project would have two separate stormwater conveyance systems. These systems will discharge from the respective sites at two separate locations. Both the main site and Parking Garage Site of the proposed Project site would utilize separate underground infiltration systems. The maximum allowable peak flow rate discharged into the Cucamonga Channel was calculated at 111 cfs for the Main Project Site and 11 cfs for the Parking Garage Site. For the Main Project Site, to store the required runoff volume of 467,800 cubic feet, footprint of the underground system is approximately 80 feet wide by 265 feet long and would be located in the southeastern portion of the Main Project Site. Based on design of the underground infiltration system, a 24-inch outlet pipe on the downstream side of the system would discharge the stormwater at a controlled rate not greater than 24 cfs (for the 100-year storm) into Cucamonga Channel. For the Parking Garage Site, to store the required runoff volume of 17,600 cubic feet, footprint of the underground system is approximately 20 feet wide by 65 feet long and would be located under the parking garage entrance drive. Based on preliminary design of the underground infiltration system, a 24-inch outlet pipe on the downstream side of the system would discharge the stormwater at a controlled rate not greater than 9 cfs (for the 100-year storm) into a new East Avion Street drainage system that will be completed prior to the opening of the proposed Project and into Cucamonga Channel. Underground stormwater infiltration is

49 CHA. *Preliminary Hydrology Study*. (See **Appendix 5.9-1.**)

consistent with area-wide LID practices used to manage stormwater quality and quantity of the proposed Project site runoff. This design will meet the MS4 permit requirements and WQMP requirements as set forth by San Bernardino County.

The proposed stormwater treatment system would target and reduce pollutants of concern in runoff from the proposed Project site in compliance with the San Bernardino County MS4 permit requirements. Compliance with the regulatory requirements and conditions of the San Bernardino County MS4 Permit as well as the Construction General Permit, including incorporation of operational BMPs to target pollutants of concern, would ensure that water quality impacts, degradation of water quality, increased pollutant discharge, alteration of receiving water quality, or impacts on surface water quality to marine, fresh, or wetland waters during Project operation would be less than significant.

HYD-2: **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Each year the Chino Basin Watermaster reviews water supply conditions including local rainfall, groundwater levels, local stormwater runoff available for replenishment, imported water availability and the amount of water stored in the groundwater basin for future demands, to ensure the Chino Basin is responsibly managed. Regardless of the annual safe yield adopted (a new safe yield is adopted every ten years) there has never been a restriction on the amount of water which may be pumped from the Chino Basin, subject to replenishment requirements under the Chino Basin Watermaster's oversight. During the most recent, consecutive five-year period of drought, the City was able to increase its production of its groundwater supplies from this adjudicated and managed groundwater basin.[50] The City also had the ability to systematically implement aspects of its Water Shortage Contingency Plan. As a result of these collective actions (and experience during prior consecutive five-year droughts), the City does not anticipate a water supply shortage from the Chino Basin.

OMUC anticipates increasing its total water supply by pursuing: 1) full utilization of OMUC's groundwater rights in the Chino Basin allowed under the Chino Basin Groundwater Adjudication Judgment (including increased groundwater recharge with stormwater and recycled water

50 Stetson Engineers. *City of Ontario 2020 UWMP*.

described in **Appendix 5.9-3)**; 2) expanding use of recycled water; and 3) expanding use of desalinated water.[51]

Less Than Significant Impact.

Construction

The existing Project site is largely developed with buildings and paved areas and, for this reason, little recharge presently occurs on the site. With development of the proposed Project, the amount of impervious surfaces would increase. However, the proposed Project includes approximately 3 acres of landscaping, which would add pervious surface to the Project site. For this reason, the Project would not have a substantial effect on groundwater recharge. Additionally, construction of the proposed Project would not require groundwater extraction during construction of the Project.

Operation

The City's total annual groundwater production has held relatively stable over the past 10 years at roughly 20,000 AFY.[52] Production capacity meets current demands and is projected to increase to meet ultimate demand. The water supply utilized by the City for 2019-2020 totaled approximately 39,921 AFY. Currently, the City's water rights in the Chino Basin as recorded by the Chino Basin Watermaster total approximately 36,514.9 AFY (Annual Production Rights for Non-Ag Pool plus Appropriative Pool), with an additional 96,544 AF in storage.[53] Although annual fluctuations will occur, the City's rights are projected to increase over the next 20 years due to more land use conversions and credits from recharge. Therefore, the City has been allocated the right to pump by the Chino Basin Watermaster, which would ensure the groundwater basin is a manageable sustainable water source.

As previously stated, no water supply wells are located on the Project site and direct water extraction would not be required during operation of the proposed Project. Two connections would occur along the southeast and southwest corners of the apron to feed water lines and hydrants along the east and west perimeters of the apron. Water lines would also connect to the Utility Substation Building, Aviation Line Maintenance Warehouse, and GSE Maintenance Building.

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51 Stetson Engineers. *City of Ontario 2020 UWMP*.

52 Stetson Engineers. *City of Ontario 2020 UWMP*.

53 Stetson Engineers. *City of Ontario 2020 UWMP*.

A WSA was prepared for the Project site to determine if the water demand during operation of the Project would be sufficiently accommodated by the existing system within the City.[54] The calculated water demand for the Project totaled approximately 124,080 gallons per day or 119 AFY, which would be 0.20 percent of the projected City-wide supply for the year of complete Project buildout. The WSA concluded that the City would have sufficient water supplies available during normal, single dry, and multiple dry years through the year 2045 to meet all projected water demands associated with its existing and future customers, including the proposed Project. In the unlikely event of a water shortage, implementation of the City's Water Conservation Plan and water efficiency strategies would ensure that sufficient water supplies were available to serve its customers, including the proposed Project and existing and future users.

The water supplies available to OMUC currently meet and exceed citywide water demands. Groundwater extraction by OMUC is currently less than the amount existing rights allow and within the extraction capacity of the local system. OMUC has the means and rights to exceed their groundwater allocation in the Chino Basin when required to meet demand pursuant to the Judgment. Further, OMUC has rights to water held in storage that would supply all City demands for more than two years. In addition to groundwater, OMUC can supply water to the proposed Project purchased from the Water Facilities Authority (WFA), that is within their existing entitlements and capacity (see **Appendix 5.9-3** for further discussion of water supply and demand**)**. Therefore, OMUC can meet water demand of the proposed Project by producing additional groundwater or purchasing imported water supplies to which it has existing rights and available capacity to use.

There are no existing wells within the proposed Project site used for extracting groundwater.[55] Construction and operation of the proposed Project would not involve groundwater extraction. For these reasons, the proposed Project will not impede sustainable groundwater management of the Chino Basin and Project impacts related to a decrease in groundwater supplies or interference with groundwater recharge would be less than significant.

HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site?

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54 Meridian Consultants, LLC. *Water Supply Assessment* (WSA). July 2022 (see **Appendix 5.9-3**).

55 California Department of Conservation. "Well Finder CalGEM GIS."

Less Than Significant Impact.

Construction Impacts

Construction of the Project would not alter the course of a stream or river. There are no existing streams or wetlands on the site. Therefore, no streams or wetlands would be disturbed as part of the Project.

During Project construction, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate.

As discussed above, the Construction General Permit requires preparation of a SWPPP. The SWPPP would detail erosion control and sediment control BMPs to be implemented during construction to minimize erosion and retain sediment on site. With compliance with the regulatory requirements and conditions of the Construction General Permit, and with implementation of the construction BMPs, construction impacts related to on-site, off-site, or downstream erosion or siltation would be less than significant.

Operational Impacts

According to the Preliminary Hydrology Study (see **Appendix 5.9-1**), the existing drainage areas on the Project site consist of approximately 84.9 acres of impervious surfaces and, with Project implementation, the re-designed drainage areas would include approximately 89.9 acres of impervious surfaces.[56] This increase in impervious surface area would increase the volume of stormwater runoff compared to existing conditions.

The existing drainage pattern of the site would not be substantially altered by the Project. A series of storm catch basins and pipes would convey stormwater generally from a west to east direction and ultimately discharge this runoff into Cucamonga Channel, similar to existing. However, post-development conditions would change the number of drainage areas from four to contain three (3) separate drainage areas. Drainage Area A (DA-A) would collect stormwater from the Main Project Site, including the western portion of the aircraft apron, the northern apron area including the maintenance buildings, and the Main Sort Building and truck yard. Stormwater runoff would be conveyed, via catch basins and pipes, eastward toward the southeastern portion of the Project site and will enter the Main Project Site's underground infiltration system. Drainage

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56 CHA. *Preliminary Hydrology Study*. (See **Appendix 5.9-1.**)

Area B (DA-B) would collect stormwater from the eastern side of the main site. Stormwater runoff would be conveyed using catch basins and pipes toward the southeastern portion of the Project site and would enter the Main Project Site's underground infiltration system. The underground infiltration system would collect stormwater from both DA-A and DA-B and discharge stormwater to a future storm system installed under E. Avion Street (separate project not associated with the proposed Project [see **Section 4.0**, East Avion Street Realignment]). This system will ultimately discharge into the Cucamonga Channel. Drainage Area C (DA-C) would collect stormwater from the portion of the site including the parking garage. The stormwater would be conveyed across the Project site via pipe and/or sheet flow to a separate underground infiltration system. This system would discharge to a new Avion Street drainage system that would be completed prior to the opening of the proposed Project. This system will ultimately discharge into the Cucamonga Channel.

The proposed Project would utilize three drainage areas compared to the existing four, as well as the new Avion Street drainage system that would be completed prior to the opening of the proposed Project, and outlet points, and implement BMPs to release stormwater at a controlled rate into the Cucamonga Channel, the proposed Project would not significantly impact the Cucamonga Channel. The rate of flow calculated for the preliminary design of the underground infiltration system and estimated amount of runoff during operation of the Project site would be no greater than 24 cfs for the main site and 9 cfs for the parking garage (for the 100-year storm), which is below the calculated maximum allowable peak flow rate of 111cfs. This would ensure that substantial erosion on or off-site would not occur. The collection, treatment, and controlled release of stormwater runoff in the planned underground water treatment facility to the drainage channels would ensure that runoff from the site does not remove significant amounts of sediment into the drainage channels and result in substantial erosion or siltation on the site. Impacts would be less than significant.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact.

Construction Impacts

As discussed above, Project construction would comply with the requirements of the Construction General Permit and would include the preparation and implementation of a SWPPP. The SWPPP would include construction BMPs to control and direct on-site surface runoff as well as include detention facilities, if required, to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage systems. With implementation of construction BMPs such as containing non-storm water runoff at the Project

site and use of proper concrete washout facilities to minimize the discharge of pollutants in stormwater runoff, construction impacts that would increase the rate or amount of surface runoff, flow, and volume, resulting in flooding would be less than significant, and no mitigation is required.

Operational Impacts

As discussed previously, the Project would increase impervious surface area, which would increase stormwater runoff compared to existing conditions. Following construction of the Project, peak flow would increase from 105.1 cubic feet per second (cfs) for the main site and 10.5 cfs for the parking garage area to 248.8 cfs for the main site and 11.3 cfs for the parking garage, without implementation of any LID BMP.[57]

Operation of the Project would conform to existing on-site drainage patterns. The proposed drainage system improvements would include a stormwater collection and conveyance system designed to collect and pre-treat stormwater in accordance with applicable LID standards in an underground storage/infiltration facility. Based on preliminary design of the underground infiltration system, stormwater would be discharged at a controlled rate of no greater than 24 cfs for the main site and 9 cfs for the parking garage (for the 100-year storm). These measures would contain the runoff from the Project site to the underground chambers which would be treated before discharging into a new East Avion Street drainage system that will be completed prior to the opening of the Proposed Project.

With the implementation of the BMPs and detention features, the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in on- or off-site flooding. Also, the site design LID features and on-site detention facilities would ensure that stormwater runoff does not exceed the capacity of the City's storm drain system, which includes the Airport. As the runoff from the Project site would be collected by existing and the new Avion Street drainage facilities, the proposed Project would not result in or contribute to flooding. For these reasons, impacts to related to increase in runoff resulting in flooding would be less than significant.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

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57 CHA. *Preliminary Hydrology Study*. (See **Appendix 5.9-1.**)

Less Than Significant Impact.

Construction Impacts

As discussed previously, Project construction would comply with the requirements of the Construction General Permit and would include the preparation and implementation of a SWPPP. The SWPPP requires all applicable BMPs be implemented, as listed in the California Stormwater Best Management Practice Handbooks or the current, San Bernardino County Stormwater Program's Report of Waste Discharge, to reduce pollutants in stormwater runoff and reduce non-stormwater discharges to the City's stormwater drainage system to the maximum extent practicable.

BMPs will be implemented for targeted industrial activities, equipment, and materials, as necessary. The following BMPs would be implemented in accordance with the Construction General Permit:[58]

- Storm drain inlet protection
- On and off-site street sweeping and vacuuming
- Silt fencing, fiber rolls, or gravel bags
- Hydroseeding inactive areas of the site
- Stockpile management
- Spill prevention and control
- Vehicle and equipment maintenance, cleaning, fueling and storage
- Stabilized construction entrance/exit
- Material delivery and storage
- Solid waste management
- Concrete waste management

During construction, the required BMPs would be used to reduce impacts to water quality, including those impacts associated with soil erosion, siltation, and spills. With implementation of construction BMPs as specified in the Construction General Permit, Project construction would not create or contribute to runoff water which would exceed the capacity of existing or planned

58 City of Ontario. *Stormwater Pollution Prevention for Industrial Businesses*.

stormwater drainage systems or provide substantial additional sources of polluted runoff and impacts would be less than significant.

Operational Impacts

Operation of the Project has the potential to introduce pollutants to the storm drain system from the proposed on-site uses. However, the proposed Project design includes measures to address any potential flood hazards. As specified in the San Bernardino County MS4 Permit, the required WQMP shall include BMPs for source control, pollution prevention, site design, LID implementation, where feasible, and structural treatment control BMPs.[59] As shown in **Table 5.9-3**, the PWQMP proposes these BMPs to comply with the MS4 permit.[60]

As discussed above, on-site stormwater detention facilities including 467,800 cubic feet of underground storage would be included in the Project to reduce the amount of additional runoff into existing drainage facilities.[61] The incorporation of the proposed operational BMPs as stated in the PWQMP would allow the Project to comply with San Bernardino County drainage requirements. Operational impacts related to creation or contribution of runoff water that would exceed the capacity of existing, or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, would be less than significant.

(iv) impede or redirect flood flows;

Less Than Significant Impact.

As shown in **Figure 5.9-1**, the Project site lies partially within Flood Zone "AO" with a flood depth of 1 and 2 feet and partially within Zone "X" (0.2% Annual Change Flood Hazard).[62] The area north of East Avion Street where the Air Cargo Sort Building, administrative offices, and aircraft apron improvements are proposed is designated as Zone "X." A portion of the Air Cargo Sort Building is within a 100-year floodplain. The area directly south of the Project site, where the parking garage is proposed, comprises a drainage basin and is designated as Zone "AO," with a 1 percent or greater chance of shallow (1 to 2 feet) flooding annually. Additionally, the

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59 State Water Resources Control Boards. *ORDER NO. R8-2010-0036. NPDES NO. CAS618036.*

60 City of Ontario. *Preliminary Water Quality Management Plan*. (See **Appendix 5.9-2.**)

61 CHA. *Preliminary Hydrology Study*. (See **Appendix 5.9-1.**)

62 Federal Emergency Management Agency (FEMA). "National Flood Hazard Layer (NFHL) Viewer." https://msc.fema.gov/portal/search?AddressQuery=wrigley%20heights%2C%20long%20beach#searchresultsanchor. Accessed July 2022.

Cucamonga Channel just east of the Project site is designated as Zone "A" which contains a 1 percent chance of flooding. Zones "A" and "AO" are designated as 100-year Floodplain areas and Zone "X" is designated as a 500-year Floodplain area.[63]

Based on these designations, the entire Project site would potentially be subject to inundation by 100-year storm floodwaters at depths of one foot or less. The proposed Project would be required to address these potential flood hazards as stated in Ontario Municipal Code Section 8-13.501: Standards of construction.[64] Specifically, all occupied and insurable structures, such as office and cargo transfer buildings, would be elevated above applicable floodwater depths to avoid associated potential hazards and be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads. Additionally, the Project would include an underground stormwater detention and infiltration which would discharge stormwater at a controlled rate not greater than 24 cfs for the main site and 9 cfs for the parking garage (for the 100-year storm). Based on these design conditions, the Project impacts related to impeding or redirecting flood flows would be less than significant.

HYD-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact.

There are no open bodies of water in the vicinity of the Project site and the Project is therefore not located within an inundation zone of a seiche. The Project site is located approximately 36 miles east of the Pacific Ocean and is not located within a tsunami inundation zone, according to the California Department of Water Resources.[65] The Project site is partially located within a special flood hazard area (Zone AO) with a depth of 1 and 2 feet, and partially within a 0.2 percent annual change flood hazard area (Zone X).[66] The Project is also within the San Antonio Creek Dam Failure Inundation zone.[67]

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63 City of Ontario. *The Ontario Plan*. "Safety Element."

64 City of Ontario. Ontario Municipal Code. Article 5. Section 8-13.501.

65 California Department of Water Resources. "California Dam Breach Inundation Maps." https://water.ca.gov/programs/all-programs/division-of-safety-of-dams/inundation-maps. Accessed December 2021.

66 Guida Surveying Inc. *ALTA/NSPS Land Title Survey SACC Ontario International Airport*. November 2021. (See **Appendix 5.9-4.**)

67 City of Ontario. *The Ontario Plan*. "Safety Element."

The Ontario Municipal Code, Chapter 13, Flood Damage Prevention Program, requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards.[68] Section 8-13.501 of the Ontario Municipal Code states that the City shall require all new structures within a special flood hazard area have elevations above the elevations of the base flood. In addition, new development would require stormwater infrastructure or upsizing of existing infrastructure to reduce flood hazards. The proposed Project would also keep the storage of potentially hazardous materials on-site to a minimum, which would reduce the potential for hazardous materials to be released into surface water during flooding (see **Section 5.8: Hazards and Hazardous Materials**). With implementation of existing regulations to reduce flood hazards, risk of release of pollutants due to Project inundation would be less than significant.

HYD-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact.

Adherence to the regulatory requirements and conditions of the State General Construction Permit, implementation of the SWPPP, and adherence to the City's Erosion and Sediment Control Plan requirements, would ensure that surface and groundwater quality are not adversely impacted during construction. In addition, implementation of the LID and BMP measures at the site, including catch basins, underground detention, and sediment filtration chambers, would ensure that water quality would not be impacted during the operation of the Project. As a result, site development would not obstruct or conflict with the implementation of the Santa Ana River Basin Water Quality Control Plan.

Water service for the Project would be provided by the City and there would be no on-site wells for use of groundwater. The City manages both the potable and non-potable supplies to ensure withdrawals from the Chino Groundwater Basin do not exceed the safe yield for the Basin, as per the Chino Basin Watermaster's OBMP. Therefore, the Project would not obstruct or conflict with the OBMP, applicable water quality control plans, or applicable sustainable groundwater management plans. Therefore, impacts would be less than significant.

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68 Ontario Municipal Code. Ch. 13. Article 4. Sec. 8-13.401.

5.9.4 CUMULATIVE IMPACTS

5.9.4.1 Hydrology and Drainage

Cumulative projects within the Chino Basin Watershed could increase impervious areas and increase stormwater runoff rates. However, all projects within the watershed would be required to prepare and implement WQMPs that include provisions for the capture and infiltration of runoff or the temporary detention of stormwater runoff so that post-development runoff discharges do not exceed pre-development runoff rates, in accordance with the NPDES and MS4 permits. The Project would increase the area of impervious surface on site and increase the amount of localized runoff during a storm event. However, the peak flow rate would not substantially increase due to the proposed underground storage and infiltration chamber, which would reduce the peak flow rate to a maximum of 24 cfs for the main site and 9 cfs for the parking garage. With implementation of the required BMPs such as underground storage and filters, impacts related to a substantial increase in the rate or amount of surface runoff, flow, and volume that would result in flooding or reduced surface water quality, would be less than significant. Thus, no significant cumulative impacts would result from the Project, related projects and other growth, and the Project's contribution to cumulative impacts will not be cumulatively considerable.

5.9.4.2 Surface Water Quality

Related projects have the potential to generate pollutants during project construction and operation. All construction projects that disturb one acre or more of land would be required to prepare and implement project-specific SWPPPs in order to obtain coverage under the Statewide GCP. All projects within the watershed would also be required to prepare and implement WQMPs specifying BMPs, including LID measures, which would be applied during project design and project operation to minimize water pollution from project operation. Compliance with these existing regulatory requirements will ensure that no significant cumulative impact to water quality would result from the Project, related projects and other growth, and the Project's contribution to cumulative impacts would not be cumulatively considerable.

5.9.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

The hydrology and water quality impacts of the Project would be less than significant due to compliance with existing regulatory requirements.

5.9.6 MITIGATION MEASURES

The proposed Project would have a less than significant impact on hydrology and water quality. Therefore, no mitigation measures are required.

5.9.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant. No mitigation measures are required.

5.9.8 REFERENCES

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5.10.1 INTRODUCTION

This section of the Draft EIR analyzes the potential noise and vibration impacts associated with the proposed Project. Specifically, the analysis describes the existing noise environment, future noise, and vibration levels at surrounding land uses resulting from construction and operation of the proposed Project, identifies the potential for impacts, and provides mitigation measures to address any significant impacts. In addition, evaluation of the potential cumulative noise and vibration impacts resulting from the proposed Project and future growth are also provided. The analysis in this section is based in part on the following documents:

- Crawford, Murphy & Tilly, *South Airport Cargo Center Aircraft Noise Assessment*, Ontario International Airport (ONT), October 13, 2022. (**Appendix 5.10-1**).
- Roadway Noise Worksheets (**Appendix 5.10-2**).
- Construction Noise Worksheets (**Appendix 5.10-3**).
- Construction Vibration Worksheets (**Appendix 5.10-4**).

5.10.2 ENVIRONMENTAL SETTING

5.10.2.1 Background Information Regarding Noise

Noise Descriptors

Noise levels are measured using a variety of scientific metrics. As a result of extensive research into the characteristics of noise and human response, standard noise descriptors have been developed for noise exposure analyses. All noise levels provided in this Noise Report are for outdoor conditions, unless otherwise stated specifically to be interior noise levels.

A-Weighted Sound Pressure Level (dBA): The decibel (dB) is a unit used to describe sound pressure level. When expressed in dBA, the sound has been filtered to reduce the effect of very low and very high frequency sounds, much as the human ear filters sound frequencies. Without this filtering, calculated and measured sound levels would include events that the human ear cannot hear (e.g., dog whistles and low-frequency sounds, such as the groaning sounds emanating from large buildings with changes in temperature and wind). With A-weighting, calculations and sound-monitoring equipment approximate the sensitivity of the human ear to sounds of different frequencies.

Maximum Noise Level (Lmax): Lmax is the maximum or peak sound level during a noise event. The metric accounts only for the instantaneous peak intensity of the sound, and not for the duration of the event. As a vehicle passes by an observer, the sound level increases to a maximum level and then decreases. Some sound level meters measure and record the maximum or Lmax level.

Sound Exposure Level (SEL): SEL, expressed in dBA, is a time-integrated measure, expressed in decibels, of the sound energy of a single noise event at a reference duration of 1 second. The sound level is integrated over the period that the level exceeds a threshold. Therefore, SEL accounts for both the maximum sound level and the duration of the sound. The standardization of discrete noise events into a 1-second duration allows calculation of the cumulative noise exposure of a series of noise events that occur over a period.

Equivalent Continuous Noise Level (Leq): Leq is the sound level, expressed in dBA, of a steady sound that has the same A-weighted sound energy as the time-varying sound over the averaging period. Unlike SEL, Leq is the average sound level for a specified time period (e.g., 24 hours, 8 hours, 1 hour). Leq is calculated by integrating the sound energy from all noise events over a given time period and applying a factor for the number of events. Leq can be expressed for any time interval; for example, the Leq representing an averaged level over an 8-hour period would be expressed as Leq (8).

Community Noise Equivalent Level (CNEL): CNEL, expressed in dBA, is a rating of community noise exposure to all sources of sound that differentiates between daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM) noise exposure. CNEL includes penalties applied to noise events occurring after 7:00 PM and before 7:00 AM, when noise is considered more intrusive. The penalized time period is further subdivided into an evening period with an addition of 5 dBA to measured or forecasted noise levels and a nighttime period with an addition of 10 dB to measured or forecasted noise levels. The evening weighting is the only difference between CNEL and day-night average sound level (DNL).

Effects of Noise on Humans

Human response to sound is highly individualized. Annoyance is the most common issue associated with community noise levels. Many factors influence the response to noise including the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, nonacoustical factors, such as an individual's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence the response to noise. These factors result in the reaction to noise being highly subjective, with the perceived effect of

a particular noise varying widely among individuals in a community. The effects of noise can be grouped into three general categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as starting hearing loss.

Noise-induced hearing loss usually takes years to develop. Hearing loss is one of the most obvious and easily quantifiable effects of excessive exposure to noise. While the loss may be temporary at first, it can become permanent after continued exposure. When combined with hearing loss associated with aging, the amount of hearing loss directly due to the environment is difficult to quantify. Although the major cause of noise induced hearing loss is occupational, nonoccupational sources may also be a factor.

Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. Interference with communication has proved to be one of the most important components of noise-related annoyance.

Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern or level of sleep. It can produce short-term effects, with the possibility of more serious effects on health if it continues over long periods.

Annoyance can be defined as the expression of negative feelings resulting from interference with activities, as well as the disruption of one's peace of mind and the enjoyment of one's environment. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed previously.

Some common sounds on the dBA scale, relative to ordinary conversation, are provided in **Table 5.10-1: Common Sounds on the A-Weighted Decibel Scale**. As shown, the relative perceived loudness of sound doubles for each increase of 10 dBA, although a 10 dBA change corresponds to a factor of 10 in relative sound energy. Generally, sounds with differences of 3 dBA or less are not perceived to be noticeably different by most listeners.

TABLE 5.10-1
COMMON SOUNDS ON THE A-WEIGHTED DECIBEL SCALE

Sound	Sound level (dBA)	Noise Environment	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil defense siren	130	Threshold of pain	64 times as loud
Hard rock band	120	Threshold of feeling	32 times as loud
Accelerating motorcycle a few feet away	110	Very Loud	16 times as loud
Pile driver; noisy urban street/heavy city traffic	100	Very Loud	8 times as loud
Ambulance siren; food blender	95	Very Loud	--
Garbage disposal	90	Very Loud	4 times as loud
Freight cars; living room music	85	Loud	--
Pneumatic drill; vacuum cleaner	80	Loud	2 times as loud
Busy restaurant	75	Moderately loud	--
Near freeway auto traffic	70	Moderately loud	Reference level
Average office	60	Quiet	½ as loud
Suburban street	55	Quiet	--
Light traffic; soft radio music in apartment	50	Quiet	¼ as loud
Large transformer	45	Quiet	--
Average residence without stereo playing	40	Faint	1/8 as loud
Soft whisper	30	Faint	--
Rustling leaves	20	Very faint	--
Human breathing	10	Very faint	Threshold of hearing
--	0	Very faint	--

Note: Subjective evaluations based on reference level of near freeway auto traffic.

5.10.2.2 Fundamentals of Vibration

Vibration is commonly defined as an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or the root-mean-square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response to ground-borne vibration. The RMS vibration velocity

level can be presented in inches per second (ips) or in vibration decibels (VdB, a decibel unit referenced to 1 microinch per second). Generally, ground-borne vibration generated by man-made activities (e.g., road traffic, construction activity) attenuates rapidly with distance from the source of the vibration.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people.[1] Most perceptible indoor vibration is caused by sources within buildings such as the operation of mechanical equipment, the movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the threshold where minor damage can occur in fragile buildings.

5.10.2.3 Existing Conditions

Surrounding Uses

The noise environment in the proposed Project area is defined by vehicular noise on the I-10 Freeway, train noise from the UPRR tracks, and aircraft noise from the Airport. The nearest sensitive uses include the single-family residence on South Grove Avenue and the Mariposa Elementary School north of the Airport boundary. A detailed description of the surrounding land uses is described below:

- **North.** Taxiway 'S' runs along the northern perimeter of the Project site. It is the main parallel taxiway on the south side of the airfield. Taxiway S has a 400-foot runway separation from Runway 8R-26L, the southern runway at the Airport. Beyond Taxiway 'S,' the former Southern Pacific Railroad tracks, airport terminals, parking lots, prime flight aviation services, airline cargo hangars, and commercial facilities are also located to the north. Car rental businesses and commercial facilities are located to the northeast on the southwest corner of South Haven Avenue and East Airport Drive.
- **East.** The Cucamonga Channel is adjacent to the eastern perimeter of the Project site. The segment of the channel adjacent to the site is an open concrete lined box-culvert

[1] Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment Manual*. p. 7-8, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed July 2022.

and flows from north to south. Immediately east of the channel at the service road is the Airport's fire station and the FAA Air Traffic Control Tower on the west side of Tower Drive. Across Tower Drive is a vacant lot, industrial and commercial facilities, and large warehouses.

- **South.** South of East Avion Street and west of South Hellman Avenue is the Airport's Maintenance facility. The area south of the National Guard facility, at the southeast corner of the Project site, contains vacant buildings formerly occupied by General Electric. Farther south is the Union Pacific Railroad/Metrolink right-of-way and Mission Boulevard, beyond which are industrial uses. An open drainage channel is located directly south of the Project site along the Airport boundary.
- **West**. Airport related buildings and hangars, the intersection of East Avion Street at South Vineyard Avenue, and the new Guardian Jet hangar are west of the Project site. Industrial and commercial uses are located farther west.

Sensitive Receptors

Some land uses are considered more sensitive to intrusive noise than others based on the types of activities typically involved at the receptor location. Land uses considered to be noise sensitive include residences, schools, hospitals, libraries, and parks. Residential land uses are considered especially noise sensitive because (1) considerable time is spent by individuals at home, (2) significant activities occur outdoors, and (3) sleep disturbance is most likely to occur in a residential area. The Federal Highway Administration (FHWA) considers uses where people normally sleep, such as residences, hotels, and motels, noise-sensitive land uses.[2]

As described above, the Project site is primarily surrounded by airport and industrial uses. Distances from the Airport boundary to residential zoned areas are approximately 1,200 feet (0.23 miles) to the northwest, 1,300 feet (0.25 miles) to the southwest, 2,800 feet (0.53 miles) to the north, 3,600 feet (0.68 miles) to the west, and 6,500 feet (1.2 miles) to the south. However, there also are some residences located within the industrial/ commercial areas to the west and south. The closest existing sensitive receptor to the Project site is a single-family residence on South Grove Avenue, approximately 200 feet north of the Airport boundary (approximately 2,000 feet northwest of Runway 8L – 26R). The closest school is the Mariposa Elementary School, approximately 2,000 feet (0.38 miles) north of the airport boundary. The closest hospital is the Kaiser Permanente Ontario Vineyard hospital, approximately 5,300 feet (one mile) south of the Airport boundary.

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2 FTA. *Transit Noise and Vibration Impact Assessment Manual*.

Roadway Noise Levels

The baseline traffic noise levels on local roadways in the surrounding areas was calculated to quantify the 24-hour CNEL noise levels using information provided in the Transportation Impact Study (Refer to **Appendix 5.12-1**). A total of 29 segments were selected for the existing off-site traffic noise analysis, based on proximity to noise sensitive uses along the roadway segments and potential increases in traffic volume from the proposed Project.

Table 5.10-2: Existing Roadway Noise Levels provides the calculated CNEL for the analyzed roadway segments based on existing traffic volumes. As shown, CNEL levels attributed to roadway traffic range from 57.63 dBA CNEL along Avion Street east of Vineyard Avenue to a high of 74.56 dBA CNEL along Haven Avenue between Guasti Road and Airport Drive. In terms of the City's land use noise compatibility categories based on roadway traffic only, most locations are classified as clearly and normally acceptable. Specifically, the noise exposure categories based on roadway traffic only are summarized as follows:

- Clearly Acceptable: Locations where commercial and industrial zones are dominant along Vineyard Avenue, Archibald Avenue, Avion Street and Jurupa Street.
- Normally Acceptable: Location where industrial and airport zones are dominant along Mission Boulevard, Archibald Avenue, Haven Avenue and Jurupa Street.
- Normally Unacceptable: None
- Clearly Unacceptable: None

TABLE 5.10-2
EXISTING ROADWAY NOISE LEVELS

Roadway Segment	General Plan Land Use Designation	Existing Roadway Noise Level	Existing Noise Exposure Compatibility Category
Mission Boulevard			
Between Euclid and Campus	Commercial/Industrial	70.76	Normally Acceptable
Between Campus and Grove	Commercial/Industrial	70.76	Normally Acceptable
Grove and Vineyard	Industrial	71.23	Normally Acceptable

TABLE 5.10-2
EXISTING ROADWAY NOISE LEVELS

Roadway Segment	General Plan Land Use Designation	Existing Roadway Noise Level	Existing Noise Exposure Compatibility Category
Vineyard Avenue			
Between Avion and Mission	Airport	60.25	Clearly Acceptable
Between Mission and Francis	Industrial	65.72	Clearly Acceptable
Between Francis and Philadelphia	Industrial/Open Space	67.16	Clearly Acceptable
Between Philadelphia and SR-60 Ramps	Industrial	69.72	Clearly Acceptable
Between SR-60 WB Ramps	Industrial	69.80	Clearly Acceptable
Archibald Avenue			
Between Jurupa and Mission	Industrial	67.40	Clearly Acceptable
Between Mission and Francis	Industrial	69.09	Clearly Acceptable
Between Francis and Cedar	Industrial	69.64	Clearly Acceptable
Between Cedar and Philadelphia	Industrial	69.95	Clearly Acceptable
Between Philadelphia and SR-60 WB	Industrial	71.97	Normally Acceptable
Between SR-60 Ramps	Industrial	72.56	Normally Acceptable
Haven Avenue			
Between I-10 Ramps	Office Commercial	74.46	Normally Acceptable
Between I-10 EB Ramps and Guasti	Office Commercial	74.54	Normally Acceptable
Between Guasti and Airport	Airport	74.56	Normally Acceptable
Between Airport and Jurupa	Airport	74.15	Normally Acceptable

TABLE 5.10-2 EXISTING ROADWAY NOISE LEVELS			
Roadway Segment	General Plan Land Use Designation	Existing Roadway Noise Level	Existing Noise Exposure Compatibility Category
Jurupa Street			
Between Archibald and Hofer Ranch	Industrial	70.61	Normally Acceptable
Between Hofer Ranch Road and Turner	Industrial	71.04	Normally Acceptable
Between Turner and Haven	Industrial	71.44	Normally Acceptable
Between Haven and Commerce	Industrial	70.46	Normally Acceptable
Between Commerce and Dupont	Industrial	71.71	Normally Acceptable
Between Dupont and Miliken	Industrial	71.83	Normally Acceptable
Between Miliken and Rockefeller/Toyota	Industrial	72.97	Normally Acceptable
Between Rockefeller/Toyota and I-15 SB Ramps	Industrial	73.63	Normally Acceptable
Between I-15 Ramps	Industrial	73.45	Normally Acceptable
Avion Street			
East of Vineyard	Industrial	57.63	Clearly Acceptable
Jurupa Street			
West of Archibald	Industrial	63.93	Clearly Acceptable

Source: Fehr and Peers and Meridian Consultants, 2022. Refer to **Appendix 5.10-2** for roadway noise worksheets.

Existing Vibration Levels

Based on field observations, the primary source of existing ground-borne vibration near the Project site is vehicle traffic on local roadways. According to the FTA,[3] typical road traffic-induced

3 FTA. *Transit Noise and Vibration Impact Assessment Manual*.

vibration levels are unlikely to be perceptible by people. In part, FTA indicates that "it is unusual for vibration from traffic including buses and trucks to be perceptible, even in a location close to major roadways." Therefore, based on FTA published vibration data, the existing ground vibration environment in the Project vicinity would be below the perceptible levels. Trucks and buses typically generate vibration velocity levels of approximately 63 VdB (at 50-feet distance), and these levels could reach 72 VdB when trucks and buses pass over bumps in the road.

5.10.2.4 Baseline Conditions

In this EIR, the term "Baseline Conditions" is used when discussing the hybrid 2019/2020 base year condition, as it relates to the air quality, GHG, and noise environments. Per CEQA Guidelines Section 15125(a)(1), "where necessary to provide the most accurate picture practically possible of the proposed Project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence." Due to the COVID-19 pandemic, existing conditions in 2021 at the time of the EIR's Notice of Preparation issuance do not represent activity levels that have been, or will be, typical of the Airport or that are reasonably expected to exist during the timeframe for proposed Project implementation.

Specifically, the FAA advised, as part of their annual Terminal Area Forecast (TAF) "In 2020 there was a major decrease in passenger enplanements and commercial operations as a result of the COVID-19 pandemic. There is uncertainty associated with the forecasts because of the uncertainty regarding the path of the pandemic and its economic impacts."[4] FAA estimated that medium hub airports (the Airport is a medium hub airport) would have an aggregate recovery to 2019 levels of aircraft operations and enplanements by 2025, however the projections for the Airport indicate operations will exceed 2019 levels by 2023.[5] The FAA's estimates were developed prior to the extensive uptake in passenger activity in mid to late 2021 and thus likely under represent the recovery expected at the Airport. Notably, the recovery estimated by FAA in their TAF released in May of 2021 does not incorporate the additional cargo activity that occurred in 2020 in response to the world's reliance on cargo carriers during the pandemic. Airports Council International-North America (ACI-NA) reported an increase of approximately 17 percent in cargo operations between 2019 and 2020; the Airport ranked 10th in North American airports for cargo activity, growing approximately 21 percent in total cargo when compared to

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4 Federal Aviation Administration (FAA). "Terminal Area Forecast (TAF)." Executive Summary Fiscal Years 2020-2045. https://www.faa.gov/data_research/aviation/taf/. Accessed July 2022.

5 FAA. "Terminal Area Forecast (TAF)."

2019. Thus, to more accurately represent historically-consistent but existing conditions at the Airport, and to avoid a potentially misleading comparison of project impacts, this EIR considers the impacts to three resource categories (noise, air quality, and GHGs) are described and compared using a hybrid of 2019 and 2020 operation levels at the Airport. The Baseline Conditions noise contour for this EIR was developed using calendar year 2019 aircraft operations with modifications to reflect increased cargo operations experienced during 2020 and continuing into 2021. The existing/base year aircraft fleet mix is a hybrid of 2019 and 2020 operations and was based on the Airport Noise & Operations Monitoring System (ANOMS) radar data from 2019 and 2020, and FAA Traffic Flow Management System Count (TFMSC) and Operations Network (OPSNET). Specifically, passenger air carriers, air taxi, and general aviation (GA) operations were obtained from the 2019 ANOMS data and the all-cargo operations were obtained from the 2020 ANOMS data. The military operations were obtained from the FAA TFMSC data. This approach serves to normalize operations to represent Baseline Conditions recognizing that the temporary reduction in passenger air carrier and air taxi operations, due to the COVID-19 pandemic, is not indicative of baseline/existing conditions at the Airport.

Aircraft Noise

This section describes the baseline condition by which aircraft noise was evaluated. Development of the baseline condition, which represents a hybrid 2019/2020 base year, is described in the Ontario International Airport Authority's (OIAA's) recently certified Supplemental Environmental Impact Report (SEIR) for the rehabilitation of the Airport's Runway 8R-26L.[6] As documented in the Runway 8R-26L SEIR and as noted above, the hybrid base year baseline condition were developed because in 2020 there was a major decrease in passenger enplanements and commercial operations at the Airport due to the COVID-19 pandemic. The baseline condition contours from the Runway 8R-26L SEIR were also used to represent the baseline condition contours for the evaluation of the proposed Project.

Assessments of aircraft noise are performed for annual average daily conditions (i.e., annual operations divided by the number of days in a year). The number of annual and average daily operations is provided in **Table 5.10-3: Aircraft Operations—Baseline Condition**. The average day aircraft fleet mix, the number of arrivals and departures by runway and time of day, the number of departures by stage length, the number of arrivals and departures by flight track, and the number of aircraft engine runups are provided in **Appendix 5.10-1**. The arrival and departure

6 Ontario International Airport Authority (OIAA). *Draft Supplemental Environmental Impact Report, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements at Ontario International Airport*. April 2022.

flight tracks that were modeled in the Aviation Environmental Design Tool (AEDT) are illustrated on **Figure 5.10-1: Flight Tracks**.

TABLE 5.10-3
AIRCRAFT OPERATIONS—BASELINE CONDITION

Year	Number of Aircraft Operations	
	Annual	Average Daily
2019/2020	106,026	290

Figure 5.10-2: Baseline Condition Noise Contours illustrates the land uses in the vicinity of the Airport overlaid with the baseline condition CNEL 65, 70, and 75 dBA aircraft noise contours. As shown, the CNEL 65 dBA contour extends approximately 2.75 miles east and approximately 0.75 miles west of the Airport's runways. East of the Airport, the land uses are primarily commercial and manufacturing/production, land uses that are compatible with aircraft noise. While there are residences west of the Airport, aircraft noise has been mitigated at most of the housing units through the OIAA's Quiet Home Program.[7]

Table 5.10-4: Housing Units and Population—Baseline Condition provides the estimated number of residences (i.e., housing units) and persons within each of the noise contour levels. Notably, the count of residences does not include residences previously mitigated through the Quiet Home Program. The number of persons within the noise contours was estimated using the number of persons per household by census block from the U.S. Census Bureau for the year 2010.[8]

As shown, for the baseline condition there are 13 residences and an estimated 59 people residing within the CNEL 65-69 dBA contour and no residents within the CNEL 70+ dBA contour.

7 In Quiet Home Program was created in the early 1990s to improve the quality of life in noise-impacted neighborhoods and to improve community/airport compatibility.

8 Year 2010 census data was used to be consistent with the methodology used in preparing the noise analysis for the rehabilitation of the Airport's Runway 8R-26L.

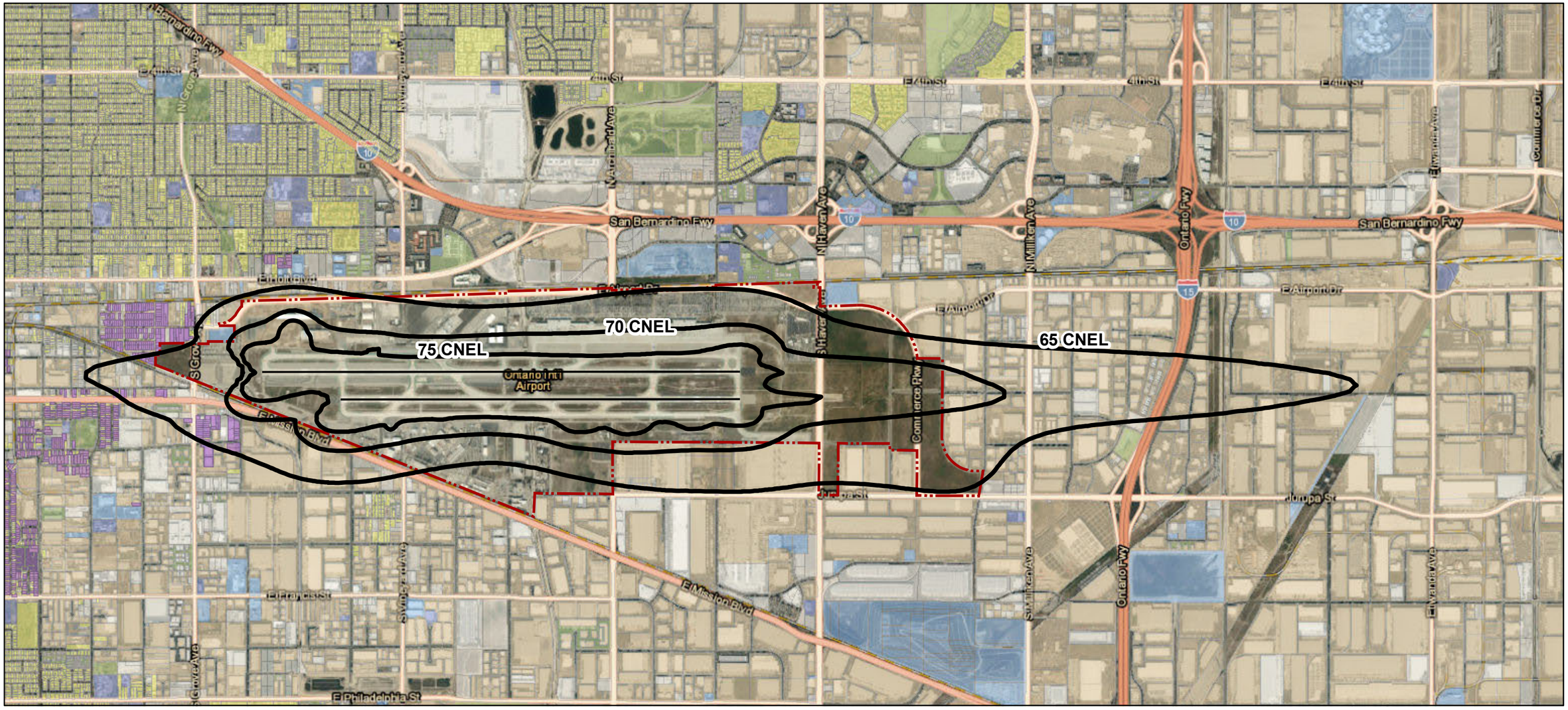
SOURCE: CMT – May 2022

FIGURE **5.10-1**

Meridian Consultants

Flight Tracks

332-001-21



Legend

- Runways
- Baseline Condition Noise Contour
- ONT Property Boundary
- Residential Use
- Public Use 1
- Public Use 2
- Recreational / Open Space
- Commercial Use
- Manufacturing and Production
- Vacant
- Mitigated Property

0 0.25 0.5 1

APPROXIMATE SCALE IN MILES

SOURCE: CMT – May 2022

FIGURE **5.10-2**

Meridian Consultants

Baseline Condition Noise Contours

332-001-21

As noted under **Table 5.10-4**, 1 of the 13 residences located within the Baseline Conditions 65-69 CNEL noise contour is subject to an avigation easement, allowing overflight by aircraft. When this avigation easement is considered, the number of housing units reduces to 12 and the population reduces to 54. The area within the CNEL 65+ dBA contour was reviewed to determine if there were any schools, libraries, hospitals, or places of worship exposed to significant aircraft noise. No schools, libraries, hospitals, or places of worship exist within the area.

TABLE 5.10-4
HOUSING UNITS AND POPULATION—BASELINE CONDITION

Housing Units/ Population	65-69 CNEL	70-74 CNEL	75+ CNEL	Total
Housing Units	13	0	0	13
Population	59	0	0	59

*Note: When considering parcels for which the OIAA has no record of the residence(s) being addressed through the Quiet Home Program but for which the parcel is subject to an avigation easement, the number of housing units reduces to 12 and the population reduces to 54 (additional information is provided in the Attachment F of the Aircraft Noise Assessment Report in **Appendix 5.10-1**).*

Source: *Draft SEIR, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements*, HNTB, April 2022.

5.10.2.5 Regulatory Background

Federal

Federal Aviation Administration

Title 14, Part 150 of the Code of Federal Regulations (14 CFR 150) prescribes the procedures, standards, and methodologies to be used by airport proprietors in developing or updating airport Noise Exposure Maps (NEMs) and airport noise compatibility programs (NCPs). The voluntary studies performed for this purpose are referred to as Part 150 studies. In a Part 150 study, uses of land that are normally compatible and noncompatible around airports are identified and measures to reduce or eliminate the number of noncompatible uses is evaluated. The land uses identified above for which state regulations are applicable (i.e., residences, schools, hospitals, convalescent homes, and places of worship) are also identified in 14 CFR 150 as being noncompatible with aircraft noise unless certain conditions are met (e.g., sound insulation to achieve an interior level of 45 dBA). In April of 2016, the FAA published a notice in the Federal Register that an NEM prepared for existing conditions at the Airport at the time of

the submittal (2015) and an NEM for future forecast conditions (2020) complied with all the applicable requirements of 14 CFR 150.[9]

An initial Part 150 study was performed for the Airport in the late 1980s and study documents were published in 1990. This initial study resulted in both NEMs and an NCP for the Airport. As part of the NCP, the Quiet Home Program was established to reduce the noncompatible land uses that were exposed to significant aircraft noise. Since that time, more than 1,599 eligible residential structures have been sound insulated and 256 noise sensitive properties acquired with the intent for compatible reuses of the acquired properties.

Federal Transit Administration Vibration Guidelines

The FTA has published a technical manual, *Transit Noise and Vibration Impacts Assessment*, which provides ground-borne vibration impact criteria with respect to building damage during construction activities.[10] According to the FTA guidelines, a vibration criterion of 0.20 PPV should be considered as the significant impact level for nonengineered timber and masonry buildings. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.50 PPV based on the FTA guidelines. Structures amplify ground-borne vibration, and wood-frame buildings, such as typical residential structures, are more affected by ground vibration than are heavier buildings. The level at which ground-borne vibration is strong enough to cause architectural damage has not been determined conclusively.

The most conservative estimates are reflected in the FTA standards, shown in **Table 5.10-5: Construction Vibration Damage Criteria**.

9 National Archives and Records Administration. *Federal Register*. Vol. 81, No. 66. Pages 20048-20049. April 6, 2016. https://www.govinfo.gov/content/pkg/FR-2016-04-06/html/2016-07914.htm. Accessed July 2022.

10 FTA. *Transit Noise and Vibration Impact Assessment Manual*.

TABLE 5.10-5
CONSTRUCTION VIBRATION DAMAGE CRITERIA

	Building Category	PPV (ips)	Lv (VdB)
I.	Reinforced concrete, steel, or timber (no plaster)	0.5	102
II.	Engineered concrete and masonry (no plaster)	0.3	98
III.	Nonengineered timber and masonry buildings	0.2	94
IV.	Buildings extremely susceptible to vibration damage	0.12	90

Note: For Max Lv (VdB), Lv = the velocity level in decibels as measured in 1/3 octave bands of frequency over the frequency ranges of 8 to 80 Hz; VdB = vibration decibels; Hz = hertz; ips = inches per second.

Source: FTA. *Transit Noise and Vibration Impact Assessment*. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed September 2021.

State

Noise

The California Environmental Quality Act (CEQA) requires the disclosure of environmental impacts related to proposed projects and the prevention of significant, avoidable environmental damage. The process informs decision makers and the public about the potential for any environmental impact.

To the extent not prohibited by federal law, Title 21 (Public Works), Division 2.5, Chapter 6 of the California Code of Regulations is applicable to all aircraft and aircraft engines that produce noise within the state of California. Section 5102 of Title 21 establishes CNEL 65 dB(A), as the Airport Noise Standard for an acceptable level of aircraft noise for persons living in the vicinity of an airport. Title 21 also defines that residences are noncompatible with aircraft noise levels at CNEL 65+ dB(A) unless the following conditions are met:[11]

- An avigation easement for aircraft noise has been acquired by the airport proprietor;
- The dwelling unit was in existence at the same location prior to January 1, 1989, and has adequate acoustic insulation to ensure an interior CNEL of 45 dB or less due to aircraft noise in all habitable rooms. However, acoustic treatment alone does not convert residences having an exterior CNEL of 75 dB or greater due to aircraft noise to a

11 California Division of Aeronautics. Department of Transportation. California Code of Regulations (CCR) Title 21 Article 1, General Section 5014. pp. 225-226.

compatible land use if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony;

- The residence is a high-rise apartment or condominium having an interior CNEL of 45 dB or less in all habitable rooms due to aircraft noise, and an air circulation or air conditioning system or air conditioning system, as appropriate;
- The airport proprietor has made a genuine effort as determined by the department in accordance with adopted land use compatibility plans and appropriate laws and regulations to acoustically treat residences exposed to an exterior CNEL less than 80 dBA (75 dBA if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony) or acquire avigation easements, or both, for the residences involved, but the property owners have refused to take part in the program; or
- The residence is owned by the airport proprietor.

Under the following conditions, public/private schools, hospitals/convalescent homes, and places of worship are also considered to be noncompatible with aircraft noise levels at or above CNEL 65 dB(A):[12]

- Schools of standard construction for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dBA or less in all classrooms due to aircraft noise;
- Hospitals and convalescent homes for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to provide an interior CNEL of 45 dBA or less due to aircraft noise in all rooms used for patient care; and
- Places of worship for which an avigation easement for noise has not been acquired by the airport proprietor or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dBA or less due to aircraft noise.

Assembly Bill 2776 requires any person who intends to sell or lease residential properties in an airport influence area to disclose that fact to the person buying the property.

12 California Division of Aeronautics. Department of Transportation. General Section 5014.

Vibration

Caltrans published its Transportation and Construction Vibration Guidance Manual in April 2020.[13] The manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. This manual provides guidelines for assessing vibration damage potential to various types of buildings, ranging from 0.08 to 0.12 inches per second for extremely fragile historic buildings, ruins, and ancient monuments, to 0.50 to 2.0 inches per second for modern industrial and commercial buildings.

The guidance and procedures provided in the Caltrans manual are suitable for use as screening tools for assessing the potential for adverse effects related to human perception and structural damage. General information on the potential effects of vibration on vibration-sensitive research and advanced-technology facilities is also provided, but a discussion of detailed assessment methods in this area is beyond the manual's scope.

Ontario Airport Land Use Compatibility Plan

As discussed in **Section 4.0: Environmental Setting** of this EIR, the Ontario Airport Land Use Compatibility Plan (ALUCP) the ALUCP does not impose any zoning restrictions or other regulations relating to the aviation or aeronautical operations and development at the Airport.[14,15,16,17,18,19]

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13 California Department of Transportation (Caltrans). *Transportation and Construction Vibration Guidance Manual*. April 2020. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed July 2022.

14 City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan*. "Chapter 1, Background and Methodology." Page 1-2. July 2018 Amendment. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/ONT-IAC/ALUCP-Chap-1-Amendment-July-2018-Final-Document.pdf. Accessed September 2022.

15 City of Ontario. Ontario Airport Planning. *Ontario International Airport Land Use Compatibility Plan*. "Chapter 2 Procedural and Compatibility Policies." Page 2-4. July 2018 Amendment. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/ONT-IAC/ALUCP-Chap-2-Amendment-July-2018-Final-Doc.pdf. Accessed September 2022.

16 City of Ontario. "Ontario International Airport – Inter Agency Collaborative." https://www.ontarioca.gov/planning/ont-iac. Accessed September 2022.

17 California Public Utilities Code. Section 21674(e).

18 Height restrictions within the boundaries of the Airport are governed only by Federal Aviation Administration Regulations Part 77.

19 Caltrans. *California Airport Land Use Planning Handbook*. Page 6-7. October 2011.

The proposed Project, which includes aircraft apron areas and a fixed base air cargo facility, proposed at the Airport in an area identified for Future Aeronautical Development on the Airport Layout Plan included as Exhibit 1-6 in the ALUCP, is an anticipated and allowed aviation-related use.

However, the ALUCP sets forth policies and land use guidelines to protect noise-sensitive receptors from excessive noise levels. To minimize noise-sensitive development in noise areas around Ontario, new development should be evaluated in accordance with the policies listed below and the criteria listed in **Figure 5.10-3: Noise Criteria.** The noise impact zones are depicted in **Figure 5.10-4: Noise Impact Zones.**

Policy N2: **Residential Development Exceptions**. The following types of residential developments are allowed within the CNEL 65 dB contour if the structure is capable of attenuating exterior noise from all noise sources to an indoor CNEL of 45 dB or less.

- **N2a: Multi-Family Residential.** Multi-family residential is allowed within the CNEL 65 dB contour if the development can achieve a density that is greater than 8 dwelling units per acre and incorporate interior common space and recreational facilities.
- **N2b: Caretaker's Unit.** A caretaker's unit that is ancillary to a primary use located within the project CNEL 65 dB contour should be deemed compatible with the ALUCP provided that there is no more than 1 dwelling unit.
- **N2c: Existing Residential Lots.** Exceptions are provided for existing residential lots (refer to Policy SP2 with regard to development by right).
- **N2d, Composite Industrial/Residential Use**. A single-family residential use combined with an industrial land use should be deemed compatible within the projected CNEL 65 dB contour due to the high ambient noise levels generated by the industrial use. However, new structures developed for residential purposes should achieve noise attenuating standards consistent with the California Building Code.

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Outdoor Uses (limited or no activities in buildings)						
Natural Land Areas: desert, brush lands						Compatible at levels indicated, but noise disruption of natural quiet will occur
Water: flood plains, wetlands, lakes, reservoirs						
Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land						
Livestock Uses: feed lots, stockyards, breeding, fish hatcheries, horse stables						Exercise caution with uses involving noise-sensitive animals
Outdoor Major Assembly Facilities: spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos [3]						Exercise caution if clear audibility by users is essential
Group Recreation (limited spectator stands): athletic fields, water recreation facilities, picnic areas						Exercise caution if clear audibility by users is essential
Small/Non-Group Recreation: golf courses, tennis courts, shooting ranges						Exercise caution if clear audibility by users is essential
Local Parks: children-oriented neighborhood parks, playgrounds						Exercise caution if clear audibility by users is essential
Camping: campgrounds, recreational vehicle/motor home parks						
Cemeteries (excluding chapels)						Compatible at levels indicated, but noise disruption of outdoor activities will occur
Residential and Lodging Uses						
Residential (<8 d.u./acre): individual dwellings, townhouses, mobile homes, bed & breakfast inns [4]		45				
Residential (≥8 d.u./acre) [4]		45	45			
Long-Term Lodging (>30 nights): extended-stay hotels, dormitories		45	45			
Short-Term Lodging (30 nights): hotels, motels, other transient lodging (except conference/assembly facilities)		45	45			

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use | Conditional Land Use (45/50) | Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses			50	50		
Personal & Miscellaneous Services: barbers, car washes, print shops			50	50		
Vehicle Fueling: gas stations, trucking & transportation terminals				50	50	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants (≥6,000 gallons)						
Heavy Industrial						
Light Industrial, High Intensity: food products preparation, electronic equipment				50	50	
Light Industrial, Low Intensity: machine shops, wood products, auto repair				50	50	
Research & Development			50	50		
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses						
Outdoor Storage: public works yards, automobile dismantling						
Mining & Extraction						
Transportation, Communication, and Utilities						
Rail & Bus Stations				50	50	
Transportation Routes: road & rail rights-of-way, bus stops						
Auto Parking: surface lots, structures						
Communications Facilities: emergency communications, broadcast & cell towers						
Power Plants						
Electrical Substations						
Wastewater Facilities: treatment, disposal						
Solid Waste Disposal Facilities: landfill, incineration						
Solid Waste Transfer Facilities, Recycle Centers						

Table 2-3
Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use | Conditional Land Use (45/50) | Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [2] (CNEL dB) ≤ 60	60-65	65-70	70-75	≥ 75	Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
Congregate Care: retirement homes, assisted living, nursing homes, intermediate care facilities		45	45			
Educational and Institutional Uses						
Family day care homes (14 children) [4]		45				
Children's Schools: K-12, day care centers (>14 children); school libraries		45				
Adult Education classroom space: adult schools, colleges, universities		45	45			Applies only to classrooms; offices, laboratory facilities, gymnasiums, outdoor athletic facilities, and other uses to be evaluated as indicated for those land use categories
Community Libraries		45				
Indoor Major Assembly Facilities: auditoriums, conference centers, concert halls, indoor arenas [3]		45	45			
Indoor Large Assembly Facilities: movie theaters, places of worship, cemetery chapels, mortuaries [3]		45	45			
Indoor Recreation: gymnasiums, club houses, athletic clubs, dance studios			50			
In-Patient Medical: hospitals, mental hospitals		45	45			
Out-Patient Medical: health care centers, clinics		45	45	45		
Penal Institutions: prisons, reformatories		45	45			
Public Safety Facilities: police, fire stations			50	50		
Commercial, Office, and Service Uses						
Major Retail: regional shopping centers, 'big box' retail			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Local Retail: community/neighborhood shopping centers, grocery stores			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Eating/Drinking Establishments: restaurants, fast-food dining, bars			50	50		Outdoor dining or gathering places incompatible above CNEL 70 dB
Limited Retail/Wholesale: furniture, automobiles, heavy equipment, lumber yards, nurseries			50	50		

Land Use Compatibility	Interpretation/Comments
Normally Compatible	*Indoor Uses:* Either the activities associated with the land use are inherently noisy or standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL); for land use types that are compatible because of inherent noise levels, sound attenuation must be provided for associated office, retail, and other noise-sensitive indoor spaces sufficient to reduce exterior noise to an interior maximum of CNEL 50 dB *Outdoor Uses:* Except as noted in the table, activities associated with the land use may be carried out with minimal interference from aircraft noise
Conditional	*Indoor Uses:* Building structure must be capable of attenuating exterior noise from all noise sources to the indoor CNEL indicated by the number in the cell (either 45 or 50) *Outdoor Uses:* Caution should be exercised with regard to noise-sensitive outdoor uses; these uses are likely to be disrupted by aircraft noise events; acceptability is dependent upon characteristics of the specific use [5]
Incompatible	*Indoor Uses:* Unacceptable noise interference if windows are open; at exposures above CNEL 65 dB, extensive mitigation techniques required to make the indoor environment acceptable for performance of activities associated with the land use *Outdoor Uses:* Severe noise interference makes the outdoor environment unacceptable for performance of activities associated with the land use

Notes

1 Land uses not specifically listed shall be evaluated using the criteria for similar uses.

2 For the purposes of these criteria, the exterior noise exposure generated by aircraft activity at ONT is defined by the projected noise impact zones illustrated on **Map 2-3** of this *Compatibility Plan*.

3 A *Major Assembly Facility* is defined as having a capacity of 1,000 people, while a *Large Assembly Facility* has a capacity of 300 to 999 people. Source: International Building Code.

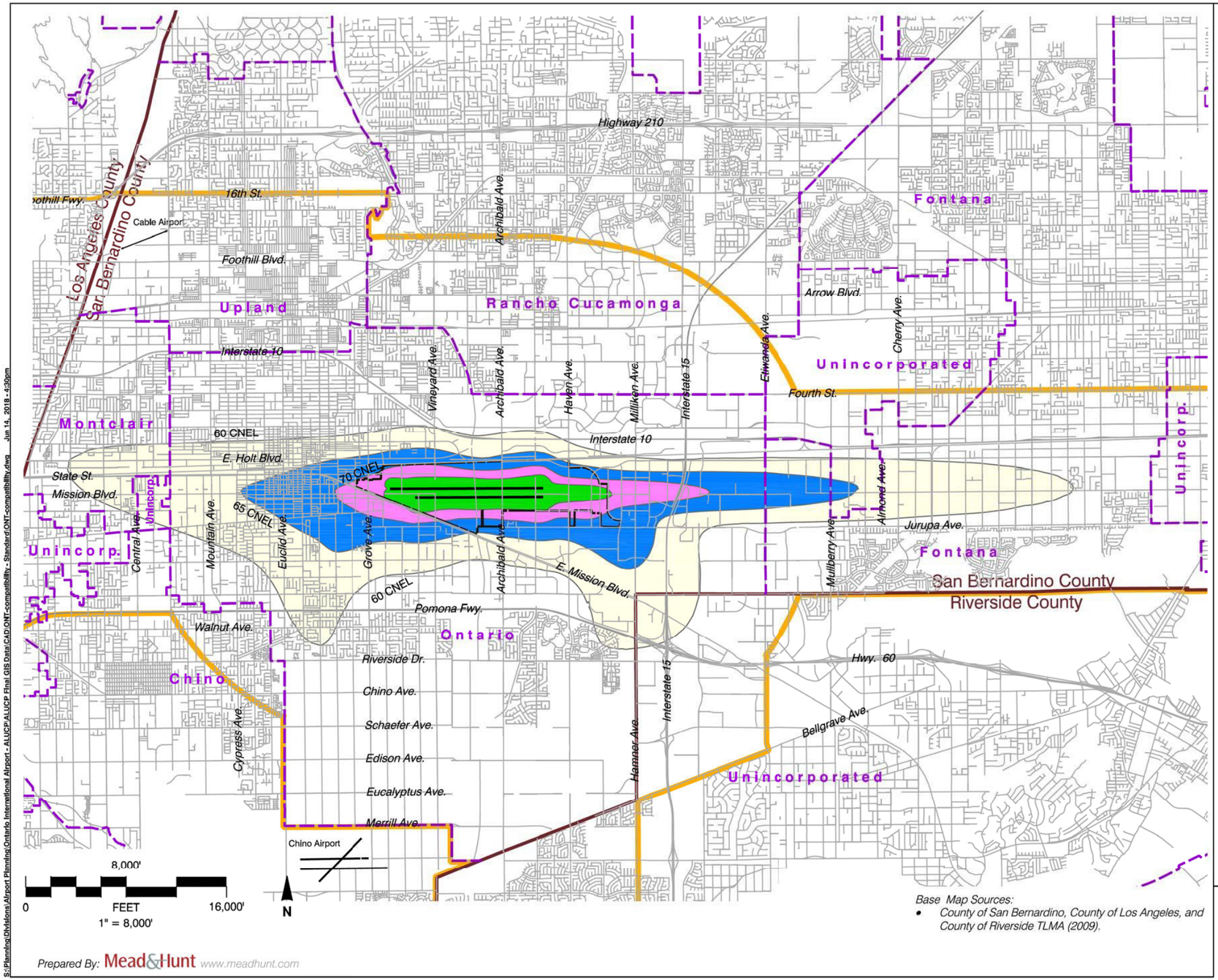
4 In accordance with **Policies S1, N2,** and **SP2**, construction of a single-family home, including a second dwelling unit as defined by state law, is allowed on a legal lot of record if such use is permitted by local land use regulations. A family day care home (serving 14 children) may be established in any dwelling.

5 Noise-sensitive land uses are ones for which the associated primary activities, whether indoor or outdoor, are susceptible to disruption by loud noise events. The most common types of noise-sensitive land uses include, but are not limited to, the following: residential, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, child-care facilities, and certain types of passive recreational parks and open space.

FIGURE **5.10-3**

Meridian Consultants

Noise Criteria



LEGEND

Boundary Lines

- Airport Property Line
- County Line
- City Limits
- Street
- Existing Runways (Runway 8L-26R, Runway 8R-26L)

Policy Boundaries

- Airport Influence Area (portions extend beyond map view)

Noise Impact Zones[1]

- 60 - 65 dB CNEL
- 65 - 70 dB CNEL
- 70 - 75 dB CNEL
- 75 + dB CNEL

NOTES

1. See **Section 6.2** and **Table 2-3** for noise policies and criteria.
2. Avigation easement and dedication required in areas exposed to noise of CNEL 65 dB or greater (see **Policy N5** and **SP1**).
3. No Project (343,000 annual operations) contours.

Base Map Sources:
- *County of San Bernardino, County of Los Angeles, and County of Riverside TLMA (2009).*

ONTARIO AIRPORT PLANNING

Ontario International Airport
Land Use Compatibility Plan
July 2018 Amendment

Map 2-3

Compatibility Policy Map: Noise Impact Zones

FIGURE **5.10-4**

Meridian Consultants

Noise Impact Zones

Policy N3: **Non-residential Development**. New nonresidential development is incompatible in locations where the airport-related noise exposure would be highly disruptive to the specific land use. The applicable criteria are indicated in **Figure 5.10-3**.

Policy N4: **Maximum Interior Noise Level**. To the extent that the criteria in **Figure 5.10-3** and other policies herein permit the development, land uses with interior activities that may be easily disrupted by aircraft noise should be required to incorporate exterior-to-interior noise level reduction (NLR) design features for all new structures. The land uses listed in Policies N4a and N4b are considered acceptable if proper sound attenuation standards are applied and the maximum interior noise level indicated in Policies N4a and N4b are not exceeded.

- **N4a: CNEL 45 dB Interior Noise Level**.
  - Any habitable room of single- or multi-family residences.
  - Hotels, motels, and other lodging.
  - Hospitals, nursing homes, and related uses where patients remain overnight.
  - Places of worship, meeting halls, theaters, and mortuaries.
  - Schools, libraries, and museums.
- **N4b: CNEL 50 dB Interior Noise Level**.
  - Offices and office areas of industrial facilities.
  - Eating and drinking establishments.
  - Retail centers and stores.
  - Miscellaneous other uses as listed in **Figure 5.10-3**.
- **N4c: Noise Attenuation Criteria.** Where **Figure 5.10-3** indicates that buildings associated with a particular land use must be capable of attenuating exterior noise to the specified maximum interior noise level, acoustical data documenting that the structure will be designed to comply with the criteria should be provided. The noise impact

zones depicted in **Figure 5.10-4** should be used in calculating compliance with these criteria. The calculations should assume that windows are closed.

- **N4d: Noise Attenuation Exceptions**: Exceptions to the interior noise level criteria set in Policy N4a may be allowed if evidence is provided that the indoor noise generated by the use itself exceeds the listed criteria.
- **N4e**: **Parcels with Multiple Noise Contour Ranges**: When a proposed building lies within multiple CNEL range zones (e.g., partly in 60-65 dB and partly in 65-70 dB0, the higher range should apply for the purposes of determining sound attenuation requirements unless less than 25 percent of the building floor area is within the least restrictive zone. In such case, the lower range zone may be used. Refer to Exhibit 2F in the ALUCP for graphical example.

Policy N3: **Avigation Easements**. The City of Ontario shall require dedication of an avigation easement in accordance with Policy SP1 as a condition of approval for proposed noise-sensitive developments situated within the City of Ontario portion of the CNEL 65 dB. Affected Agencies that have authority over lands elsewhere within CNEL 65 dB contour are encouraged to establish a similar requirement for development within their jurisdiction.

Municipal Code Standards

Per Section 5-29.06(e), noise sources associated with construction, repair, remodeling, demolition or grading of a public right-of-way are exempt from the provisions of the Municipal Code.

Section 5-29.09 addresses construction noise and states that no person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 AM and 6:00 PM or on Saturday or Sunday between the hours of 9:00 AM and 6:00 PM.

Ontario International Airport Rules and Regulations

There is a long history of efforts to manage aircraft noise resulting from the aircraft operations at the Airport. Section 5 of the Rules and Regulations Manual for the Airport,[20] a manual published by the OIAA, addresses aircraft noise mitigation operating procedures and restrictions at the airport. As a result of these efforts, and when weather conditions permit, the following voluntary operational and aircraft restrictions are in place at the Airport:

- Touch-and-go operations performed by turbojet and turbofan aircraft are prohibited unless special permission is given to do so.
- From 10:00 PM to 7:00 AM, when wind and weather conditions permit, aircraft depart to the east and land to the west. During these nighttime hours, this "Contra Flow" minimizes the level of aircraft noise exposure to the area west of the Airport.
- From 10:00 PM to 7:00 AM, engine run-ups are prohibited.
- Departures not starting at the end of a runway (referred to as intersection departures) are prohibited except for departures from Runway 8L at Taxiway D and from Runway 26R at Taxiway V. This restriction places aircraft at higher altitudes when passing over residences in the vicinity of the airport.
- When possible, helicopter operators are to use noise abatement arrival and departure flight techniques.

The City of Ontario and San Bernardino County, acting as the OIAA, also encourage the airlines operating at the Airport to use quieter aircraft, to re-engine aircraft to meet the most restrictive aircraft engine noise standards established by the FAA, and to retire old/noisier aircraft.

5.10.3 ENVIRONMENTAL IMPACT ANALYSIS

5.10.3.1 Thresholds of Significance

The potential for the proposed Project to result in impacts associated with noise is based on Appendix G of the CEQA Guidelines and are as follows:

20 Ontario International Airport. "ONT Rules and Regulations." https://www.flyontario.com/corporate/rules-and-regulations. Accessed July 2022.

Would the project:

NOI-1: Generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

NOI-2: Generate excessive groundborne vibration or groundborne noise levels?

NOI-3: Located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, expose people residing or working in the Project area to excessive noise levels?

Construction Noise

The City has not adopted thresholds of significance for analysis of impacts from construction noise. As mentioned previously, Section 5-29.09 of the City's Municipal Code regulates construction noise and restricts construction activities that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, to the hours of 7:00 AM to 6:00 PM on weekdays and 9:00 AM to 6:00 PM on Saturday or Sunday.

For purposes of this analysis, to evaluate whether the proposed Project will generate a substantial periodic increase in short-term noise levels at off-site sensitive receptor locations, a construction-related noise level threshold is adopted from the Criteria for Recommended Standard: Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health (NIOSH). A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3 dBA increase, the exposure time is cut in half. This results in noise level thresholds of 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative construction noise level threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at nearby sensitive receptor locations. Since this construction-related noise level threshold represents the energy average of the noise source over a given time period, they are expressed as Leq noise levels. Therefore, the noise level threshold of 85 dBA Leq over a period of eight hours or more is used to evaluate the potential Project-related construction noise level impacts at the nearby sensitive receptor locations.

Operational Noise

Project-related noise impacts to off-site noise sensitive uses have been determined based on the standards set forth in the Noise Level Exposure and Land Use Compatibility Guidelines (refer to **Figure 5.10-3**) and specific data regarding human responses to changes in noise levels. A change in a noise level of less than 3 dBA is not perceptible by the human ear in the context of the community noise environment. A change of 3 to 5 dBA may be perceptible to some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily perceptible. Based on this information, significant off-site noise impacts would occur if Project-related operational activities result in increased noise levels that trigger any of the following:

- An increase of 5.0 dBA CNEL or greater at a noise-sensitive use and the resulting level remains within the "clearly acceptable" and "normally acceptable" land use compatibility classification from **Figure 5.10-3**; or
- An increase of 3.0 dBA CNEL or greater at a noise-sensitive use and the resulting level falls within the "normally unacceptable" or "clearly unacceptable" land use compatibility classification from **Figure 5.10-3**; or
- An increase resulting in a change from a "clearly acceptable" or "normally acceptable" land use compatibility classification to a "normally unacceptable" or "clearly unacceptable" land use compatibility classification.

Vibration

There are no adopted City standards or thresholds of significance for vibration. The evaluation of potential building damage impacts related to construction vibration levels is based on the published data in the FTA guidance.[21] While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration. As such, the vibration damage criteria adopted by the FTA and applied in this analysis are listed below. Vibration impacts could be potentially significant if the vibration velocity exceeds the following:

- Reinforced-concrete, steel, or timber (no plaster) would exceed 0.5 PPV (inches per second);[22]

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21 FTA. *Transit Noise and Vibration Impact Assessment Manual*.

22 When assessing vibration source levels from construction equipment, vibration is generally assessed in terms of PPV. PPV is defined as the peak signal value of an oscillating vibration velocity waveform, expressed in inches per second.

- Engineered concrete and masonry (no plaster) would exceed 0.3 PPV;
- Nonengineered timber and masonry buildings would exceed 0.2 PPV;
- Buildings extremely susceptible to vibration damage would exceed 0.12 PPV.

5.10.3.2 Methodology

Construction

Construction during Phase 1 would occur over six (6) phases consisting of the following: demolition, site preparation, garage construction, building construction, apron paving and material handling equipment (MHE) installation. Additionally, construction during Phase 2 would occur over five (5) phases consisting of the following: demolition, site preparation, building construction, apron paving and MHE installation.

On-Site Construction

Construction activities typically generate noise from the operation of equipment required for construction of various facilities. Noise impacts from on-site construction and staging of construction trucks were evaluated by determining the noise levels generated by different types of construction activity, calculating the construction-related noise level at nearby noise-sensitive receptor locations, and comparing these construction-related noise levels to the NIOSH noise level threshold of 85 dBA Leq. Actual noise level would vary, depending upon the equipment type, model, the type of work activity being performed, and the condition of the equipment.

In order to calculate construction noise levels, hourly activity, or utilization factors (i.e., the percentage of normal construction activity that would occur, or construction equipment that would be active, during each hour of the day) are estimated based on the temporal characteristics of other previous and current construction projects. The hourly activity factors express the percentage of time that construction activities would emit average noise levels. Typical noise levels for each type of construction equipment were obtained from the FHWA Roadway Construction Noise Model.

An inventory of construction equipment, including the number and types of equipment, which would be operating simultaneously was identified for each phase/component of construction and shown in **Table 5.10-6: Construction Equipment by Phase**. It is highly unlikely that all pieces of construction equipment identified in **Table 5.10-6** would operate simultaneously in any specific location during construction because equipment is generally operated only when needed and space constraints limit the equipment that can be used at any one time in a specific

location. Therefore, this modeling is considered a conservative approach to calculate the maximum noise levels that would be generated.

TABLE 5.10-6
CONSTRUCTION EQUIPMENT BY PHASE

Construction Phase	Equipment Type	Quantity	Usage Hours (per day)	Noise Level at 50 feet (dBA Leq-1hour)	Calculated Average Noise Level (dBA Leq-1hour)
Demolition	Excavators	3	8	81.5	88.7
	Other Construction Equipment	3	8	86.8	
	Rubber Tired Dozers	2	8	80.7	
Site Preparation	Excavators	3	8	81.5	86.8
	Off-Highway Trucks	3	8	75.0	
	Plate Compactors	2	8	79.3	
	Rollers	2	8	76.0	
	Rubber Tired Dozers	2	8	80.7	
	Skid Steer Loaders	2	8	78.1	
Garage Construction	Cranes	2	7	75.6	84.8
	Pumps	1	8	77.9	
	Tractors/Loaders/Backhoes	2	8	83.0	
Building Construction	Aerial Lifts	5	8	74.7	88.4
	Cranes	2	7	75.6	
	Generator Sets	1	8	77.6	
	Pumps	1	8	77.9	
	Tractors/Loaders/Backhoes	3	7	84.8	
	Tractors/Loaders/Backhoes	2	8	83.0	
	Welders	1	8	70.0	
Apron Paving	Graders	1	8	81.0	86.3
	Other Construction Equipment	1	8	82.0	
	Pavers	2	8	77.2	

TABLE 5.10-6
CONSTRUCTION EQUIPMENT BY PHASE

Construction Phase	Equipment Type	Quantity	Usage Hours (per day)	Noise Level at 50 feet (dBA Leq-1hour)	Calculated Average Noise Level (dBA Leq-1hour)
	Paving Equipment	2	8	77.2	
	Rollers	2	8	76.0	
MHE Installation	Aerial Lifts	3	8	72.5	87.9
	Forklifts	3	8	86.8	
	Tractors/Loaders/Backhoes	1	8	80.0	
	Welders	2	8	73.0	

Note: Construction noise levels do not include implementation of regulatory compliance measures.

The calculated average noise levels provided in **Table 5.10-6** were input into the noise model SoundPLAN,[23] which generates computer simulations of noise propagation from sources such as construction noise. SoundPLAN forecasts noise levels at specific receptors using sound power data and three-dimensional topographical data.

Construction noise levels have been calculated at each of the analyzed receptors as follows: (1) construction noise levels generated during each of the construction phases; and (2) construction noise levels during those periods when the phases could potentially occur concurrently.

Noise levels generated by on-site construction equipment can be reduced via specific noise control measures including the following: (1) muffler requirements; (2) equipment modifications that reduce noise levels; and (3) maintenance and operational requirements. These noise control measures can be used separately or in combination in order to reduce the noise levels generated by on-site construction equipment.

Most on-site construction-related noise originates from equipment powered by either gasoline or diesel engines. A large part of the noise emitted is due to the intake and exhaust portions of the engine cycle. Reducing noise from this source can be achieved via muffler systems. This noise control strategy would include the replacement of worn mufflers and retrofitting on-site

23 SoundPLAN model is in compliance with ISO 9613-2 standards for assessing attenuation of sound propagating outdoors and general calculation method.

construction equipment where mufflers are not in use. Using muffler systems on on-site construction equipment reduces construction noise levels by 10 dBA or more.[24]

Another effective method of diminishing noise levels associated with individual pieces of construction equipment is by modifying the equipment. Modifications such as the dampening of metal surfaces is effective in reducing on-site construction equipment noise levels. These modifications are typically done by the manufacturer or with factory assistance. Noise reductions of up to 5 dBA are achieved using dampening materials.[25]

Additionally, faulty or damaged mufflers, loose engine parts, rattling screws, bolts, or metal plates all contribute to increasing the noise level of on-site construction equipment. Regular inspections of on-site construction equipment for these conditions and making adjustments to the equipment as necessary can also reduce noise levels generated by on-site construction equipment.

Off-Site Construction Traffic Noise

The analysis of construction traffic noise impacts focuses on off-site areas by: (1) identifying major roadways that may be used for construction worker commute routes or truck haul routes; (2) generally identifying the nature and location of noise-sensitive receptors along those routes; and (3) evaluating the traffic characteristics along those routes, specifically as related to existing traffic volumes.

Construction Equipment Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration.

Impacts due to construction activities were evaluated by identifying vibration sources (i.e., construction equipment), measuring the distance between vibration sources and surrounding structure locations, and making a significance determination.

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24 Federal Highway Administration (FHWA). "Special Report—Measurement, Prediction, and Mitigation." Updated June 2017. https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm. Accessed July 2022.

25 FHWA. "Special Report—Measurement, Prediction, and Mitigation."

For quantitative construction vibration assessments related to building damage, vibration source levels for construction equipment were taken from the FTA *Transit Noise and Vibration Impact Assessment Manual.* Building damage would be assessed for each piece of equipment individually and assessed in terms of peak particle velocity.

The vibration source levels for various types of equipment are based on data provided by the FTA.

Operational

Roadway Noise

Operational roadway noise is determined by a number of variables including the types of motor vehicles traveling on a roadway (e.g., cars and trucks), the speed those vehicles are traveling, the width of the roadway, the presence of natural and man-made features (e.g., slopes and walls) that reduce roadway noise levels at the receptors (e.g., residential or commercial locations), and most importantly the number of vehicles traveling on the roadway.

Noise levels were evaluated with respect to the following traffic scenarios:

- Baseline Conditions;
- Opening Year (2025) Without Project Conditions;
- Opening Year (2025) With Project Conditions;
- Opening Year (2029) Without Project Conditions;
- Opening Year (2029) With Project Conditions;
- Future (2040) Without Project Conditions; and
- Future (2040) With Project Conditions

Noise impacts due to off-site motor vehicle travel were analyzed by comparing the projected increase in traffic noise levels from without Project conditions to plus Project to the applicable significance criteria.

A total of 29 segments that are analyzed in the Traffic Study are the subject of the analysis of roadway noise to determine the potential effect of the proposed Project's motor vehicle travel on community noise level. These 29 segments were selected as they represent those locations the proposed Project's traffic engineer has determined to have the greatest potential to be affected by proposed Project development. To assess the potential for cumulative impacts, existing ADT volumes, when available, were also modeled. The results of this modeling were

compared to the established significance thresholds to assess the extent of potential impacts under the proposed Project.

The modeling described above was conducted using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) and traffic volume data provided by the proposed Project's transportation engineer. The TNM is the current Caltrans standard computer noise model for traffic noise studies. The TNM calculates the hourly Leq noise levels based on specific information including roadway configurations, hourly traffic volume, vehicle mix, vehicle speed, and the location of adjacent land uses, which for this analysis is based on Google Earth data which incorporates topography.

The vehicle mix/distribution data used in the TNM calculations are shown in **Table 5.10-7: Vehicle Mix for Traffic Noise Model (TNM)**. In recognition of the differences in the vehicle mix associated with the proposed development, different vehicle mix and distribution data has been developed for eight (8) zones of the study area: (1) Mission west of Grove; (2) Vineyard north of Philadelphia; (3) Archibald south of Cedar; (4) Mission east of Archibald; (5) Jurupa east of Tower; (6) Haven south of Airport; (7) Jurupa east of Milliken; and (8) Vineyard north of Philadelphia.

TABLE 5.10-7
VEHICLE MIX FOR TRAFFIC NOISE MODEL (TNM)

Daily Heavy Vehicle	PC	2-axle	3-axle	4+ axle
Zone 1 – Mission West of Grove	23,284	1,115	291	949
	90.81%	4.35%	1.13%	3.70%
Zones 2 & 8 – Vineyard north of Philadelphia	10,143	699	149	508
	88.21%	6.08%	1.30%	4.42%
Zone 3 – Archibald south of Cedar	12,124	627	240	1,243
	85.18%	4.40%	1.69%	8.73%
Zone 4 – Mission east of Archibald	15,207	611	266	1,063
	88.69%	3.56%	1.55%	6.20%
Zone 5 – Jurupa east of Tower	2,426	368	673	109
	67.84%	10.29%	18.81%	3.05%
Zone 6 – Haven south of Airport	43,087	1,613	521	2,311
	90.65%	3.39%	1.10%	4.86%
Zone 7 – Jurupa east of Milliken	22,952	1,081	771	3,416
	81.33%	3.83%	2.73%	12.10%

Medium truck is a truck with 2 axles; Heavy truck is a truck with 3 or more axles.

Source: Fehr & Peers, 2022

Aircraft Noise

Aircraft noise levels were derived using Version 3d of the Federal Aviation Administration's (FAA's) Aviation Environmental Design Tool (AEDT), the current version of the computer model when the analysis was performed. Since then, the FAA released a more updated version of AEDT (Version 3e). A review of the new features of Version 3e indicate that the updated model would not provide aircraft noise results that would differ from those derived using Version 3d.

AEDT uses airport-specific information and aircraft fleet databases. The aircraft fleet database contains more than 3,000 aircraft (airframe and engine combinations). For the evaluation of noise, AEDT contains parameters from the International Civil Aviation Organization's (ICAO's) Aircraft Noise and Performance Database and the European Organization for the Safety of Air Navigation's (EUROCONTROL's) base of aircraft data. The fleet database also contains noise versus power versus distance acoustic data augmented by a database of spectral characteristics. The noise versus power versus distance data represent the aircraft source noise level for a given operational mode (i.e., arrival, departure) and power setting (runups) at a range of slant distances from an aircraft to account for acoustic propagation through the atmosphere. Arrivals and departures generate different types of aircraft noise. For departures, noise from the engine is typically dominant while airframe noise is typically dominant for arrivals.[26]

The airport-specific data used by AEDT include the following:

- Number of aircraft operations by aircraft type – referred to as the aircraft fleet mix.
- Time of day in which the operations occur – for the purpose of deriving CNELs.
- Departure destinations by aircraft type – this information is used to assign "stage lengths" to aircraft departures to account for the lower altitude of departures flying longer distances because the necessary additional fuel adds to the weight of an aircraft.
- Runway and aircraft track usage – defines to what runway(s) and flight tracks (i.e., paths) aircraft arrivals and departures are assigned.
- Location and frequency of engine runups – performance checks may be performed at thrust settings from idle to full power.

The aircraft noise assessment representing Phase 1 conditions was performed for the year 2025, when the proposed Project would first be operational. In 2025, with the proposed Project it is

26 FAA. *Aviation Environmental Design Tool (AEDT), Version 3d, User Manual*. March 2021. https://aedt.faa.gov/Documents/AEDT3d_UserManual.pdf. Accessed November 2022.

forecast that there would be 44 daily cargo-related operations occurring six days a week at the Airport. By 2029 (Phase 2 buildout), it is forecast that there would be 66 daily cargo-related operations occurring six days a week.

The average daily aircraft fleet mix and number of operations, the number of arrivals and departures by runway and time of day, the number of departures by stage length, the number of arrivals and departures by flight track, and the number of runups with the proposed Project are provided in **Appendix 5.10-1**. **Table 5.10-8: Aircraft Operations—Baseline Condition and Proposed Project** provides the total number of annual and average daily aircraft operations with the proposed Project for 2025 and 2029. For comparative purposes, the number of baseline condition operations is also provided. As shown, when considering the additional number of operations with the proposed Project, the number of total average day operations is forecast to increase by 70 and 115 operations in 2025 and 2029, respectively, when compared to the baseline condition.

TABLE 5.10-8
AIRCRAFT OPERATIONS—BASELINE CONDITION AND PROPOSED PROJECT

Year	Condition	Annual Operations	Average Day	
			Operations	Increase from Baseline Condition
2019/2020	Baseline	106,026	290	--
2025	Proposed Project	131,354	360	70
2029	Proposed Project	147,714	405	115

Source: Refer to **Appendix 5.10-1**, *Table 3: Aircraft Operations-Baseline Condition and Proposed Project*.

5.10.3.3 Project Impacts

Would the Project result in:

NOI-1: **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than Significant Impact.

Construction Impacts

On-Site Construction Noise

Noise from construction activities would be affected by the amount of construction equipment, the location of this equipment, the timing and duration of construction activities, and the relative distance to noise-sensitive receptors. Construction activities that would occur during the construction phases would generate both steady-state and episodic noise that would be heard both on and off the Project site. Each construction phase involves the use of different types of construction equipment and, therefore, has its own distinct noise characteristics. The proposed Project would be constructed using typical construction techniques; no blasting or impact pile driving would be required.

The construction equipment reference provided in **Table 5.10-6**, is based on measured noise data compiled by the FHWA and would occur when equipment is operating under full power conditions. However, equipment used on construction sites typically operate at less than full power. The acoustical usage factor is the percentage of time that each type of construction equipment is anticipated to be in full power operation during a typical construction day. These values are estimates and will vary based on the actual construction process and schedule.

Construction equipment operates at its noisiest levels for certain percentages of time during operation. As such, equipment would operate at different percentages over the course of an hour.[27] During a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

To characterize construction-period noise levels, the average (hourly Leq) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously.

The estimated construction noise levels were calculated for each of the analyzed receptors during each construction phase in which construction equipment was assumed to be operating simultaneously. Given the physical size of the Project site and logistical limitations this is considered a conservative evaluation because construction of the proposed Project would typically use fewer pieces of equipment simultaneously at any given time as well as operating throughout the construction site (i.e., most of the time construction equipment would be operating at distances further away from the off-site receptors than that assumed in the modeling

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27 FHWA. *Traffic Noise Model*. 2006.

of proposed Project construction noise levels). As such, construction would often generate lower noise levels than reported herein. Additionally, estimated construction noise levels at each receptor were calculated during periods when construction phases could potentially occur concurrently.

As mentioned previously, construction would occur over six (6) phases consisting of demolition, site preparation, garage construction, building construction, apron paving and MHE installation. **Table 5.10-9: Maximum Noise Impacts Associated With On-Site Construction Activities** presents the maximum noise impacts that are forecasted to occur at each of the identified sensitive receptor sites. As shown in **Table 5.10-9**, construction noise levels for each phase would range from a low of 1.2 dBA (Leq-1hour) at the residential community along Mission Boulevard and Greenwood Avenue during the garage construction phase to a high of 12.8 dBA (Leq-1hour) at the Azure Hotel & Suites during the demolition phase. Additionally, as mentioned previously, there may be periods where construction phases could potentially occur concurrently. However, as shown in **Table 5.10-9**, concurrent construction noise levels would result in maximum noise levels of 17.3 dBA (Leq-1hour) at the Azure Hotel & Suites during the site preparation, garage construction, building construction and apron paving phases. Construction noise levels would not exceed 85 dBA (Leq-1hour) at the nearby sensitive receptors.

It is important to note, construction noise levels provided in **Table 5.10-9** do not include any reduction related to standard noise control strategies. As mentioned previously, using muffler systems on on-site construction equipment reduces construction noise levels by 10 dBA or more. Modifications such as dampening of metal surfaces or the redesign of a particular piece of equipment can achieve a noise reduction of up 5 dBA. Conservatively, these combined noise control strategies would further reduce construction noise levels presented in **Table 5.10-9** by 10 to 15 dBA. As such, construction noise impacts would be less than significant.

TABLE 5.10-9
MAXIMUM NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES

Construction Phase	Kaiser Permanente	Rancho Ontario Lifestyle Community	Residential (Mission & Greenwood)	Palm Paseo	Azure Hotel & Suites
			dBA, Leq 1-hour		
Individual Construction Phases					
Demolition	11.5	7.1	5.1	7.8	12.8
Site Preparation	10.9	6.6	4.7	7.3	12.5
Garage Construction	7.6	3.2	1.2	3.9	8.9

TABLE 5.10-9
MAXIMUM NOISE IMPACTS ASSOCIATED WITH ON-SITE CONSTRUCTION ACTIVITIES

Construction Phase	Kaiser Permanente	Rancho Ontario Lifestyle Community	Residential (Mission & Greenwood)	Palm Paseo	Azure Hotel & Suites
			dBA, Leq 1-hour		
Building Construction	11.2	6.8	4.8	7.5	12.5
Apron Paving	9.1	4.7	2.7	5.4	10.4
MHE Installation	10.7	6.3	4.3	7.0	12.0
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**
Concurrent Construction Phases					
Demolition and Site Preparation	14.2	9.9	7.9	10.6	15.7
Demolition, Site Preparation and Garage Construction	15.1	10.7	8.8	11.4	16.5
Site Preparation and Garage Construction	12.6	8.2	6.3	8.9	14.1
Site Preparation, Garage Construction and Building Construction	14.9	10.6	8.6	11.3	16.4
Site Preparation, Garage Construction, Building Construction and Apron Paving	16.0	11.6	9.6	12.3	17.3
Garage Construction, Building Construction and Apron Paving	14.3	9.9	7.9	10.6	15.6
Building Construction, Apron Paving and MHE Installation	15.2	10.8	8.8	11.5	16.5
Building Construction and MHE Installation	14.0	9.6	7.6	10.2	15.3
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

Source: Refer to **Appendix 5.10-3** for construction noise worksheets.

Operational Impacts

Roadway Noise

Operational roadway noise is determined by a number of variables including the types of motor vehicles traveling on a roadway (e.g., cars and trucks), the speed those vehicles are traveling, the width of the roadway, the presence of natural and man-made features (e.g., slopes and walls) that reduce roadway noise levels at the receptors (e.g., residential or commercial locations), and most importantly the number of vehicles traveling on the roadway.

Phase 1

Table 5.10-10: Opening Year (2025) Phase 1 Roadway Noise Levels presents the change in CNEL from Opening Year (2025) without and with project conditions. As shown in **Table 5.10-10**, the maximum noise level increase along the studied roadway segments would be 1.82 dBA CNEL along Vineyard Avenue between Avion Street and Mission Boulevard. Roadway noise levels along this segment would remain classified with the "Clearly Acceptable" designation. Additionally, the next highest increase would be 1.79 dBA CNEL along Avion Street east of Vineyard Avenue. Roadway noise levels along this segment would remain classified with the "Clearly Acceptable" designation. Roadway noise levels would not create a readily perceptible increase of 5 dBA or greater at locations where ambient noise levels are less than 60 dBA; a barely perceptible increase of 3 dBA or greater at locations where ambient noise levels from 60 to 65 dBA; and a community noise level impact increase of 1.5 dBA or greater at locations where ambient noise levels already exceed 65 dBA. As such, roadway noise levels during the Opening Year (2025) Phase 1 Conditions would be less than significant.

TABLE 5.10-10
OPENING YEAR (2025) PHASE 1 ROADWAY NOISE LEVELS

Roadway Segment	General Plan Land Use Designation	Opening Year Without Project	Opening Year With Project	Change in Noise Levels	Significant Impact?
Mission Boulevard					
Between Euclid and Campus	Commercial/Industrial	71.26	71.29	0.03	**No**
Between Campus and Grove	Commercial/Industrial	71.23	71.26	0.03	**No**
Grove and Vineyard	Industrial	71.74	71.82	0.08	**No**

TABLE 5.10-10 OPENING YEAR (2025) PHASE 1 ROADWAY NOISE LEVELS					
Roadway Segment	General Plan Land Use Designation	Opening Year Without Project	Opening Year With Project	Change in Noise Levels	Significant Impact?
Vineyard Avenue					
Between Avion and Mission	Airport	61.26	63.08	1.82	**No**
Between Mission and Francis	Industrial	66.20	66.59	0.39	**No**
Between Francis and Philadelphia	Industrial/Open Space	67.49	67.76	0.27	**No**
Between Philadelphia and SR-60 Ramps	Industrial	69.50	70.11	0.61	**No**
Between SR-60 WB Ramps	Industrial	70.14	70.32	0.18	**No**
Archibald Avenue					
Between Jurupa and Mission	Industrial	67.88	68.00	0.12	**No**
Between Mission and Francis	Industrial	69.35	69.44	0.09	**No**
Between Francis and Cedar	Industrial	69.91	69.99	0.08	**No**
Between Cedar and Philadelphia	Industrial	70.20	70.27	0.07	**No**
Between Philadelphia and SR-60 WB	Industrial	72.17	72.21	0.04	**No**
Between SR-60 Ramps	Industrial	72.80	72.83	0.03	**No**
Haven Avenue					
Between I-10 Ramps	Office Commercial	75.00	75.06	0.06	**No**
Between I-10 EB Ramps and Guasti	Office Commercial	75.05	75.06	0.01	**No**
Between Guasti and Airport	Airport	74.60	74.62	0.02	**No**

TABLE 5.10-10 OPENING YEAR (2025) PHASE 1 ROADWAY NOISE LEVELS					
Roadway Segment	**General Plan Land Use Designation**	**Opening Year Without Project**	**Opening Year With Project**	**Change in Noise Levels**	**Significant Impact?**
Between Airport and Jurupa	Airport	74.61	74.63	0.02	**No**
Jurupa Street					
Between Archibald and Hofer Ranch	Industrial	71.03	71.14	0.11	**No**
Between Hofer Ranch Road and Turner	Industrial	71.43	71.53	0.10	**No**
Between Turner and Haven	Industrial	71.82	71.92	0.10	**No**
Between Haven and Commerce	Industrial	71.17	71.23	0.06	**No**
Between Commerce and Dupont	Industrial	72.33	72.38	0.05	**No**
Between Dupont and Miliken	Industrial	72.43	72.48	0.05	**No**
Between Miliken and Rockefeller/Toyota	Industrial	73.48	73.52	0.04	**No**
Between Rockefeller/Toyota and I-15 SB Ramps	Industrial	74.05	74.09	0.04	**No**
Between I-15 Ramps	Industrial	73.79	73.81	0.02	**No**
Avion Street					
East of Vineyard	Industrial	58.93	60.72	1.79	**No**
Jurupa Street					
West of Archibald	Industrial	64.62	64.98	0.36	**No**

Source: Fehr and Peers and Meridian Consultants, 2022. Refer to **Appendix 5.10-2** for roadway noise worksheets.

Phase 2

Table 5.10-11: Opening Year (2029) Phase 2 Roadway Noise Levels presents the change in CNEL from Opening Year (2029) without and with project conditions. As shown in **Table 5.10-**

11, the maximum noise level increase along the studied roadway segments would be 1.83 dBA CNEL along Avion Street east of Vineyard Avenue. Roadway noise levels along this segment would remain classified with the "Clearly Acceptable" designation. Additionally, the next highest increase would be 1.81 dBA CNEL along Vineyard Avenue between Avion Street and Mission Boulevard. Roadway noise levels along this segment would remain classified with the "Clearly Acceptable" designation. Roadway noise levels would not create a readily perceptible increase of 5 dBA or greater at locations where ambient noise levels are less than 60 dBA; a barely perceptible increase of 3 dBA or greater at locations where ambient noise levels from 60 to 65 dBA; or a community noise level impact increase of 1.5 dBA or greater at locations where ambient noise levels already exceed 65 dBA. As such, roadway noise levels during the Opening Year (2029) Phase 2 Conditions would be less than significant.

TABLE 5.10-11
OPENING YEAR (2029) PHASE 2 ROADWAY NOISE LEVELS

Roadway Segment	General Plan Land Use Designation	Opening Year Without Project	Opening Year With Project	Change in Noise Levels	Significant Impact?
Mission Boulevard					
Between Euclid and Campus	Commercial/Industrial	71.43	71.46	0.03	**No**
Between Campus and Grove	Commercial/Industrial	71.42	71.45	0.03	**No**
Grove and Vineyard	Industrial	71.92	71.97	0.05	**No**
Vineyard Avenue					
Between Avion and Mission	Airport	61.43	63.24	1.81	**No**
Between Mission and Francis	Industrial	66.36	66.87	0.51	**No**
Between Francis and Philadelphia	Industrial/Open Space	67.65	68.00	0.35	**No**
Between Philadelphia and SR-60 Ramps	Industrial	70.11	70.31	0.20	**No**
Between SR-60 WB Ramps	Industrial	70.31	70.42	0.11	**No**

TABLE 5.10-11
OPENING YEAR (2029) PHASE 2 ROADWAY NOISE LEVELS

Roadway Segment	General Plan Land Use Designation	Opening Year Without Project	Opening Year With Project	Change in Noise Levels	Significant Impact?
Archibald Avenue					
Between Jurupa and Mission	Industrial	68.06	68.21	0.15	**No**
Between Mission and Francis	Industrial	69.58	69.68	0.10	**No**
Between Francis and Cedar	Industrial	70.09	70.18	0.09	**No**
Between Cedar and Philadelphia	Industrial	70.39	70.47	0.08	**No**
Between Philadelphia and SR-60 WB	Industrial	72.37	72.43	0.06	**No**
Between SR-60 Ramps	Industrial	72.99	73.03	0.04	**No**
Haven Avenue					
Between I-10 Ramps	Office Commercial	75.19	75.20	0.01	**No**
Between I-10 EB Ramps and Guasti	Office Commercial	75.24	75.26	0.02	**No**
Between Guasti and Airport	Airport	74.80	74.82	0.02	**No**
Between Airport and Jurupa	Airport	74.81	74.83	0.02	**No**
Jurupa Street					
Between Archibald and Hofer Ranch	Industrial	71.22	71.33	0.11	**No**
Between Hofer Ranch Road and Turner	Industrial	71.60	71.70	0.10	**No**
Between Turner and Haven	Industrial	72.01	72.10	0.09	**No**
Between Haven and Commerce	Industrial	71.35	71.41	0.06	**No**

TABLE 5.10-11 OPENING YEAR (2029) PHASE 2 ROADWAY NOISE LEVELS					
Roadway Segment	General Plan Land Use Designation	Opening Year Without Project	Opening Year With Project	Change in Noise Levels	Significant Impact?
Between Commerce and Dupont	Industrial	72.53	72.58	0.05	No
Between Dupont and Miliken	Industrial	72.60	72.65	0.05	No
Between Miliken and Rockefeller/Toyota	Industrial	73.65	73.69	0.04	No
Between Rockefeller/Toyota and I-15 SB Ramps	Industrial	74.24	74.28	0.04	No
Between I-15 Ramps	Industrial	73.97	73.99	0.02	No
Avion Street					
East of Vineyard	Industrial	58.93	60.76	1.83	No
Jurupa Street					
West of Archibald	Industrial	64.72	65.12	0.40	No

Source: Fehr and Peers and Meridian Consultants, 2022. Refer to **Appendix 5.10-2** for roadway noise worksheets.

NOI-2: Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact.

Construction Impacts

Table 5.10-12: On-Site Construction Vibration Impacts—Building Damage presents the construction vibration impacts associated with on-site construction in terms of building damage. As shown in **Table 5.10-12**, the forecasted vibration levels due to on-site construction activities would not exceed the strictest building damage significance threshold of 0.12 PPV ips for any sensitive sites surrounding the Project area during construction. Due to the distance of the Project-identified sensitive receptors, changes in elevations, and intervening structures, such as buildings and walls, on-site construction vibration would not result in a significant vibration impact with regard to building damage. Impacts related to building damage from on-site construction vibration would be less than significant.

TABLE 5.10-12
ON-SITE CONSTRUCTION VIBRATION IMPACTS—BUILDING DAMAGE

Nearest Sensitive Off-Site Building Structures	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from Project Construction Equipment						Significance Threshold	Exceeds Threshold?
	Vibratory Roller	Large Bulldozer	Caisson Drilling	Loaded Trucks	Jack hammer	Small bulldozer		
Kaiser Permanente	0.00	0.00	0.00	0.00	0.00	0.00	0.12	No
Rancho Ontario Lifestyle Community	0.00	0.00	0.00	0.00	0.00	0.00	0.12	No
Residential (Mission & Greenwood)	0.00	0.00	0.00	0.00	0.00	0.00	0.12	No
Palm Paseo	0.00	0.00	0.00	0.00	0.00	0.00	0.12	No
Azure Hotel & Suites	0.00	0.00	0.00	0.00	0.00	0.00	0.12	No

Source: Refer to **Appendix 5.10-4** for construction vibration worksheets.

Operational Impacts

Due to the distance of the Project-identified sensitive receptors, changes in elevations, and intervening structures, such as buildings and walls, operational groundborne vibration impacts would be minimal. During operation the proposed Project would utilize trucks to support the ground-to-air and air-to-ground cargo operations. As shown in **Table 5.10-12**, loaded trucks would not cause a significant vibratory impact to nearby sensitive receptors. Moreover, according to the FTA,[28] typical road traffic-induced vibration levels are unlikely to be perceptible by people. In part, FTA indicates that "it is unusual for vibration from traffic including buses and trucks to be perceptible, even in a location close to major roadways." Therefore, based on FTA published vibration data, the anticipated ground vibration environment in the Project vicinity would be below the perceptible levels. As such, impacts related to building damage from operational groundborne vibration would be less than significant.

NOI-3: **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two**

28 FTA. *Transit Noise and Vibration Impact Assessment Manual*.

miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels?

Less Than Significant with Mitigation Incorporated.

The Airport would continue to implement voluntary operational and aircraft restrictions for noise management during implementation of the Project, including but not limited to:

- Touch-and-go operations performed by turbojet and turbofan aircraft are prohibited unless special permission is given to do so.
- From 10:00 PM to 7:00 AM, when wind and weather conditions permit, aircraft depart to the east and land to the west. During these nighttime hours, this "Contra Flow" minimizes the level of aircraft noise exposure to the area west of the Airport.
- From 10:00 PM to 7:00 AM, engine run-ups are prohibited.
- Departures not starting at the end of a runway (referred to as intersection departures) are prohibited except for departures from Runway 8L at Taxiway D and from Runway 26R at Taxiway V. This restriction places aircraft at higher altitudes when passing over residences in the vicinity of the airport.
- When possible, helicopter operators are to use noise abatement arrival and departure flight techniques.

Table 5.10-13: Housing Units and Population—Baseline Condition and Proposed Project provides the estimated number of unmitigated housing units and persons within the CNEL 65-69, 70-74, and 75+ dBA contours. As shown, in the year 2025 with the proposed Project it is estimated that there would be 4 additional unmitigated housing units and 18 persons within the CNEL 65-69 dBA contour and no housing units or persons within the CNEL 70+ dBA contour when compared to the baseline condition. By the year 2029, it is estimated that there would be 12 additional unmitigated housing units and 43 additional persons within the CNEL 65-69 dBA contour and no housing units or persons within the CNEL 70+ dBA contour. As noted under **Table 5.10-15**, some of the additional residences located within the Proposed Project 65-69 CNEL noise contour are subject to avigation easements allowing overflight by aircraft. When these avigation easements are considered, the number of additional housing units in 2025 is reduced to 3 units with the affected population reduced to 14 and in 2029 the number of housing units affected is reduced to 12 units with the affected population reduced to 51.

Because unmitigated residences would be exposed to aircraft noise that would be considered significant, the Baseline Condition and Proposed Project condition would result in a potentially

significant impact. Implementation of **Mitigation Measure NOI-1** would define a residential noise program for housing units affected by aviation noise generated by the Project would reduce impacts related to aircraft noise to less than significant levels.

TABLE 5.10-13
HOUSING UNITS AND POPULATION—
BASELINE CONDITION AND PROPOSED PROJECT

Year	Condition	Housing Units/ Population	65-69 CNEL	70-74 CNEL	75+ CNEL	Total
2019/2020	Baseline	Housing Units[a]	13	0	0	13
		Population[a]	59	0	0	59
2025	Proposed Project	Housing Units[b]	17	0	0	17
		Population[b]	77	0	0	77
	Increase with Proposed Project	Housing Units	+4	0	0	+4
		Population	+18	0	0	+18
2029	Proposed Project	Housing Units[b]	28	0	0	28
		Population[b]	122	0	0	122
	Increase with Proposed Project	Housing Units	+15	0	0	+15
		Population	+63	0	0	+63

[a] *Source: Draft SEIR, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements, HNTB, April 2022.*

[b] *Source: Crawford, Murphy & Tilly, Inc., October 2022.*

Note: When considering parcels for which the OIAA has no record of the residences being addressed through the Quiet Home Program but for which the parcel is subject to an avigation easement, the increase in the number of housing units in 2025 with the Proposed Project reduces to three and the population reduces to 14 and in 2029 the number of housing units reduces to 12 and the population reduces to 51 (additional information is provided in Attachment F of the Aircraft Noise Assessment Report).

Changes to Ambient Noise Levels/Exposure to Excessive Noise Levels

The land uses within the year 2025 and 2029 aircraft CNEL 65+ dBA noise contour with the proposed Project and the baseline condition are depicted on **Figure 5.10-5: 2025 Proposed Project vs. Baseline Condition Noise Contours** and **Figure 5.10-6: 2029 Proposed Project vs. Baseline Condition Noise Contours**. As shown, between the two contour lines (i.e., the area of change in aircraft noise exposure with the proposed Project), the land uses primarily consist of commercial, manufacturing/production, and residential properties previously mitigated for aviation noise.[29] There are also a few unmitigated residences located within the western extent

[29] The mitigated properties (all residences) were addressed by the OIAA's Quiet Home Program.

of the area in which aircraft noise would increase with the proposed Project, as discussed further below. Additionally, between the two CNEL 70+ dBA contour lines, the land uses are commercial, manufacturing/production, or vacant. The area within the CNEL 65+ dBA contour for the proposed Project was also reviewed to determine if there were any schools, libraries, hospitals, or places of worship that would be exposed to significant aircraft noise. No schools, libraries, hospitals, or places of worship exist within the Project CNEL 65+ dBA contour.

Proposed Project/No Action Alternative

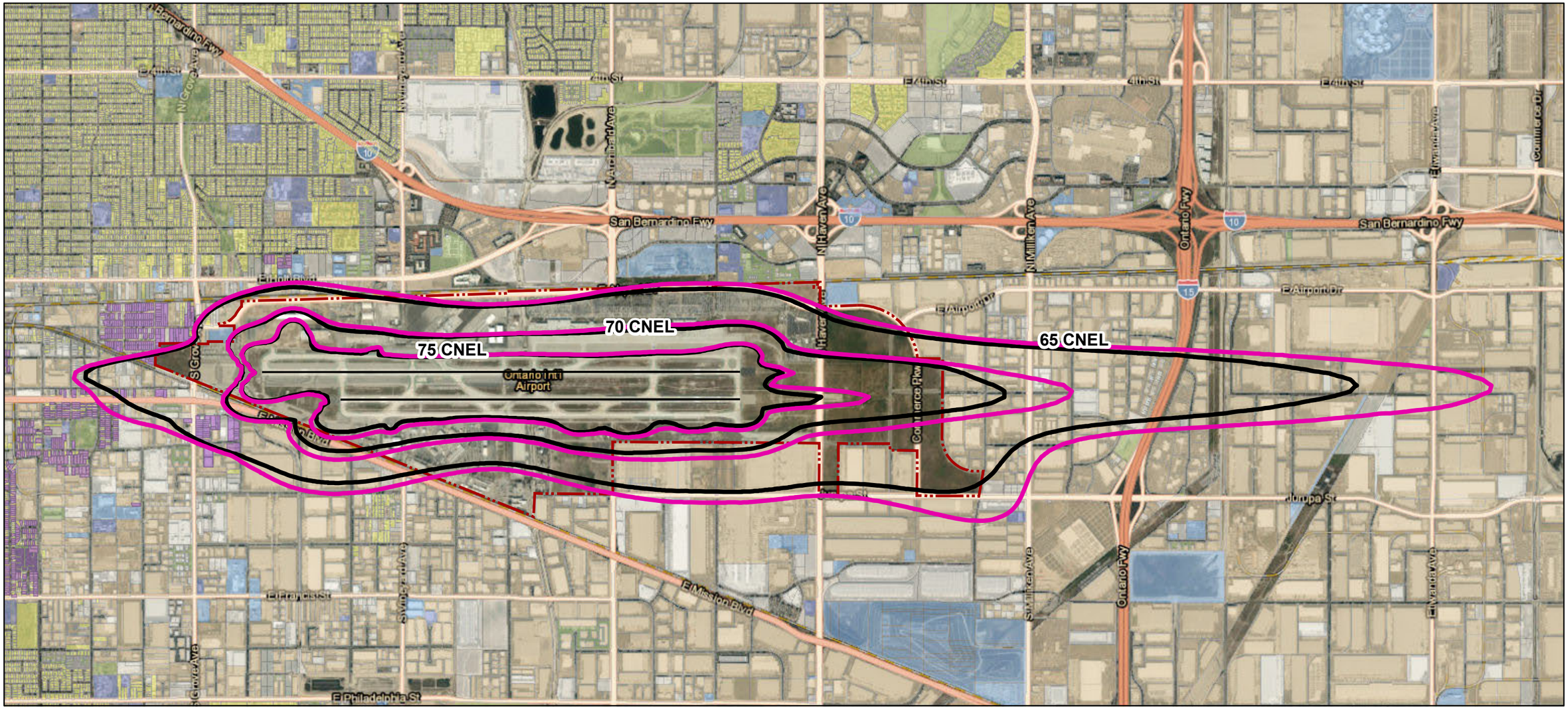
As previously stated, to define the significance of the impact of a proposed project, CEQA regulations require future conditions with a proposed project be compared to existing (i.e., Baseline) conditions. Because such a comparison also includes the potential impact that would occur in the future without a project (i.e., the No Action Alternative), a comparison of the proposed Project and No Action Alternative was completed. Notably, the growth in passenger activity at the Airport, which would occur with or without the proposed Project, would result in increases in aircraft operations and aircraft noise.

The average daily aircraft fleet mix and number of operations, the number of arrivals and departures by runway and time of day, the number of departures by stage length, the number of arrivals and departures by flight track, and the number of runups with the No Action Alternative are provided in **Appendix 5.10-1**. For comparative purposes, **Table 5.10-14: Aircraft Operations—Proposed Project and No Action Alternative** provides the total number of annual and average day aircraft operations with the proposed Project and No Action Alternative. As shown, with the No Action Alternative, the number of average daily operations is forecast to increase by 38 and 57 operations in 2025 and 2029, respectively, when compared to the baseline condition.

TABLE 5.10-14
AIRCRAFT OPERATIONS—PROPOSED PROJECT AND NO ACTION ALTERNATIVE

Year	Condition	Annual Operations	Average Day	
			Operations	Increase from No Action Alternative
2025	Proposed Project	131,354	360	38
	No Action Alternative	117,624	322	--
2029	Proposed Project	147,714	405	57
	No Action Alternative	127,122	348	--

Note: Values reflect rounding.



SOURCE: CMT – May 2022

FIGURE **5.10-5**

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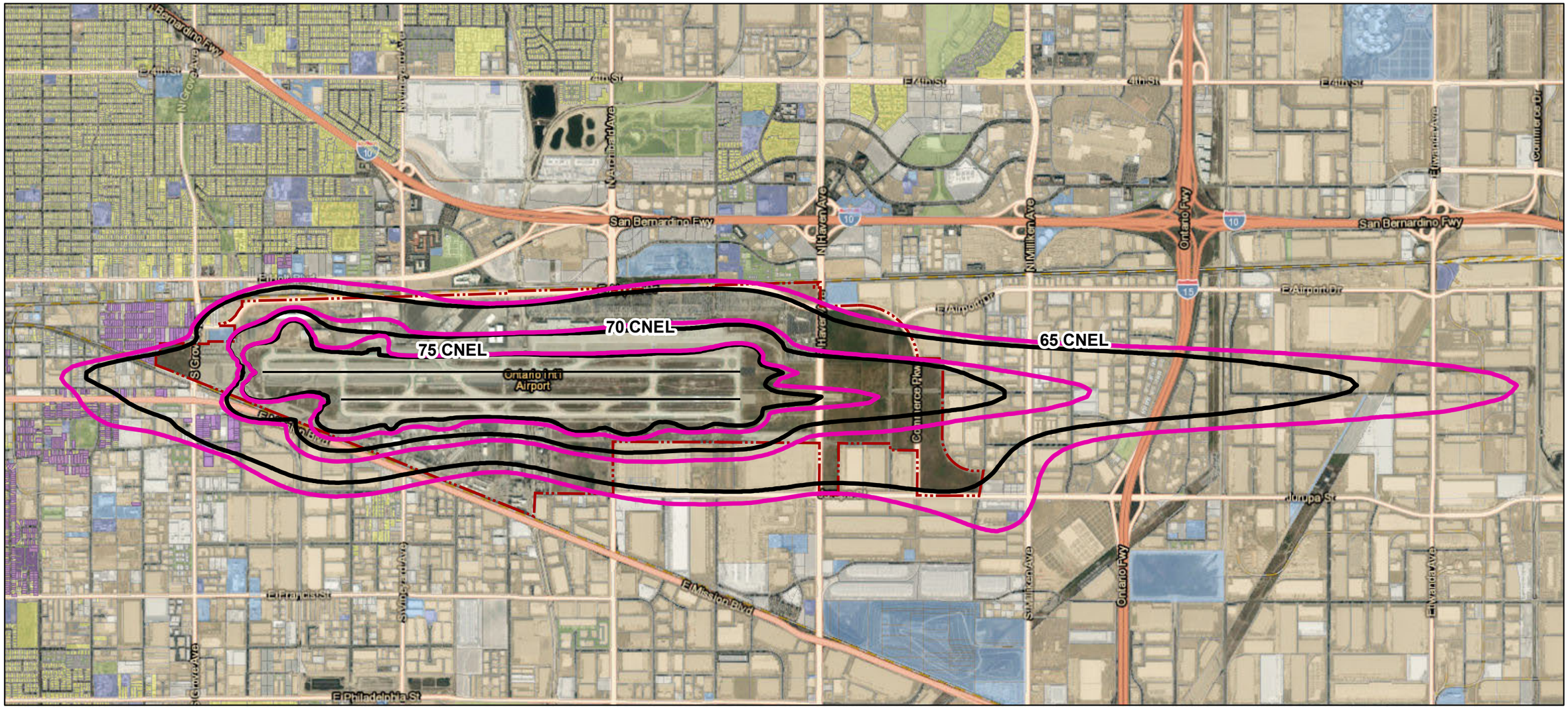
2025 Proposed Project vs Baseline Condition Noise Contours

332-001-21



Legend

- Runways
- 2029 Proposed Project Noise Contour
- Baseline Condition Noise Contour
- ONT Property Boundary
- Residential Use
- Public Use 1
- Public Use 2
- Recreational / Open Space
- Commercial Use
- Manufacturing and Production
- Vacant
- Mitigated Property

0 0.25 0.5 1

APPROXIMATE SCALE IN MILES

SOURCE: CMT – May 2022

FIGURE **5.10-6**

Meridian Consultants

2029 Proposed Project vs Baseline Condition Noise Contours

The land uses within the year 2025 and 2029 aircraft CNEL 65 dBA noise contour with the proposed Project and the No Action Alternative are depicted on **Figure 5.10-7: 2025 Proposed Project vs. 2025 No Action Alternative Noise Contours** and **Figure 5.10-8: 2029 Proposed Project vs. 2029 No Action Alternative Noise Contours**. As shown, between the two CNEL 65 dBA contour lines (i.e., the area of change in aircraft noise exposure with the proposed Project), the land uses are primary commercial, manufacturing/production, and residential with mitigated properties[30] (all residences) and a few unmitigated residences located west of the airport. Additionally, between the two CNEL 70+ dBA contour lines, the land uses are commercial, manufacturing/production, or vacant.

Table 5.10-15: Housing Units and Population-Proposed Project and No Action Alternative identifies the estimated number of unmitigated housing units and people within each of the noise contour levels. As shown, in the year 2025 with the proposed Project it is estimated that there would be five (5) additional unmitigated housing units and 23 persons within the CNEL 65-69 dBA contour and no housing units or persons within the CNEL 70+ dBA contour. By the year 2029 with the proposed Project, it is estimated that there would be 15 additional unmitigated housing units and 63 additional persons within the CNEL 65-69 dBA contour and no housing units or persons within the CNEL 70+ dBA contour. Notably, because the contour shapes and size are very similar, in the year 2025, it is estimated that there would be one less residence in the No Project CNEL 65-59 dBA contour than the number of residences in the baseline condition contour while in the year 2029, the number of residences in the No Project and baseline condition contours is the same (i.e., 13 unmitigated housing units and 59 people).

Because unmitigated residences would be exposed to aircraft noise that would be considered significant, the proposed Project and No Action Alternative condition would result in a potentially significant impact. Implementation of **Mitigation Measure NOI-1** would include a residential noise program for housing units located within the 65+ dB contour to reduce the interior noise level within affected homes by at least five (5) dB and reduce average interior CNEL of habitable rooms to below 45 dB. As such, with implementation of **Mitigation Measure NOI-1** impacts related to aircraft noise would be reduced to less than significant levels.

30 The mitigated properties (all residences) were addressed by the OIAA's Quiet Home Program—a program that provided sound insulation to 1,599 dwellings as of 2016.

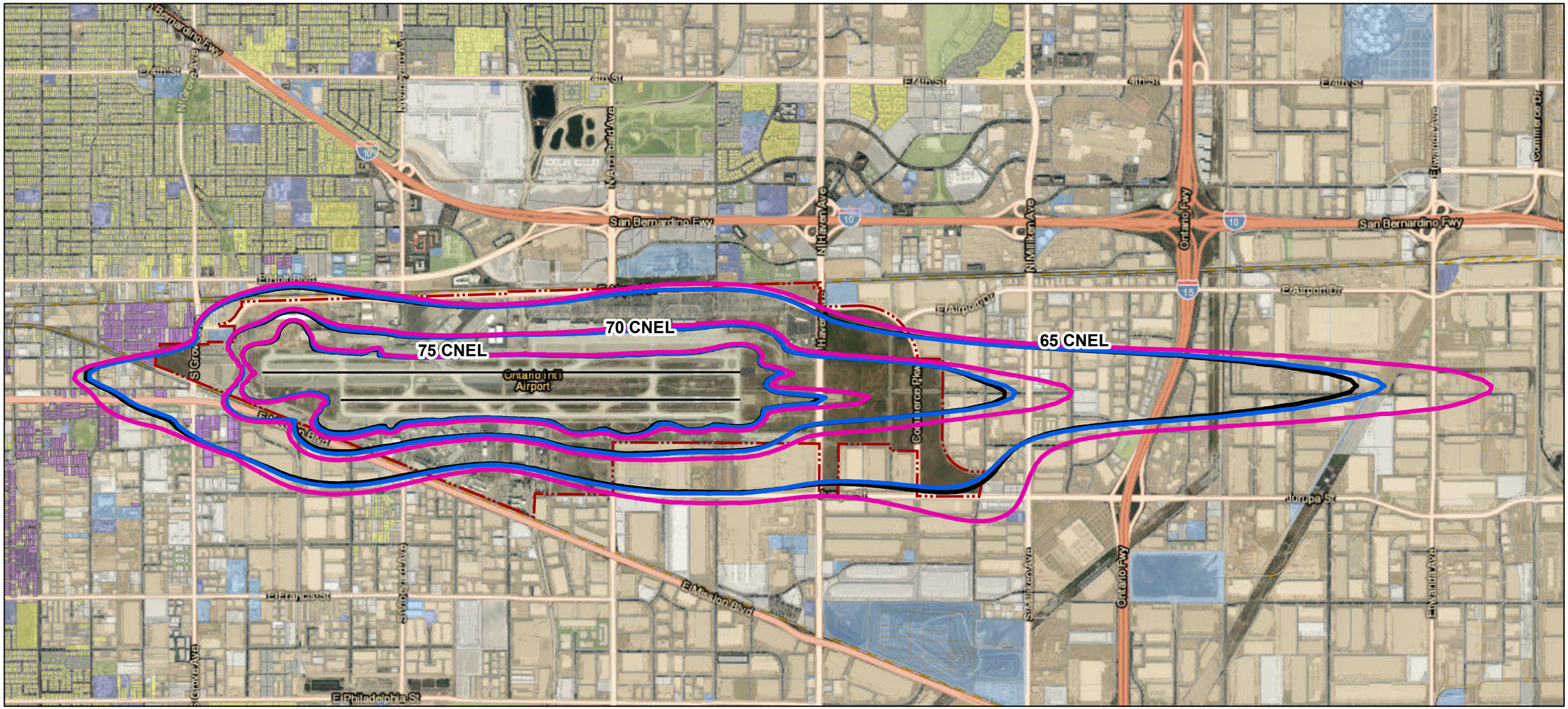
TABLE 5.10-15
HOUSING UNITS AND POPULATION-PROPOSED PROJECT AND NO ACTION ALTERNATIVE

Year	Condition	Housing Units/ Population	65-69 CNEL	70-74 CNEL	75+ CNEL	Total
2025	No Project	Housing Units[a]	13	0	0	13
		Population[a]	59	0	0	59
	Proposed Project	Housing Units[b]	17	0	0	17
		Population[b]	77	0	0	77
	Increase with Proposed Project	Housing Units	+4	0	0	+4
		Population	+18	0	0	+18
2029	No Project	Housing Units[a]	13	0	0	13
		Population[a]	59	0	0	59
	Proposed Project	Housing Units[b]	28	0	0	28
		Population[b]	122	0	0	122
	Increase with Proposed Project	Housing Units	+15	0	0	+15
		Population	+63	0	0	+63

[a] *Source: Draft SEIR, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements, HNTB, April 2022.*

[b] *Source: Crawford, Murphy & Tilly, Inc., October 2022.*

It is notable that there is a minimal change in the CNEL 65 dBA contours when comparing baseline conditions to forecast No Project conditions for both the year 2025 and 2029. This minimal change is predicted to occur despite a forecast increase in the number of average daily aircraft operations (an increase of 38 daily operations in 2025 and an increase of 57 daily operations in 2029). The minimal change is due in large part to a change in the narrowbody jet fleet forecast to arrive and depart the Airport.



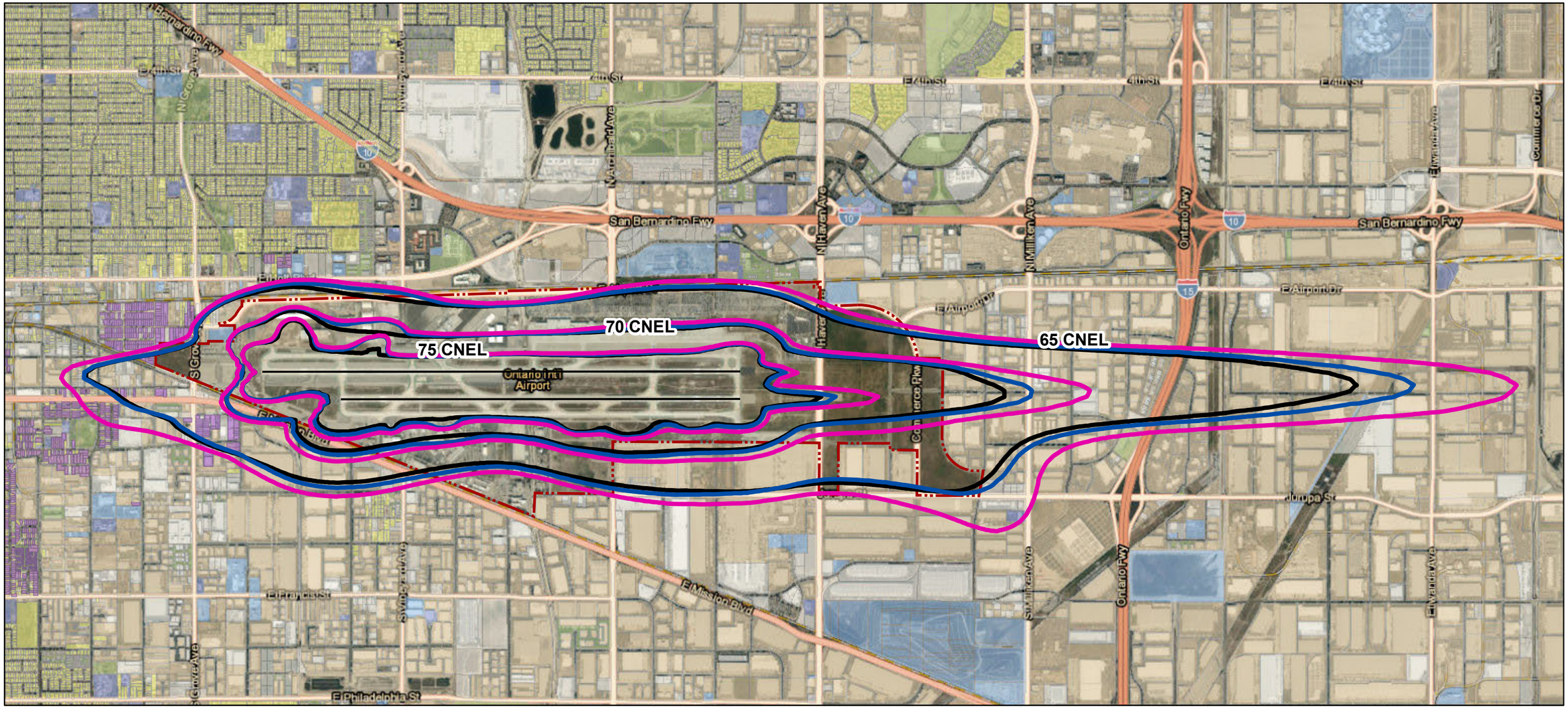
SOURCE: CMT – May 2022

FIGURE **5.10-7**

Meridian Consultants

2025 Proposed Project vs. 2025 No Action Alternative Noise Contours

332-001-21



Legend

- Runways
- 2029 Proposed Project Noise Contour
- 2029 No Action Noise Contour
- Baseline Condition Noise Contour
- ONT Property Boundary
- Residential Use
- Public Use 1
- Public Use 2
- Recreational / Open Space
- Commercial Use
- Manufacturing and Production
- Vacant
- Mitigated Property

0 0.25 0.5 1

APPROXIMATE SCALE IN MILES

SOURCE: CMT – May 2022

FIGURE **5.10-8**

Meridian Consultants

2029 Proposed Project vs. 2029 No Action Alternative Noise Contours

332-001-21

Table 5.10-16: Aircraft Fleet Mix Changes compares the numbers of some of the older, noisier aircraft types (referred to as Stage 3 aircraft) that are predicted to reach the end of their service life and would therefore be replaced with newer and quieter aircraft (Stage 5 aircraft). Overall, by the year 2029 it is forecast that approximately 39 percent of the Stage 3 narrowbody aircraft would be replaced by Stage 5 narrowbody aircraft. As explained above, aircraft noise to unmitigated housing units would be less than significant with incorporation of **Mitigation Measure NOI-1**.

TABLE 5.10-16
AIRCRAFT FLEET MIX CHANGES

Aircraft Type	Stage	2021 Baseline Condition Average Daily Operations	2025		2029	
			Average Daily Operations	Increase/ Decrease from Baseline	Average Daily Operations	Increase/ Decrease from 2025 No Project
Airbus A321	3	1	1	0	2	1
Airbus A321neo	5	0	8	+8	21	12
Boeing 737-700	3	58	52	-6	34	-18
Boeing 737-7 MAX	5	0	0	0	21	21
Boeing 737-800	3	31	22	-9	19	-3
Boeing 737-8 MAX	5	0	22	+22	25	2
Boeing 737-900	3	7	4	-3	4	0
Boeing 737-9 MAX	5	0	2	+2	4	2

5.10.4 CUMULATIVE IMPACTS

5.10.4.1 Construction

Noise, by definition, is a localized phenomenon and drastically reduces as distance from the source increases. As a result, only related projects, and growth in the general area of the Project site (within 500 feet) would contribute to cumulative noise impacts. Cumulative construction-noise impacts have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. It is expected that, as with the proposed Project, the related projects would implement noise reduction techniques such as mufflers, shields, and sound barriers, which would minimize any noise-related nuisances during construction. In addition, distance attenuation and intervening structures would further reduce construction noise levels and not result in noticeable

increases. Therefore, the combined construction-noise impacts of related projects and the proposed Project's contribution would be less than significant.

With regard to stationary sources, cumulative significant noise impacts may result from cumulative development. Stationary sources of noise that could be introduced in the area by cumulative projects could include mechanical equipment, loading docks, and parking lots. Given that these projects would be required to adhere to the City's noise standards, all stationary sources would be required to have shielding or other noise-abatement measures so as not to cause a substantial increase in ambient noise levels. Moreover, due to distance, it is unlikely that noise from multiple cumulative projects would interact to create a significant combined noise impact. As such, it is not anticipated that a significant cumulative increase in permanent ambient noise levels would occur.

5.10.4.2 Operation

Roadway Noise

Table 5.10-17: Future Year (2040) Roadway Noise Levels presents the change in CNEL from Future Year (2040) without and with project conditions. As shown in **Table 5.10-17**, the maximum noise level increase along the studied roadway segments would be 0.70 dBA CNEL along Vineyard Avenue between Avion and Mission. Roadway noise levels along this segment would remain classified with the "Clearly Acceptable" designation. Additionally, the next highest increase would be 0.47 dBA CNEL along Avion Street east of Vineyard. Roadway noise levels along this segment would remain classified with the "Clearly Acceptable" designation. Roadway noise levels would not create a readily perceptible increase of 5 dBA or greater at locations where ambient noise levels are less than 60 dBA; a barely perceptible increase of 3 dBA or greater at locations where ambient noise levels from 60 to 65 dBA; and a community noise level impact increase of 1.5 dBA or greater at locations where ambient noise levels already exceed 65 dBA. As such, roadway noise levels during the Future Year (2040) Conditions would not be less than significant.

TABLE 5.10-17
FUTURE YEAR (2040) ROADWAY NOISE LEVELS

Roadway Segment	Adjacent Land Use	Future Year Without Project	Future Year With Project	Change in Noise Levels	Significant Impact?
Mission Boulevard					
Between Euclid and Campus	Commercial/Industrial	73.30	73.32	0.02	**No**

TABLE 5.10-17 FUTURE YEAR (2040) ROADWAY NOISE LEVELS					
Roadway Segment	**Adjacent Land Use**	**Future Year Without Project**	**Future Year With Project**	**Change in Noise Levels**	**Significant Impact?**
Between Campus and Grove	Commercial/Industrial	72.80	72.82	0.02	**No**
Grove and Vineyard	Industrial	73.96	73.99	0.03	**No**
Vineyard Avenue					
Between Avion and Mission	Airport	66.09	66.79	0.70	**No**
Between Mission and Francis	Industrial	68.86	69.15	0.29	**No**
Between Francis and Philadelphia	Industrial/Open Space	69.71	69.93	0.22	**No**
Between Philadelphia and SR-60 Ramps	Industrial	71.64	71.78	0.14	**No**
Between SR-60 WB Ramps	Industrial	72.50	72.57	0.07	**No**
Archibald Avenue					
Between Jurupa and Mission	Industrial	70.36	70.45	0.09	**No**
Between Mission and Francis	Industrial	72.23	71.30	0.07	**No**
Between Francis and Cedar	Industrial	70.94	71.01	0.07	**No**
Between Cedar and Philadelphia	Industrial	72.22	72.28	0.06	**No**
Between Philadelphia and SR-60 WB	Industrial	74.43	74.46	0.03	**No**
Between SR-60 Ramps	Industrial	74.49	74.51	0.02	**No**
Haven Avenue					
Between I-10 Ramps	Office Commercial	75.66	75.67	0.01	**No**

TABLE 5.10-17
FUTURE YEAR (2040) ROADWAY NOISE LEVELS

Roadway Segment	Adjacent Land Use	Future Year Without Project	Future Year With Project	Change in Noise Levels	Significant Impact?
Between I-10 EB Ramps and Guasti	Office Commercial	75.71	75.73	0.02	**No**
Between Guasti and Airport	Airport	75.38	75.40	0.02	**No**
Between Airport and Jurupa	Airport	75.43	75.44	0.01	**No**
Jurupa Street					
Between Archibald and Hofer Ranch	Industrial	74.10	74.16	0.06	**No**
Between Hofer Ranch Road and Turner	Industrial	75.65	75.69	0.04	**No**
Between Turner and Haven	Industrial	76.10	76.13	0.03	**No**
Between Haven and Commerce	Industrial	74.26	74.29	0.03	**No**
Between Commerce and Dupont	Industrial	74.89	74.92	0.03	**No**
Between Dupont and Miliken	Industrial	74.82	74.85	0.03	**No**
Between Miliken and Rockefeller/Toyota	Industrial	75.65	75.68	0.03	**No**
Between Rockefeller/Toyota and I-15 SB Ramps	Industrial	75.65	76.09	0.44	**No**
Between I-15 Ramps	Industrial	75.88	75.90	0.02	**No**
Avion Street					
East of Vineyard	Industrial	65.57	66.04	0.47	**No**
Jurupa Street					
West of Archibald	Industrial	64.62	65.02	0.40	**No**

Source: Fehr and Peers and Meridian Consultants, 2022. Refer to **Appendix 5.10-2** for roadway noise worksheets.

Aircraft Noise

As previously stated, the OIAA recently certified a Draft SEIR for the rehabilitation of the Airport's Runway 8R-26L and associated airfield improvements. These improvements are proposed so that the airfield meets current FAA standards, safety is improved, and the efficiency of the airfield is enhanced. To implement the improvements, temporary runway closures would be required and the only change in the use of the airfield would result from suspension of voluntary restrictions on the use of Contra Flow operations during nighttime hours (10:00 PM to 7:00 AM). Because these voluntary restrictions would not be available when operating only one runway, the Runway 8R-26L Draft SEIR forecasts that there would be a temporary increase in noise exposure to the west of the Airport during nighttime hours.

The Runway 8R-26L runway rehabilitation/reconstruction project is scheduled to begin in 2023 and end in 2025, one of the same years for which the proposed Project was evaluated. To evaluate the impact due to the overlap of the proposed Project that is the subject of this report and the Runway 8R-26L runway rehabilitation/reconstruction project, a cumulative aircraft noise analysis was performed. As required by CEQA, the cumulative 2025 condition was compared to the baseline condition, as shown in **Figure 5.10-9: 2025 Proposed Project-Cumulative Impact vs. Baseline Condition Noise Contours.**

Table 5.10-18: Housing Units and Population-Related Projects provides the estimated number of unmitigated housing units and people within each of the noise contour levels for the baseline condition and the related projects for the year 2025, which includes the proposed Project and Runway 8R-26L runway rehabilitation/reconstruction project. As shown, with the related projects, it is estimated that there would be 219 additional unmitigated housing units and 991 persons within the CNEL 65-69 dBA contour and no housing units or persons within the CNEL 70+ dBA contour when compared to the baseline condition with the proposed Project and construction of the Runway 8R-26L runway rehabilitation/reconstruction project. Based on these results, in the year 2025 the proposed Project and construction of the Runway 8R-26L runway rehabilitation/reconstruction project would result in a temporary significant cumulative impact. However, these impacts would be temporary only during construction of Runway 8R-26L runway rehabilitation/reconstruction project. No other related project would contribute to this cumulative aircraft noise impact.

As the Runway 8R-26L runway rehabilitation/reconstruction project is a construction project, once operational, the Runway 8R-26L runway rehabilitation/reconstruction project would result in less than significant aircraft noise impacts. As discussed above, in the year 2025 with the proposed Project it is estimated that there would be five (5) additional unmitigated housing units and 23 persons within the CNEL 65-69 dBA contour and no housing units or persons within the

CNEL 70+ dBA contour. Implementation of **Mitigation Measure NOI-1** would include a residential noise program for housing units located within the 65+ dB contour to reduce the interior noise level within affected homes by at least five (5) dB and reduce average interior CNEL of habitable rooms to below 45 dB. As such, with implementation of **Mitigation Measure NOI-1** project impacts related to aircraft noise would be reduced to less than significant levels. Therefore, the proposed Project's contribution to temporary cumulative impacts would not be cumulatively considerable.

TABLE 5.10-18
HOUSING UNITS AND POPULATION-RELATED PROJECTS

Year	Condition	Housing Units/ Population	65-69 CNEL	70-74 CNEL	75+ CNEL	Total
2019/2020	Baseline	Housing Units[a]	13	0	0	13
		Population[a]	59	0	0	59
2025	Related Projects	Housing Units[b]	232	0	0	232
		Population[b]	1,050	0	0	1,050
	Increase with Related Projects	Housing Units	+219	0	0	+219
		Population	+991	0	0	+991

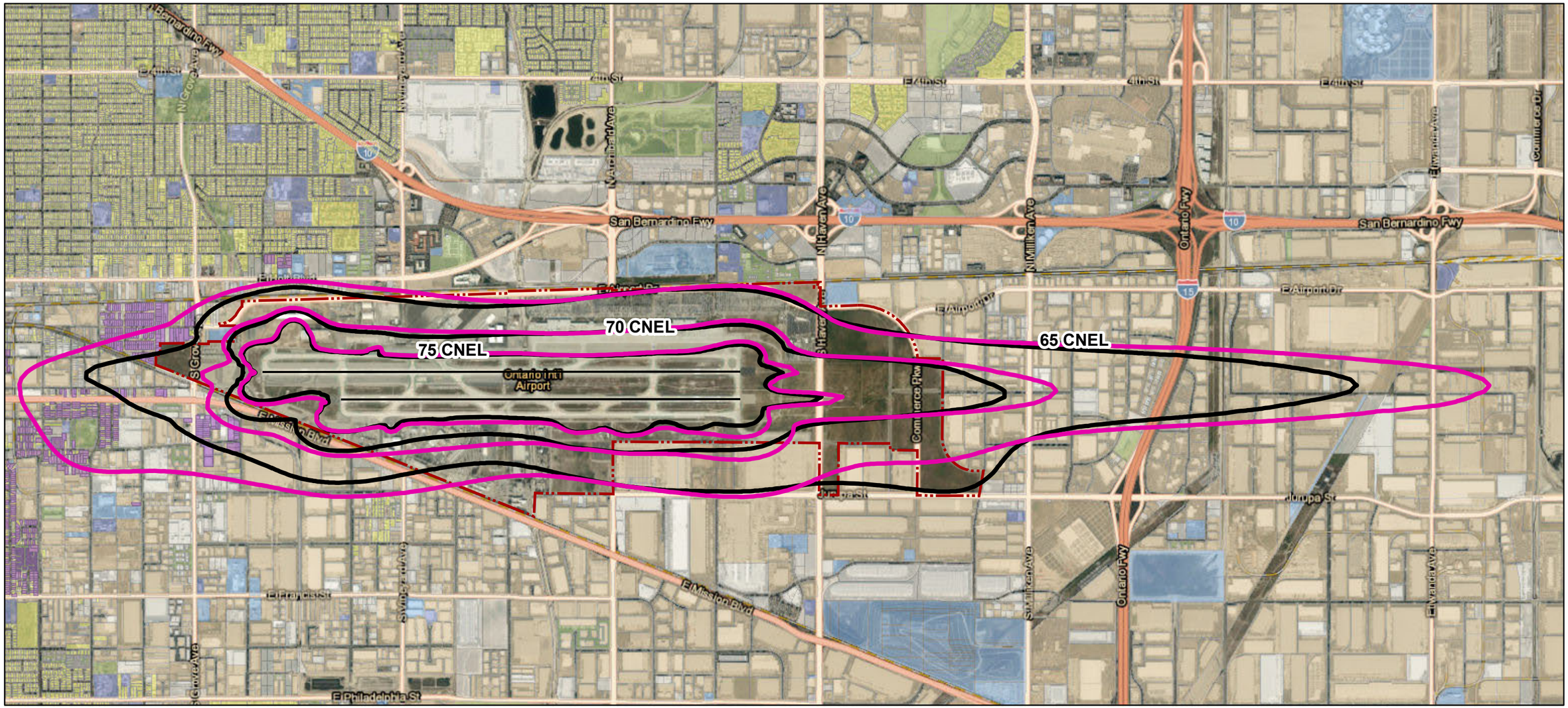
[a] *Source: Draft SEIR, Rehabilitation of Runway 8R-26L and Associated Airfield Improvements, HNTB, April 2022.*

[b] *Source: Crawford, Murphy & Tilly, Inc., October 2022.*

5.10.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

As shown in **Table 5.10-9**, construction noise levels would not exceed 85 dBA (Leq-1hour) at the nearby sensitive receptors. Moreover, **Table 5.10-12** shows that the forecasted vibration levels due to on-site construction activities would not exceed the strictest building damage significance threshold of 0.12 PPV ips for all sensitive sites surrounding the Project area during construction. As such, construction impacts would be less than significant.

As shown in **Table 5.10-10** and **Table 5.10-11**, roadway noise levels during Phase 1 and Phase 2 conditions would be less than significant. However, **Table 5.10-14** shows that for the Baseline Condition and Proposed Project condition, unmitigated residences would be exposed to aircraft noise that would be considered significant. Additionally, **Table 5.10-17** shows that for the Proposed Project and No Action Alternative condition, unmitigated residences would be exposed to aircraft noise that would be considered potentially significant.



Legend

- Runways
- 2025 Proposed Project - Cumulative Impact Noise Contour
- Baseline Condition Noise Contour
- ONT Property Boundary
- Residential Use
- Public Use 1
- Public Use 2
- Recreational / Open Space
- Commercial Use
- Manufacturing and Production
- Vacant
- Mitigated Property

0 0.25 0.5 1

APPROXIMATE SCALE IN MILES

SOURCE: CMT – May 2022

FIGURE **5.10-9**

Meridian Consultants

2025 Proposed Project-Cumulative Impact vs. Baseline Condition Noise Contours

332-001-21

As discussed previously, implementation of **Mitigation Measure NOI-1** would include a residential sound insulation program for housing units located within the 65-69 dBA noise contour at the Airport, which would reduce impacts related to aircraft noise would be reduced to less than significant levels. Additionally, in the year 2025 the proposed Project and construction of the Runway 8R-26L runway rehabilitation/reconstruction project would result in a temporary significant cumulative impact.

5.10.6 MITIGATION MEASURES

The following mitigation measure is recommended to reduce potentially significant impacts related to operational aircraft noise.

MM NOI-1: Residential Sound Insulation Program (RSIP).

Non-compatible residential land uses within the 65+ decibel (dB) contour with habitable areas inside the home with average noise levels of 45 dB or greater with all windows closed would be eligible for the RSIP.

The goal of the Program is to reduce the interior noise level within affected homes by at least five (5) decibels (dB). The results may vary depending upon the existing structural characteristics of the home. In order to achieve this goal, modifications may include the retrofit of exterior doors and windows, installation of a ventilation system, and other miscellaneous treatments. The RSIP would include the following:

- A noise audit will be conducted for each home in the RSIP to measure the noise reduction properties of a residence in its existing condition 1) to confirm that average interior aircraft sound levels are greater than a Community Noise Equivalent Level (CNEL) of 45 decibels (dB) and 2) to provide an indication of the potential effectiveness of noise reducing treatments.
- The goal of the RSIP is to reduce the average interior CNEL of habitable rooms by a minimum of 5 dB (i.e., a clearly detectable reduction) and reduce the average interior CNEL of habitable rooms to below 45 dB.
- Sound levels will be measured using aircraft as the noise source or simulation methods (loudspeaker(s)).
- Property owners will be required to sign an avigation easement, guaranteeing the right of flight over a residence, as a requirement to participate in the RSIP.
- Upon completion, current owners will be required to disclose the residence was included in the RSIP and is subject to an avigation easement.

- If housing units do not meet the local building codes required to qualify for sound insulation, a homeowner shall be given the option to sell the property. The residence may be resold to a new owner. The housing unit may or may not be sound insulated and/or upgraded prior to resale but will be subject to an avigation easement.

5.10.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the RSIP in **Mitigation Measure NOI-1** would reduce impacts from the Project to less than significant.

As discussed above, the proposed Project would contribute to temporary cumulative noise impacts during construction of the Runway 8R-26L runway rehabilitation/reconstruction project. No feasible mitigation measures are available to reduce this temporary cumulative noise impact to less than significant. As discussed above, the Runway 8R-26L runway rehabilitation/reconstruction project would result in less than significant aircraft noise impacts once operational. Implementation of **Mitigation Measure NOI-**1 would include a residential noise program for housing units located near the Airport, which, with implementation of **Mitigation Measure NOI-1** project impacts related to aircraft noise would be reduced to less than significant levels. Therefore, the proposed Project's contribution to temporary cumulative impacts would not be cumulatively considerable.

5.10.8 REFERENCES

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5.11.1 INTRODUCTION

This section addresses the potential for the proposed Project to result in impacts due to the need for the construction of new or altered fire and police facilities to provide service to the proposed Project. The potential for the proposed Project to result in impacts on other public services such as schools, recreation/parks, and libraries are discussed in **Section 7.0: Effects Found Not To Be Significant** of this Draft EIR. The analysis in this section on fire and police protection services and facilities is based in part on the below correspondence:

- Ontario Fire Department. Deputy Chief Mike Gerken. Response to Fire Protection Services Questionnaire. Dated December 2021. (**Appendix 5.11-1.**)
- Ontario Police Department. Sergeant Lawrence Bonomo. Response to Police Protection Services Questionnaire. Dated December 2021. (**Appendix 5.11-2.**)
- 2021 Amended and Restated Agreement to Provide Municipal Services (MSA; **Appendix 5.11-3**).

5.11.2 ENVIRONMENTAL SETTING

5.11.2.1 Existing Conditions

Fire Protection

The City of Ontario Fire Department (OFD) provides fire protection, paramedic, and emergency response services in the City of Ontario (City), including at Ontario International Airport (Airport). City fire services for the Airport are provided under a 2021 Amended and Restated Agreement to Provide Municipal Services (MSA) between the OIAA and the City as two separate public agencies (**Appendix 5.11-3**). City fire service levels under the MSA are identified in **Exhibit B** of the document. OFD employs 225 personnel, comprised of 186 sworn firefighters and 39 professional staff, has a daily staffing level of 59 sworn firefighters, and responds to more than 20,000 calls per year.[1] OFD operates six bureaus:

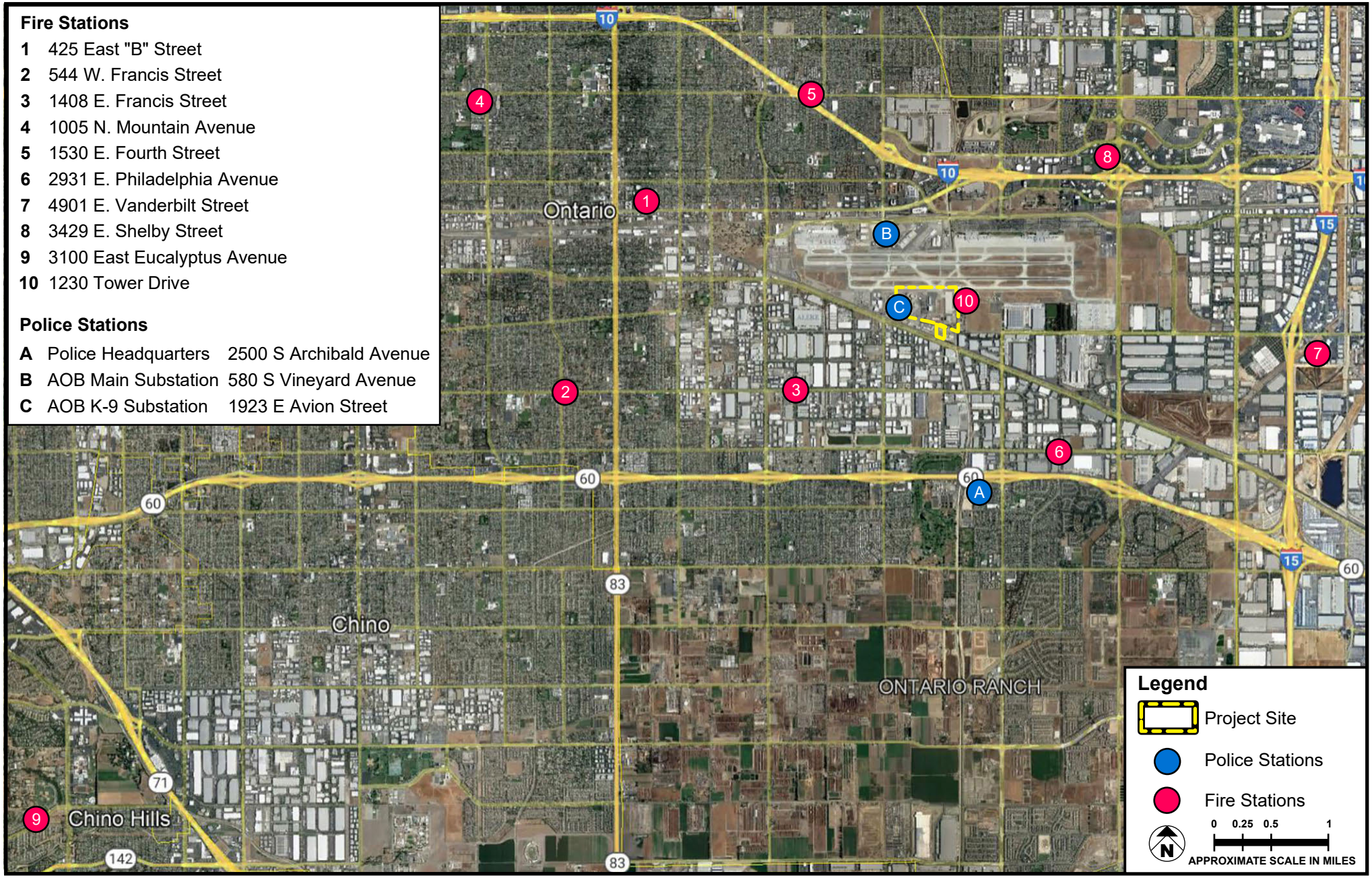
1. The Fire Prevention Bureau provides for the permitting, inspection of, and standby for events such as concerts, conventions, and firework shows. It includes the Fire and Life Safety Inspection Program, which inspects all Ontario buildings for fire and life safety compliance,

[1] City of Ontario. Fire Department. https://www.ontarioca.gov/Fire. Accessed January 4, 2022.

and the OFD Permit Counter, which performs plan checks for all new buildings and changes to existing buildings to ensure compliance with applicable codes, ordinances, and standards.

2. The Operations Bureau is responsible for day-to-day operations of the OFD. It includes the Training Division, which provides departmental training; the Bomb Squad, which responds to all incidents involving explosives; the Hazardous Materials Team, which responds to chemical spills or toxic releases; and the Urban Search and Rescue Team, which provides specialized rescue techniques.
3. The Support Services Bureau is responsible for station equipment and supplies, as well as the selection and purchase of fire apparatus and equipment.
4. The Training and Professional Services Bureau is responsible for recruitment and training of OFD personnel.
5. The Emergency Medical Services (EMS) Bureau is responsible for providing advanced life support care.
6. The Administrative Services Bureau is responsible for maintaining the general administrative tasks to support the OFD, including a Finance and Grants Division; the Fire Dispatch Center, which answers emergency and non-emergency calls for service; the Office of Emergency Management, which readies the community for a potential disaster; and the Performance Management Division, which monitors performance indicators and tracks department wide statistics and response times.

OFD operates ten fire stations, comprised of nine 4-man engine companies, three 4-man truck companies, and an 8-man Airport Rescue and Firefighting (ARFF) company. Each station has one fire engine and one company on duty at any given time. OFD Stations are identified in **Table 5.11-1: Ontario Fire Stations**, and shown in **Figure 5.11-1: Fire and Police Stations**.



SOURCE: Google Earth - 2021

FIGURE **5.11-1**

Meridian Consultants

Police and Fire Stations

332-001-21

TABLE 5.11-1 ONTARIO FIRE STATIONS	
Station	**Location**
1	425 East "B" Street, Ontario, CA 91764
2	544 W. Francis Street, Ontario, CA 91762
3	1408 E. Francis Street, Ontario, CA 91761
4	1005 N. Mountain Avenue, Ontario, CA 91762
5	1530 E. Fourth Street, Ontario, CA 91764
6	2931 E. Philadelphia Avenue, Ontario, CA 91761
7	4901 E. Vanderbilt Street, Ontario, CA 91761
8	3429 E. Shelby Street, Ontario, CA 91764
9	3100 East Eucalyptus Avenue, Ontario, CA 91761
10	1230 Tower Drive, Ontario, CA 91764

Source: City of Ontario Fire Department. "Fire Stations." https://www.ontarioca.gov/Fire/FireStations. Accessed December 14, 2021.

The closest fire station to the Project site is OFD Station 10, located at the Airport, approximately 0.1 mile east of the Project site. Station 10 operates personnel and equipment that provide ARFF services and advanced life support care to the Airport. **Table 5.11-2: Ontario Fire Station 10—1230 Tower Drive**, lists the type and number of equipment, as well as personnel, available at Station 10. Due to its proximity to the Project site, a potential response to the Project site from Station 10 would be less than three minutes.[2]

TABLE 5.11-2 ONTARIO FIRE STATION 10—1230 TOWER DRIVE		
Equipment	**Quantity**	**Staffing**
ARFF Truck (6x6 Rosenbauer, 3000 gal. with High Reach Extendable Turret)	3	8 personnel daily per shift, including paramedic services[1]
ARFF Truck (4x4 Rosenbauer, 1500 gal.)	1	
Fire Captain command vehicle	1	
Mobile Stair vehicle	1	

1. Paramedic services are provided through American Medical Response (AMR).

Source: Ontario Fire Department. Deputy Chief Mike Gerken. Response to Fire Protection Services Questionnaire. Dated December 2021. (See **Appendix 5.11-1.**)

2 Ontario Fire Department. Deputy Chief Mike Gerken. Response to Fire Protection Services Questionnaire. Dated December 2021. (See **Appendix 5.11-1.**)

Police Protection

The City of Ontario Police Department (OPD) provides law enforcement throughout the City, including the Airport. City police service levels under the MSA are identified in Exhibit A of the document. OPD operates five service bureaus:

1. The Field Operations Bureau is responsible for patrol and administrative investigations.
2. The Special Operations Bureau is responsible for traffic services, community relationship building through the Community Oriented Problem Solving (COPS) Unit, gang related policing, air support services, canine services, crime prevention, investigating and resolving chronic police issues through the Multi-Enforcement Team, and police operations in high-risk situations through the Special Weapons and Tactics Team (SWAT).
3. The Investigations Bureau is responsible for criminal investigations related to drugs, prostitution, and gambling, and the handling of forensics and evidence.
4. The Administrative Services Bureau is responsible for overseeing the administrative activities of the department, including record keeping, financial services, departmental communications, police dispatch which includes 9-1-1 calls, and crime prevention through statistical analysis and community programs.
5. The Office of the Chief of Police provides general management direction and control of the other bureaus and is responsible for the Office of the Deputy Chief of Police, internal affairs of the department, personnel recruitment and training, information gathering through the Intelligence Unit, and for the release of information through the Press Information Officer Unit.

OPD is equipped with patrol vehicles, motorcycles, K-9 units, unmarked units, helicopters, bicycles, a SWAT van, command armored rescue vehicle, and crime prevention vans. OPD has a geographical based policing program: West, East, and South. Each geographical area includes a Lieutenant as Area Commander and a dedicated team of officers and corporals, headed by police sergeants who conduct patrol operations, traffic officers, COPS officers who work special projects, narcotics investigators, and detectives. The Project site is within the South Area Command.

OPD currently provides 26 officers, six (6) sergeants, one (1) lieutenant, one (1) captain, and five (5) civilian community services officers. At any given time, an average of five (5) officers and one

(1) supervisor are on duty. An average of two civilian community service officers are on duty between noon and midnight.[3]

OPD's response time between receipt of a service call and the arrival of a patrol officer varies and depends on the urgency of the call. Due to the uniqueness of each call, the department strives for an average emergency call response time of four minutes. In general, emergency calls would have officers at the site within one to ten minutes. Non-emergency calls are immediately responded to if there are available officers.[4]

Most OPD operations are provided from the main headquarters with officers patrolling through their assigned geographic areas. In addition to OPD headquarters, OPD operates the Airport Operations Bureau (AOB) and associated canine (K9) substations, as listed below in **Table 5.11-3: Ontario Police Stations**, and shown in **Figure 5.11-1**. OPD participates in a mutual aid system. If needed, additional law enforcement can be provided from surrounding law enforcement agencies.

TABLE 5.11-3
ONTARIO POLICE STATIONS

Station	Location
Police Headquarters	2500 S Archibald Ave, Ontario, CA 91761
AOB Main Substation	580 S Vineyard Avenue, Ontario, CA 91761
AOB K9 Substation	1923 E Avion Street, Ontario, CA 91761

Sources: Ontario Police Department. Sergeant Lawrence Bonomo. Response to Police Protection Services Questionnaire. Dated December 2021. (**Appendix 5.11-2**).
City of Ontario Police Department. https://www.ontarioca.gov/Police. Accessed January 20, 2022.

The AOB provides law enforcement services at the Airport, including the Project site. The AOB station is located approximately 0.5 mile north of the Project site on the north side of the Airport. AOB employs approximately 40 police officers supported by explosive detection canines, narcotic detection canines, and community service officers. AOB officers patrol all areas of the Airport, including both terminal buildings on foot and in patrol units, investigate crimes, manage traffic flow, respond to airport emergencies, and enforce Transportation Safety Administration (TSA) regulations and airport security programs. AOB officer duties include responding to security screening calls and calls for assistance, such as burglaries, robberies, auto thefts, traffic

3 Ontario Police Department. Sergeant Lawrence Bonomo. Response to Police Protection Services Questionnaire. Dated December 2021. (See **Appendix 5.11-2.**)

4 Ontario Police Department. Sergeant Lawrence Bonomo. (See **Appendix 5.11-2.**)

accidents, airfield security breaches, crimes aboard aircraft, and traffic control. Officers are also assigned to the airport narcotics taskforce.

5.11.2.2 Regulatory Background

Federal

Code of Federal Regulations, Title 14, Part 139

In 2004, FAA issued a final rule that revised the Federal airport certification regulation (14 CFR Part 139) and established certification requirements for airports serving scheduled air carrier operations in aircraft designed for more than 9 passenger seats but less than 31 passenger seats. In addition, this final rule amended a section of an air carrier operation regulation (14 CFR Part 121) so it would conform with changes to airport certification requirements. The revised federal airport certification requirements went into effect on June 9, 2004. Operators of Part 139 airports must provide aircraft rescue and firefighting (ARFF) services during air carrier operations that require a Part 139 certificate. Part 139 includes requirements and specifications relating to pre-arranged firefighting and emergency medical response procedures, means for alerting firefighting and emergency response personnel, knowledge of the type of rescue and firefighting equipment to be provided, and training of responding firefighting and emergency medical personnel on the airport.

International Fire Code

The International Fire Code (IFC) regulates minimum fire safety requirements for new and existing buildings,facilities, storage, and processes. The IFC includes general and specialized technical fire and life safety regulations addressing fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, use and storage of hazardous materials, protection of emergency responders, industrial processes, and many other topics. The IFC is issued by the International Code Council, an international organization of building officials.

National Fire Protection Association

National Fire Protection Association (NFPA) Fire Code section 1710 specifies minimum requirements for effective and efficient organization and deployment of fire suppression operations, emergency medical operations, and special operations including aircraft rescue and firefighting to the public by career fire departments to protect citizens and the occupational safety and health of fire department employees. NFPA Section 1710 recommends that a first-responder unit arrive at the fire scene in 6 minutes or less at least 90 percent of the time, measured from the 911 call. NFPA recommends that full response to a structural fire occur within

10 minutes of the 911 call at least 90 percent of the time. NFPA also recommends a 6-minute response for basic life support and 10-minute response for advanced life support at least 90 percent of the time. As discussed above, a potential response to the Project site from Station 10 would be less than three minutes, which would be within the 6-minute response for basic life support and 10-minute response for advanced life support recommended by NFPA.[5]

State

California Building Code

The California Building Code (CBC) includes fire safety requirements, including the installation of sprinklers in all commercial and residential buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Constitution, Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services."[6] Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directs the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, the City is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In *City of Hayward v. Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found under Section 35 that cities have "a constitutional obligation to provide adequate fire protection services."[7]

California Fire Code

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5 Ontario Fire Department. Deputy Chief Mike Gerken. (See **Appendix 5.11-1.**)

6 California Constitution, Article XIII, Section 35, Subdivision (a)(2). https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=CONS&sectionNum=SEC.%2035.&article=XIII. Accessed July 2022.

7 *City of Hayward v. Trustee of California State University*. (2015) 242 Cal. App. 4th 833.

California Code of Regulations (CCR) Title 24, Part 9 (2019 California Fire Code) contains regulations relating to construction and maintenance of buildings, the use of premises, and the management of wildland urban interface areas, among other issues. The California Fire Code is updated every three years by the California Building Standards Commission; the current version took effect on January 1, 2020.

The California Fire Code sets forth regulations regarding building standards, fire protection and notification systems, fire protection devices such as fire extinguishers and smoke alarms, high-rise building standards, and fire suppression training. It contains regulations relating to construction, maintenance, and use of buildings.

Topics addressed in the code also include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire safety requirements for new and existing buildings and the surrounding premises. Development under the Project would be subject to applicable regulations of the California Fire Code.

California Health and Safety Code

Sections 13000 et seq. of the California Health and Safety Code include fire regulations for building standards (also in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with the CCR, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Fighting Equipment," California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire house sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

Governor's Office of Emergency Services

In 2009, the State of California passed legislation creating the California Governor's Office of Emergency Services (Cal OES) and authorized it to prepare a Standard Emergency Management System (SEMS) program (Government Code Section 8607; Title 19 CCR Section 2401 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. In

California, SEMS provides the mechanism by which local government requests assistance. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the State's preparation for, prevention of, and response to major disasters such as fires, floods, earthquakes, and terrorist attacks. During an emergency, Cal OES serves as the lead State agency for emergency management in the State. It also serves as the lead agency for mobilizing the State's resources and obtaining federal resources. Cal OES coordinates the State's response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the State through the Statewide mutual aid system (see discussion of Mutual Aid Agreements, above). California Emergency Management Agency (Cal-EMA) maintains oversight of the State's mutual aid system.

California Vehicle Code

Section 21806 of the California Vehicle Code (CVC) pertains to emergency vehicles responding to Code 3 incidents/calls.[8] This section of the CVC states: "Upon the immediate approach of an authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet to the front of the vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following: (a) (1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed. (2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety. (b) The operator of every streetcar shall immediately stop the street car, clear of any intersection, and remain stopped until the authorized emergency vehicle has passed. (c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed."[9]

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8 A Code 3 response to any emergency may be initiated when one or more of the following elements are present: a serious public hazard, an immediate pursuit, preservation of life, a serious crime in progress, and prevention of a serious crime. A Code 3 response involves the use of sirens and flashing red lights.

9 California Vehicle Code, Division 11. Rules of the Road, Chapter 4. Right-of-Way, Section 21806. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=VEH&sectionNum=21806. Accessed July 2022.

Local

The Ontario Plan

While City police, fire, and ancillary municipal services for the Airport are addressed in the MSA, the Ontario Plan additionally includes the following goals and policies related to the City's fire, emergency, and police services (Ontario 2009a).

Goal S-3: Reduced risk of death, injury, property damage and economic loss due to fires, accidents, and normal everyday occurrences through prompt and capable emergency response.

- **S-3.1: Prevention Services**. We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.
- **S-3.3: Fire and Emergency Medical Services.** We maintain sufficient fire stations, equipment, and staffing to respond effectively to emergencies and meet the needs of the community and state requirements.
- **S-3.4: Special Team Services.** We maintain effective special rescue services.
- **S-3.5: Emergency Notifications.** We maintain a public alert notification system that efficiently conveys information about imminent, developing, ongoing, and concluding emergency events to residents and visitors, working with network providers that translate information into other languages.
- **S-3.6: Interagency Cooperation.** In order to back up and supplement our capabilities to respond to emergencies, we participate in the California Fire Rescue and Mutual Aid Plan.
- **S-3.8: Fire Prevention through Environmental Design.** We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.
- **S-3.9: Resource Allocation.** We analyze fire data to evaluate the effectiveness of our fire prevention and reduction strategies and allocate resources accordingly.

Goal S7: Neighborhoods and commercial and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, community involvement and a system of continuous monitoring.

- **S-7.1: Police Unit Response.** We respond to calls for service in a timely manner.
- **S-7.2: Community Oriented Problem Solving (C.O.P.S.).** We support and maintain the mission of COPS to identify and resolve community problems.
- **S-7.3: Prevention Services.** We provide crime prevention programs targeted to youth, parents, seniors, businesses, and neighborhoods.
- **S-7.4: Crime Prevention through Environmental Design (CPTED**). We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.
- **S-7.5: Interdepartmental Coordination.** We utilize all City departments to help reduce crime and promote public safety.
- **S-7.6: Partnerships.** We partner with other local, state and federal law enforcement agencies and private security providers to enhance law enforcement service to Ontario.
- **S-7.7: Resource Allocation.** We analyze crime data to evaluate the effectiveness of crime prevention and reduction strategies and allocate resources accordingly.

2021 Amended and Restated Agreement to Provide Municipal Services

The 2021 Amended and Restated Agreement to Provide Municipal Services between City and OIAA allows for the provision of City fire and police services for the Airport. The Agreement provides for the scope of services, level of service, and the cost of services provided by the City to OIAA. The Agreement is consistent with the OIAA's obligation as a federally-certified airport, subject to the requirements of the Code of Federal Regulations, Title 14, Part 139. Per the Agreement, the City Manager will have charge of the personnel, equipment, and supplies provided, the authority to negotiate annual and other periodic changes in the Base Service Level, which constitutes full staffing for Airport fire and police services, and the Annual Fee.[10] The City has agreed to provide all staffing and resources necessary to deliver the Base Service Level. The Base Service Level is the agreed provision of personnel, equipment, and supplies provided, defined within the scope of services, level of service, and the cost of services provided by the

[10] The City and OIAA have agreed on a fixed Annual Fee. The Annual Fee has two components, the Annual Fee for Public Safety Services and the Annual Fee for Administrative Services. The annual cost of providing the Municipal Services set forth in the Base Service Level is included in the Annual Fee. The Annual Fee with respect to Administrative Services will be adjusted to take into account the change in service level. By April 1 of each year, the City shall transmit for planning purposes to OIAA the adjusted Annual Fee for the upcoming fiscal year.

City to OIAA. The Base Service Level is subject to changes in regulatory requirements or passenger traffic at the Airport.

Ontario International Airport Authority – Rules and Regulations Manual

The Ontario International Airport has adopted a Rules and Regulations Manual to provide Airport users with a single document representing a compendium of rules, regulations, procedures, and general information governing activities at the Airport. The objective of the manual is to promote the safe and efficient use of the Airport as an integral part of the National Airspace System. Sections 6 and 7 of the Manual discuss fire and law enforcement safety at the Airport.

- Section 6, Fire Safety, of the Rules and Regulations Manual was updated in July 2021.[11] It includes sections of the CFR, California Fire Code, National Fire Protection Association Codes and Standards applicable to airport fire safety. It also incorporates applicable laws, rules, and regulations enforced by the OFD Inspector assigned to the Airport, including the inspection of all buildings, structures, and premises pertaining to fire protection, fire prevention, and fire spread control.
- Section 7, Airport Security, of the Rules and Regulations Manual was updated in September 2020.[12] It includes requirements set forth in the Airport Security Program. Section 7(G) specifies security requirements of employees and other persons while employed or conducting business at the Airport, such as access to secure areas of the Airport, and inspection and screening by Airport Officials, Law Enforcement, or TSA when accessing or present within restricted areas of the Airport. Section 7(H) identifies rules and regulations pertaining to securing doors and gates with restricted access at facilities on Airport property. Section 7(O) provides limitations on video monitoring and recording on Airport premises and coordination with the Airport's Security Coordinator. Section 7(R) specifies limitations of tenants' operations from perimeter-based facilities with direct access to the restricted areas of the Airport, including security inspections and audits, tenant responsibilities for controlling access, and TSA fines and penalties for non-compliance.

11 Ontario International Airport Authority (OIAA). *Rules and Regulations Manual for Ontario International Airport*. "Section 6." July 2021. https://www.flyontario.com/corporate/rules-and-regulations. Accessed December 9, 2021.

12 OIAA. *Rules and Regulations Manual for Ontario International Airport*.

5.11.3 ENVIRONMENTAL IMPACT ANALYSIS

5.11.3.1 Thresholds of Significance

The potential for the Project to result in impacts associated with fire and police protection services are based on Appendix G of the CEQA Guidelines and are as follows:

Would the project:

PS-1: **Result in a substantial adverse physical impact associated with the provisions of new or physically altered fire protection facilities, need for new or physically altered fire protection 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 protection services?**

PS-2: **Result in a substantial adverse physical impact associated with the provisions of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?**

5.11.3.2 Methodology

In addition to reviewing the City's police, fire, and ancillary municipal service levels for the Airport, as stated in the MSA (see **Appendix 5.11-3**), OFD and OPD were contacted to determine which fire and police stations and facilities would serve the proposed Project, and their operating capacities, equipment, and personnel (see **Appendices 5.11-1** and **5.11-2)**. Potential impacts to fire and police protection facilities were evaluated by assessing the potential for the proposed Project to increase demand of fire and police protection services, and impacting their existing facilities and operations.

5.11.3.3 Project Impacts

PS-1: **Would the Project result in a substantial adverse physical impact associated with the provisions of new or physically altered fire protection facilities, need for new or physically altered fire protection 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 protection services?

Less Than Significant Impact.

Impacts to fire protection services are considered significant if Project implementation would result in substantial and adverse physical impacts associated with the provisions of new or physically altered fire protection facilities. This can include the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services.

Construction

During construction of the proposed Project, the presence of heavy construction equipment and demolition of existing structures could create a potential short-term demand for fire protection services. Demolition and construction activities would comply with all applicable California Fire Code requirements, including safeguards to prevent fires, and provide reasonable safety to life and property during construction and demolition.

The handling of mechanical equipment and flammable construction materials would follow the requirements of the California Occupational Safety and Health Administration (Cal/OSHA), which has established minimum standards for fire suppression and emergency medical services. This includes requirements that construction managers and personnel are trained in emergency response and fire safety operations, including the monitoring and management of life safety systems and facilities during construction. The transportation of flammable construction materials would conform with all applicable local, State, and federal regulations governing such activities.

The existing OFD facilities meet current and future needs for fire protection services, including the needs of the proposed Project. OFD Station 10 is located immediately east of the Cucamonga Channel, as shown in **Figure 5.11-1**, and due to its proximity to the Project site, a potential response to the Project site would be less than three minutes.[13] According to OFD, there are no deficiencies in fire protection services, including OFD Station 10.[14] As such, construction of the proposed Project would not alter the level of fire protection service currently provided to the area.

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13 Ontario Fire Department. Deputy Chief Mike Gerken. (See **Appendix 5.11-1.**)

14 Ontario Fire Department. Deputy Chief Mike Gerken. (See **Appendix 5.11-1.**)

Construction impacts are temporary in nature and do not cause lasting effects that would impact fire protection services. Based on the factors discussed above, construction of the proposed Project would not significantly impact existing fire protection service ratios, response times, or other performance objectives, and Project implementation would not require the need for new or the expansion of existing fire facilities. Therefore, the Project's impacts to fire protection services during construction would be less than significant.

Operation

During operation, the maintenance of acceptable service ratios, response times, and service performance objectives related to the adequacy of fire protection is based on the available response and distance times from existing fire stations, especially OFD Station 10, which serves the Project site, as well as from fire-flow requirements of the proposed Project. Additionally, the availability of water, the ability of OFD to navigate the Project site, and the strategic placement of onsite suppression systems are determinants of fire protection.

The Project site includes older and mostly vacant hangars and buildings. While the proposed Project would increase people, equipment, and aircraft to the Project site, the proposed Air Cargo Sort Building and parking garage would be built to current fire codes and standards. Additionally, the proposed structures would have fire extinguishers, wet and dry sprinkler systems, pre-action sprinkler systems, fire alarm systems, fire pumps, backflow devices, and clean agent waterless fire suppression systems, pursuant to the California Fire Code, CBC, City of Ontario Fire Code, OIAA, and other applicable regulations regarding fire safety. These modern fire suppression features would substantially decrease the risk of fire hazards in new facilities.

The primary need for fire services at the Project site would relate to fires and potential incidents involving hazardous materials by aircraft ground operations, aircraft fueling, the storage of cleaning and maintenance materials, and the handling of cargo within the facility. Sufficient onsite water must be available prior to combustibles arriving on the Project site. Fire flow tests are currently being conducted. Once the applicant submits plans to the City of Ontario Building and OFD, the fire flow requirement will be determined.

As described in **Section 3.0: Project Description**, fuel hydrants are proposed along the east and west perimeters of the aircraft apron and around the cargo building, including at each aircraft parking position adjacent to the building, at the truckyard and visitor parking lot, and parking garage. The plans would be routed to OFD for their review and approval by the Fire Marshal of adequate fire suppression systems and site access by large firetrucks, vehicles, and equipment from East Avion Street and from the service road from the airfield. Field inspections would be

conducted prior to occupancy to ensure that the Project's fire suppression systems are sufficient and fully operable.[15]

Station 10 is immediately east of the Cucamonga Channel, as shown in **Figure 5.11-1**. Due to its proximity to the Project site, a potential response to the Project site would be less than three minutes.[16] Additionally, as provided in **Table 5.11-2**, Station 10 has existing aircraft-rescue firefighting equipment that is available to suppress fires on the apron. Station 10 also has adequate equipment to accommodate general industrial warehouse operations in the cargo building. The existing fire protection equipment and services offered at Station 10 are sufficient to accommodate the proposed Project.[17] In the event additional assistance is required, Station 10 would be supported by the other nine OFD stations in the City. Mutual aid would also be called upon from other fire departments and agencies, including but not limited to Rancho Cucamonga Fire, Chino Valley Fire Protection District, and San Bernardino County Fire. According to OFD, there are no deficiencies in fire protection services, including at Station 10.[18] As such, operation of the proposed Project would not alter the level of fire protection service currently provided to the area. The existing OFD facilities meet current and future needs for fire protection services, including the proposed Project.

Based on the factors discussed above, operation of the proposed Project would not significantly impact existing fire protection service ratios, response times, or other performance objectives, and Project implementation would not require the need for new or the expansion of existing fire facilities. Therefore, Project impacts to fire protection services during operation would be less than significant.

PS-2: **Would the Project result in a substantial adverse physical impact associated with the provisions of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios,**

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15 City of Ontario. Fire Department. "Fire Prevention." Plan Review. https://www.ontarioca.gov/Fire/Prevention. Accessed December 9, 2021.

16 Ontario Fire Department. Deputy Chief Mike Gerken. (See **Appendix 5.11-1.**)

17 Ontario Fire Department. Deputy Chief Mike Gerken. (See **Appendix 5.11-1.**)

18 Ontario Fire Department. Deputy Chief Mike Gerken. (See **Appendix 5.11-1.**)

response times or other performance objectives for police protection services?

Less Than Significant Impact.

Impacts to police services are considered significant if Project implementation would result in a substantial adverse physical impact associated with the provisions of new or physically altered police protection facilities. This can include the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, as well as response times or other performance objectives for police protection services.

Construction

The existing conditions of the 97-acre Project site includes mostly vacant hangars and buildings that can be accessed by the public from driveways on East Avion Street. OPD currently patrols the Project site for suspicious persons and trespassing. The AOB would respond to calls for services requiring a police response.[19] The response time to the Project site would vary by type of call and location of OPD officers. Emergency calls would have officers at the site within one to ten minutes. Non-emergency calls are immediately responded to if there are available officers.[20]

Construction of the proposed Project would require the relocation of the AOB K-9 Substation, currently located in the OIAA administrative offices on East Avion Street, to a vacant hangar on the north side of the Airport. This relocation to the vacant hangar would not result in a substantial adverse physical impact.

During construction, the entire construction area would be fenced off. No access would be allowed into the airfield and other secured Airport areas from the construction site. Access in and out of the construction site would be from East Avion Street and would be limited to one to two access points that would be gated and secured by a security guard. The implementation of these construction management practices would reduce the number of calls for police services during construction, beyond what is currently conducted at the Project site.

Construction impacts are temporary in nature and do not cause lasting effects that would impact police services. Based on the factors discussed above, construction of the proposed Project would not significantly impact existing police service ratios, response times, or other

19 Ontario Police Department. Sergeant Lawrence Bonomo. (See **Appendix 5.11-2.**)

20 Ontario Police Department. Sergeant Lawrence Bonomo. (See **Appendix 5.11-2.**)

performance objectives, and Project implementation would not require the need for new, nor the expansion of, existing police facilities. Therefore, Project impacts on police services during construction would be less than significant.

Operation

Once constructed, the property would be fully secured. There would be limited access into the Air Cargo Sort Building. As described in **Section 3.0**, fencing would be installed along the perimeter of the property in accordance with airport standards to limit trespassing into the cargo building, apron, airfield, and other secured areas of the Airport.

The Air Cargo Sort Building would also include areas for facility security, administered by TSA, FAA, and OIAA. The entire Project site, including the interior and exterior of the cargo building and parking garage on the south side of East Avion Street, would be installed with security cameras, alarm systems, and adequate lighting for operations during the day and nighttime security. The proposed Project would improve security at the Project site, as compared to the existing conditions, and would not require increased police patrol of the Project site during Project operation. OPD anticipates service calls from the proposed Project would relate to suspicious persons, trespassing, and thefts, which would not be substantially different from the existing calls occurring at the Project site. Therefore, Project impacts to police services from operation of the Project would be less than significant.

OPD operates their K9 substation in a hangar at the OIAA administrative offices on East Avion Street, which is within the Phase 2 area of the proposed Project. The K9 substation include six officers that handle trained service dogs that work at the Airport. Prior to the start of Phase 2 construction, the K9 substation would be relocated to a hangar on the north side of the Airport. Operations of the K9 substation would be similar to existing operations. The relocation of the K9 substation would not impact response times, which would remain between 1 and 10 minutes.[21] Impacts related to the displacement of the K9 substation at the OIAA administrative offices would be less than significant.

Therefore, Project impacts to police services would be less than significant and the proposed Project would not trigger the provision of new, nor the expansion of, existing police protection facilities that could cause environmental impact.

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21 Ontario Police Department. Sergeant Lawrence Bonomo. (See **Appendix 5.11-2.**)

5.11.4 CUMULATIVE IMPACTS

The geographic area for cumulative impact analysis is the service areas of OFD and OPD. As discussed above, the proposed Project would not significantly impact OFD and OPD facilities or reduce their existing service ratios, staffing levels, or performance objectives, which could result in the need for new facilities or the expansion of existing facilities for which environmental impact analysis would be required. If the City determines that new facilities are necessary at some point in the future, such facilities (1) would occur where allowed under the designated land use, (2) would be expected to be located on parcels that are infill opportunities on lots that are typically between approximately 0.5 to 2 acres in size, and (3) would likely qualify for a Categorical Exemption under CEQA Guidelines Section 15301 or 15332, Negative Declaration or Mitigated Negative Declaration, and would not be expected to result in significant impacts. Accordingly, the potential need for additional fire protection services is not an environmental impact that the Project would be required to mitigate. Therefore, no significant cumulative impacts will result from the Project, related projects, and other growth, and the Project's contribution to cumulative impacts will not be cumulatively considerable.

5.11.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, Impacts PS-1 and PS-2 would be less than significant.

5.11.6 MITIGATION MEASURES

No mitigation measures are required.

5.11.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with local, State, and federal plans, policies, and programs would reduce potential impacts related to fire and police services (Impacts PS-1 and PS-2) to less than significant.

5.11.8 REFERENCES

California Constitution, Article XIII, Section 35, Subdivision (a)(2). https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=CONS&sectionNum=SEC.%2035.&article=XIII. Accessed July 2022.

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5.12.1 INTRODUCTION

This section evaluates potential transportation impacts that could result from the Project. This section describes the existing environmental and regulatory settings related to transportation and traffic. This section also evaluates the potential for the Project to induce an increase in Vehicle Miles Traveled (VMT) that would constitute a significant environmental impact as defined by CEQA and the CEQA Guidelines the consistency of the Project with applicable transportation plans and policies. The operating conditions of intersections that will be affected by traffic generated by the Project are evaluated to determine the consistency of the Project with performance standards in the City of Ontario General Plan (The Ontario Plan) and the San Bernardino County Congestion Management Program (CMP). As discussed in this section, the effect of a proposed project on the operating conditions of intersections and roadways is not a significant impact under CEQA. This section incorporates information from the following technical report:

- Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023. (**Appendix 5.12-1**).

5.12.2 ENVIRONMENTAL SETTING

5.12.2.1 Existing Conditions

Regional Setting

The Project site is located at Ontario International Airport (Airport) in the City of Ontario (City), San Bernardino County. The roadway network is shown in **Figure 5.12-1: Project Study Area and Study Intersections** and consists of thirty-six intersections (Study Area). The Study Area is primarily comprised of portions of the City and includes intersections under the jurisdiction of the City or California Department of Transportation (Caltrans). Regional access to the Airport and the Project site is via Interstate 10 (I-10), State Route 60 (SR-60), and Interstate 15 (I-15).

Regional Surface Transportation Facilities

I-10, located approximately one-mile to the north of the Project site, is a major east-west freeway that traverses through the states of California, Arizona, New Mexico, Texas, Louisiana, Mississippi, Alabama, and Florida. Within the Study Area, I-10 has six-to-eight lanes or three to four lanes in each direction.

SR-60, located approximately 1.25 mile to the south of the Project site, is a major east-west highway that traverses Southern California. Within the Study Area, SR-60 has eight lanes and two high occupancy vehicles lanes or four lanes and one high occupancy vehicles lane in each direction.

I-15, located approximately 2.75 miles to the east of the Project site, is a major north-south freeway that traverses through the states of California, Nevada, Arizona, Utah, and Idaho. Within the Study Area, I-15 is an eight-to-ten lane freeway with four-to-five lanes in each direction.

Local Setting

The Project site is approximately 97 acres, located south of the Airport airfield and west of the Cucamonga Channel. Most of the Project site is located north of East Avion Street with the rest of the site located south of East Avion Street and east of South Hellman Avenue. Local access to the site is provided through principal arterial and minor arterial streets, pedestrian, and bicycle facilities, and through public transit services.

Local Roadways

Haven Avenue is an eight-lane north-south principal arterial and is classified as a truck route by the City. Haven Avenue begins at Snowdrop Road in the City of Rancho Cucamonga and continues south as Sumner Avenue in the City of Eastvale, with a speed limit of 55 miles per hour in between I-15 and SR-60.

Jurupa Street is a six-lane east-west principal arterial and is classified as a truck route by the City. Jurupa Street begins at Archibald Avenue and continues east to Riverside Avenue in Bloomington, with a speed limit of 45 miles per hour in between Archibald Avenue and I-15.

Milliken Avenue is a six-lane north-south principal arterial and is classified as a truck route by the City. Milliken Avenue begins at Wilson Avenue in the City of Rancho Cucamonga and continues south as Hamner Avenue below SR-60 in the City of Eastvale, with a speed limit of 50 miles per hour in between I-15 and SR-60.

Mission Boulevard is a six-lane east-west principal arterial and is classified as a truck route by the City. Milliken Avenue begins at Temple Avenue as Diamond Bar Boulevard in the City of Diamond Bar and continues east as Van Buren Boulevard below SR-60 in the City of Mira Loma, with a speed limit of 55 miles per hour in between Haven Avenue and Grove Avenue.

Airport Drive is a four-to-six-lane east-west minor arterial and is classified as a truck route by the City. Airport Drive begins at Grove Avenue and continues east past Etiwanda Avenue as Slover

Avenue in the City of Fontana, with a speed limit of 45 miles per hour east of Haven Avenue and 50 miles per hour west of Rental Car Road.

Vineyard Avenue is a four-lane north-south principal arterial and is classified as a truck route north of SR-60 by the City. Vineyard Avenue begins at Mission Boulevard and continues south to East Riverside Drive, with a speed limit of 45 miles per hour east throughout the entire arterial.

Grove Avenue is a six-lane north-south principal arterial and is classified as a truck route north of SR-60 by the City. Grove Avenue begins at 15th Street in the City of Upland and continues south to Merrill Avenue in the City of Chino. Grove Avenue has a speed limit of 50 miles per hour in between Belmont Street and SR-60 and has a speed limit of 45 miles per hour north of Belmont Street.

Archibald Avenue is a six-lane north-south principal arterial located and is classified as a truck route by the City. Archibald Avenue begins at Lowell Street and continues south past SR-60 as River Road in the City of Corona, with a speed limit ranging between 40-45 miles per hour below Mission Boulevard.

Avion Street is not classified by the City as it is on private property. No street parking is permitted on Avion Street. Avion Street has a speed limit of 30 miles per hour east of Vineyard Avenue. Avion Street will be widened in a separate project.

Fourth Street is a six-lane east-west principal arterial east of Grove Avenue. This arterial is known as Fourth Street/4th Street in between Benson Avenue in the City of Montclair and Etiwanda Avenue and known as San Bernardino Avenue/Street elsewhere. Fourth Street has a speed limit of 45 miles per hour in between Archibald Avenue and I-15.

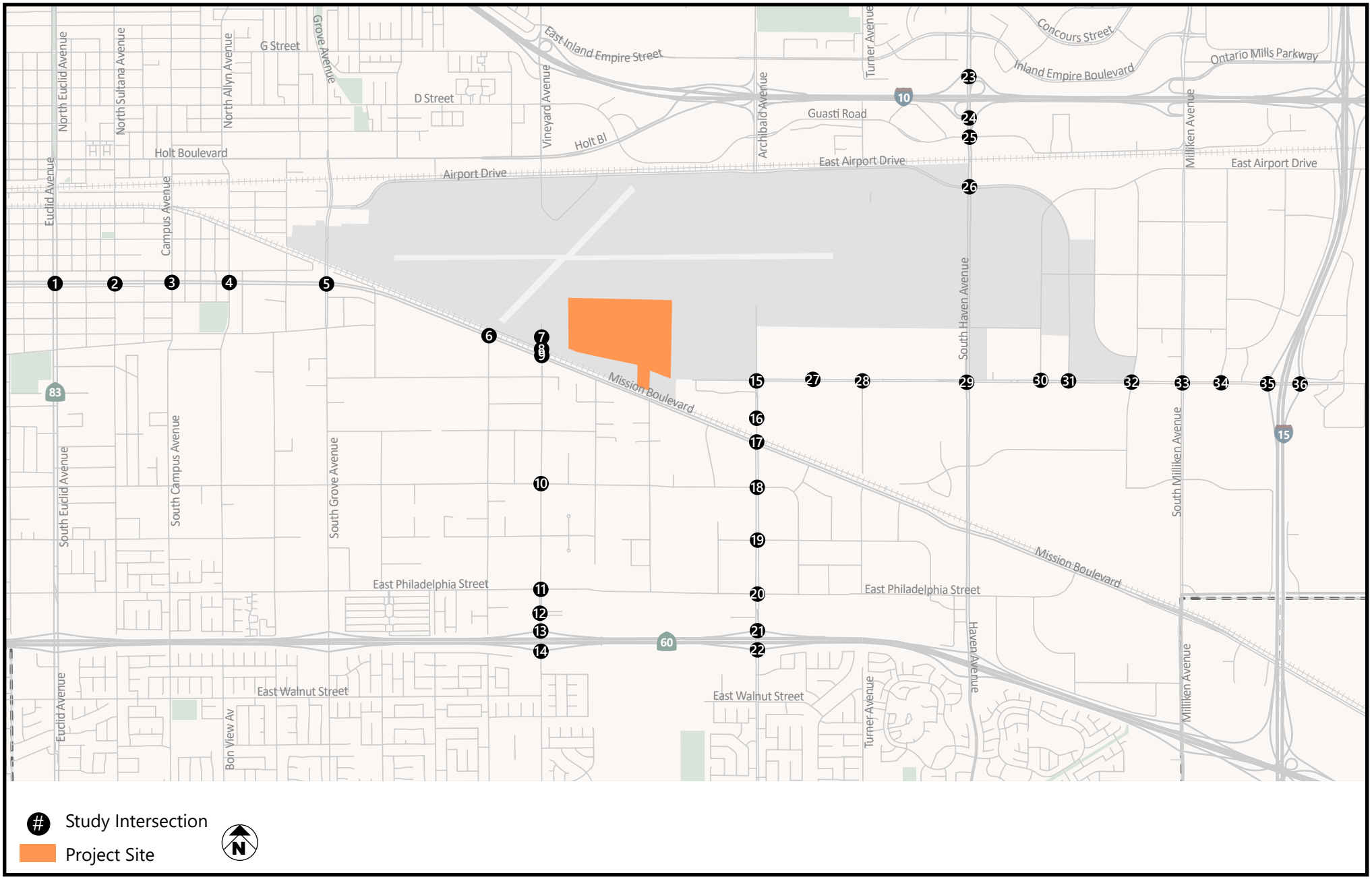
Traffic Study Area Intersections

The City of Ontario was consulted to determine the intersections to be studied to determine the consistency of the Project with appliable transportation plans and policies. The locations of intersections within the Study Area are shown on **Figure 5.12-1: Project Study Area and Study Intersections**. **Table 5.12-1: Study Area Intersections** identifies the 36 intersections where operating conditions are evaluated in the Traffic Study (see **Appendix 5.12-1**).

TABLE 5.12-1
STUDY AREA INTERSECTIONS

Intersections			
1.	Euclid Avenue (SR-83) at Mission Boulevard	19.	Cedar Avenue at Archibald Avenue
2.	Sultana Avenue at Mission Boulevard	20.	Philadelphia Street at Archibald Avenue
3.	Campus Avenue at Mission Boulevard	21.	SR-60 Westbound Ramps at Archibald Avenue
4.	Bon View Avenue at Mission Boulevard	22.	SR-60 Eastbound Ramps at Archibald Avenue
5.	Grove Avenue at Mission Boulevard	23.	I-10 Westbound Ramps at Haven Avenue
6.	Baker Avenue at Mission Boulevard	24.	I-10 Eastbound Ramps at Haven Avenue
7.	Avion Street at Vineyard Avenue	25.	Guasti Road at Haven Avenue
8.	Avion Drive at Vineyard Avenue	26.	Airport Drive at Haven Avenue
9.	Mission Boulevard at Vineyard Avenue	27.	Hofer Ranch Road at Jurupa Street
10.	Francis Street at Vineyard Avenue	28.	Turner Avenue at Jurupa Street
11.	Philadelphia Street at Vineyard Avenue	29.	Haven Avenue at Jurupa Street
12.	Raymond Kay Way at Vineyard Avenue	30.	Carnegie Avenue at Jurupa Street
13.	SR-60 Westbound Ramps at Vineyard Avenue	31.	Commerce Parkway at Jurupa Street
14.	SR-60 Eastbound Ramps at Vineyard Avenue	32.	Dupont Avenue at Jurupa Street
15.	Jurupa Street at Archibald Avenue	33.	Milliken Avenue at Jurupa Street
16.	Tracy Paseo at Archibald Avenue	34.	Rockefeller Avenue/Toyota Way at Jurupa Street
17.	Mission Boulevard at Archibald Avenue	35.	I-15 Southbound Ramps at Jurupa Street
18.	Francis Street at Archibald Avenue	36.	I-15 Northbound Ramps at Jurupa Street

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study), March 2023 (see Appendix 5.12-1).



SOURCE: Google Earth - 2021

FIGURE **5.12-1**

Meridian Consultants

Project Study Area and Study Intersections

332-001-21

Pedestrian and Bicycle Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signals, and multi-use trails within the Study Area. Several roadways in the Study Area provide sidewalks on at least one side of the street intermittently along the roadway segment, however, there are multiple gaps in the pedestrian network within the Study Area. Corridors with significant gaps in pedestrian facilities are primarily located in the City's industrial areas and include Philadelphia Street from Grove Avenue to Proforma Avenue, East Francis Street, South Grove Avenue, Mission Boulevard, South Campus Avenue, and Euclid Avenue south of Riverside Drive.

Bicycle facilities include Class I Bike Paths, Class II Bike Lanes, and Class III Bike Routes within the Study Area. Class II Bike Lanes and Class III Bike Routes are located north of the Project site along Inland Empire Boulevard and G Street. The West Cucamonga Creek Flood Control Channel has an existing Class I Bike Path located south of the Project site from Mission Boulevard to Philadelphia Street between Grove Avenue and Baker Avenue.

Planned bicycle network improvements will include installation of Class I Bike Path at Philadelphia Street between West Cucamonga Creek Flood Control Channel and Cucamonga Creek Multipurpose Trail. Additional improvements will include bike routes where the exact facility type and alignment are not known at this time.[1] These will be located at Mission Boulevard between Benson Avenue and Milliken Avenue, Haven Avenue between Fourth Street and Riverside Drive, Euclid Avenue/SR-83 between I-10 Eastbound Ramps and Riverside Drive, and Grove Avenue between 8th Street and Mission Boulevard.

Public Transit Services

Public transit services are available through Omnitrans, Metrolink, and Amtrak. Omnitrans provides local and express bus services to San Bernardino County, which includes the City.

Omnitrans provides local and express bus services to the Project area with Routes 61, 80, 81, 82, 87, and 290. In the vicinity of the proposed Project, local bus stops are located along Ontario International Airport Terminals 2 and 4 on East Terminal Way, at the Ontario-East Metrolink Station west of Mission Boulevard and South Haven Avenue, at Francis Street at Vineyard Avenue, and at the at Ontario Mills Mall. In addition to serving the City, Omnitrans also provides bus service Pomona, Montclair, Rancho Cucamonga, South Fontana, Fontana, Eastvale and San Bernardino. Furthermore, Metrolink provides rail service on the Riverside Line, which links

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1 Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**).

downtown Riverside to Union Station in downtown Los Angeles. The Ontario-East Metrolink Station is located west of Mission Boulevard and Haven Avenue, approximately 1.5 miles to the southeast of the Project site. Amtrak provides intercity rail service three times per week between Los Angeles and New Orleans, Louisiana, and three times per week between Los Angeles and Chicago, Illinois. Both services have stops at the Ontario Train Station, located approximately 2.4 miles to the northwest of the Project site.

Omnitrans

Route 61 operates Monday to Friday between 4:30 AM and 10:00 PM with 20 to 30-minute headways, and between 5:20 AM and 10:30 PM with 30-minute headways on weekends with service to Pomona, Montclair, Ontario, and Fontana. Route 61 stops just east of baggage claim near Ontario International Airport Terminals 2 and 4, approximately 0.75 mile to the north of the Project site.

Route 80 operates Monday to Friday between 5:00 AM and 10:30 PM with 10 to 20-minute headways, and between 5:40 AM and 7:30 PM with 20-minute headways on weekends with service to Ontario and Rancho Cucamonga. Route 80 stops just east of baggage claim near Ontario International Airport Terminals 2 and 4, approximately 0.75 mile to the north of the Project site.

Route 81 operates Monday to Friday between 5:00 AM and 8:45 PM with 20-minute headways, and between 6:00 AM and 8:50 PM with 10 to 20-minute headways on Saturdays with service to Ontario and Rancho Cucamonga. Route 81, which stops near the Ontario-East Metrolink Station, is approximately 1.5 miles to the southeast of the Project site.

Route 82 operates Monday to Friday between 4:25 AM and 10:40 PM with 60-minute headways, and between 6:15 AM and 8:00 PM with 20 to 30-minute headways on weekends with service Rancho Cucamonga, Ontario, South Fontana, and Fontana. Route 82 stop at Ontario Mills Mall, approximately 2.5 miles northeast of the Project site.

Route 87 operates Monday to Friday between 5:00 AM and 9:45 PM with 60-minute headways, and between 5:30 AM and 8:30 PM with 60-minute headways on Saturday with service to Rancho Cucamonga, Ontario, and Eastvale. Route 87 stops at Francis Street at Vineyard Avenue, approximately 0.65 mile to the south of the Project site.

Route 290 operates freeway express service Monday to Friday between 4:15 AM to 9:40 AM and 3:00 PM to 8:45 PM with 15 to 20-minute headways with service San Bernardino, Ontario, and Montclair. Route 290 stop at Ontario Mills Mall, approximately 2.5 miles northeast of the Project site.

Metrolink

Commuter train service is provided by Metrolink, which provides service throughout the Southern California region. The Ontario-East Metrolink Station is located west of Mission Boulevard and Haven Avenue, approximately 1.5 miles to the southeast of the Project site. The Station is served by the Riverside Line, which connects downtown Riverside to Union Station in downtown Los Angeles.

Metrolink operates on tracks owned by Union Pacific Railroad (UP) that pass the Project site immediately to the south. The tracks run east-west through the middle of the City, with grade separations at Milliken and Haven Avenues. UP serves customers between Riverside and the City who have rail spurs connecting to this line. Most of UP's intermodal and carload traffic originates in or is destined for Long Beach, Los Angeles, or City of Industry. These trains typically remain on the UP mainline along I-10 unless a full or partial shutdown occurs and there is a need to use this line as a bypass. Local freight train traffic in the city includes switches on various spur lines serving the industrial areas at the southern section of the City.

Amtrak

Intercity rail service is provided by Amtrak. Both the Sunset Limited Line and the Texas Eagle Line serve the Ontario Train Station, located approximately 2.4 miles to the northwest of the Project site.

The Sunset Limited Line provides service three times a week between Los Angeles and New Orleans, Louisiana, with stops in Pomona and the City at the Ontario Train Station.

The Texas Eagle Line provides service three times per week between Los Angeles and Chicago, Illinois, with stops in Pomona and the City at the Ontario Train Station.

Vehicle Miles Traveled

For purposes of analyzing VMT impacts, the City has established the 2019 Base Year vehicle miles traveled (VMT) metrics shown in **Table 5.12-2: VMT Metrics for City of Ontario** to serve as a basis for determining the significance of the increase in VMT from proposed projects. The metrics includes a 2019 Base Year estimate of the Citywide average for commute VMT per employee for 2019, and a Threshold of Significance for the Citywide average for VMT/SP under Adopted Ontario Plan Buildout Conditions for 2050. The City of Ontario Base Year VMT is 19.74 commute VMT per employee. The VMT analysis prepared for the Project as part of the Traffic Study (see **Appendix 5.12-1**) is consistent with the VMT guidelines in the City's VMT Impact Resolution, adopted in June 2020.

TABLE 5.12-2 VMT METRICS FOR CITY OF ONTARIO		
Region	2019 Base Year Commute VMT/Employee	2050 Adopted Ontario Plan Buildout VMT/Service Population (Threshold of Significance)
City of Ontario	19.74	29.76

Abbreviations: VMT = vehicle miles traveled; SP = service population

Source: County Department of Public Works TSM.

Level of Service

The Level of Service (LOS) analysis conducted to determine the consistency of the Project with applicable transportation plans and policies considered the daily capacity at intersections during the AM and PM commute periods when peak traffic volumes typically occur to determine the operating condition of these intersections. A LOS ranking scale is used to identify the operating condition at intersections. This scale compares traffic volumes to intersection capacity and assigns a letter grade to this relationship. The letter scale ranges from A to F with LOS A representing minimal delay conditions and LOS F representing excessive congestion conditions. The level of service criteria is summarized in **Table 5.12-3: Intersection Level of Service Definition.**

TABLE 5.12-3 INTERSECTION LEVEL OF SERVICE DEFINITION				
Level of Service	Description	Signalized Volume-to-Capacity (V/C) Ratio	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length	0.000-0.600	≤ 10.0	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths	0.601-0.700	> 10.0 to 20.0	> 10.0 to 15.0

TABLE 5.12-3
INTERSECTION LEVEL OF SERVICE DEFINITION

Level of Service	Description	Signalized Volume-to-Capacity (V/C) Ratio	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear	0.701-0.800	> 20.0 to 35.0	> 15.0 to 25.0
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	0.801-0.900	> 35.0 to 55.0	> 25.0 to 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences	0.901-1.000	> 55.0 to 80.0	> 35.0 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	Greater than 1.000	> 80.0	> 50.0

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**).

Existing Level of Service

Pursuant to CEQA, VMT is now the primary metric used to identify the significance of transportation impacts. Analysis of the operating conditions of intersections and roadways is no longer required by CEQA. Analysis of the effect of the Project on the operation of roadway facilities was completed to determine consistency with the policy in The Ontario Plan, which identifies a peak hour Level of Service (LOS) E or better as the City's desired performance standard at all intersections. LOS E is also the desired LOS standard in the San Bernardino County CMP. Accordingly, even though no longer required by CEQA, this Draft EIR includes an analysis of the effect of the Project on the operating conditions of intersections in the area.

Existing morning and evening peak hour movement counts were collected for the study intersections in October 2021. Existing (2021) morning and evening peak hour traffic volumes were used for information related to the 36 study intersections, as seen in **Figure 5.12-1**. Counts were collected over one day during fair weather, while school was in session, and during a typical (non-holiday) Thursday, consistent with industry standards and as identified in the San Bernardino CMP Guidelines. The existing traffic volumes, lane configurations, and signal timings were used to provide information related to operations at the Study Area intersections for existing weekday AM and PM peak hour conditions and are presented in **Table 5.12-4: Existing (2021) Intersection Peak AM and PM Conditions**. As shown in **Table 5.12-4**, all intersections, with the exception of Bon View Avenue at Mission Boulevard, operate at LOS D or better.

TABLE 5.12-4
EXISTING (2021) INTERSECTION PEAK AM AND PM CONDITIONS

	Intersection	Control	Peak Hour	LOS / Average Delay
1	Mission Blvd & Euclid Ave/SR-83	Signalized	AM	D / 50
			PM	D / 45
2	Mission Blvd & Sultana Ave	Signalized	AM	B / 13
			PM	B / 14
3	Mission Blvd & Campus Ave	Signalized	AM	B / 19
			PM	C / 28
4	Mission Blvd & Bon View Ave	Signalized	AM	D / 49
			PM	**F / 212**[3]

TABLE 5.12-4
EXISTING (2021) INTERSECTION PEAK AM AND PM CONDITIONS

	Intersection	Control	Peak Hour	LOS / Average Delay
5	Mission Blvd & Grove Ave	Signalized	AM	D / 52
			PM	D / 53
6	Baker Ave & Mission Blvd	Signalized	AM	A / 7
			PM	A / 8
7	Vineyard Ave & Avion St	AWSC[1]	AM	A / 8
			PM	A / 8
8	Vineyard Ave & Avion Dr	TWSC[2]	AM	A / 0
			PM	A / 0
9	Vineyard Ave & Mission Blvd[4]	Signalized	AM	B / 16
			PM	B / 19
10	Vineyard Ave & Francis St	Signalized	AM	B / 18
			PM	C / 24
11	Vineyard Ave & Philadelphia St	Signalized	AM	C / 21
			PM	C / 33
12	Vineyard Ave & Raymond Kay Way	Signalized	AM	C / 22
			PM	B / 16
13	Vineyard Ave & SR-60 WB Ramps	Signalized	AM	B / 17
			PM	C / 26
14	Vineyard Ave & SR-60 EB Ramps	Signalized	AM	C / 32
			PM	C / 25
15	Archibald Ave & Jurupa St	AWSC[1]	AM	B / 14
			PM	B / 15
16	Archibald Ave & Tracy Paseo	Signalized	AM	A / 7

TABLE 5.12-4
EXISTING (2021) INTERSECTION PEAK AM AND PM CONDITIONS

	Intersection	Control	Peak Hour	LOS / Average Delay
			PM	A / 9
17	Archibald Ave & Mission Blvd[4]	Signalized	AM	D / 52
			PM	D / 54
18	Archibald Ave & Francis St	Signalized	AM	C / 21
			PM	C / 26
19	Archibald Ave & Cedar St	Signalized	AM	B / 13
			PM	B / 19
20	Archibald Ave & Philadelphia St	Signalized	AM	C / 31
			PM	C / 32
21	Archibald Ave & SR-60 WB Ramps	Signalized	AM	C / 25
			PM	C / 29
22	Archibald Ave & SR-60 EB Ramps	Signalized	AM	C / 26
			PM	C / 21
23	Haven Ave & I-10 WB Ramps	Signalized	AM	C / 26
			PM	B / 16
24	Haven Ave & I-10 EB Ramps	Signalized	AM	C / 28
			PM	B / 18
25	Haven Ave & Guasti Rd	Signalized	AM	C / 23
			PM	C / 30
26	Haven Ave & Airport Dr	Signalized	AM	C / 31
			PM	D / 42
27	Hofer Ranch Rd & Jurupa St	Signalized	AM	C / 21
			PM	C / 21

TABLE 5.12-4
EXISTING (2021) INTERSECTION PEAK AM AND PM CONDITIONS

	Intersection	Control	Peak Hour	LOS / Average Delay
28	Jurupa St & Turner Ave	Signalized	AM	A / 9
			PM	B / 11
29	Jurupa St & Haven Ave	Signalized	AM	C / 28
			PM	D / 37
30	Jurupa St & Carnegie Ave	Signalized	AM	A / 8
			PM	A / 8
31	Jurupa St & Commerce Pkwy	Signalized	AM	C / 25
			PM	C / 26
32	Jurupa St & Dupont Ave	Signalized	AM	B / 14
			PM	A / 9
33	Jurupa St & Milliken Ave	Signalized	AM	D / 36
			PM	D / 39
34	Jurupa St & Rockefeller Ave	Signalized	AM	B / 20
			PM	D / 36
35	Jurupa St & I-15 SB Ramps	Signalized	AM	C / 29
			PM	C / 28
36	Jurupa St & I-15 NB Ramps	Signalized	AM	C / 20
			PM	B / 19

Notes:

1. AWSC = All-Way Stop Controlled.

2. TWSC = Two-Way Stop Controlled.

3. Bolded results operate below adopted LOS standards.

4. The LOS results at this intersection as reported by Synchro do not reflect the additional delays caused by trains. This intersection is expected to experience an additional average of seven minutes of delay per hour, which is not reflected in the LOS results.

Source: Fehr & Peers. Ontario International Airport South Airport Cargo Center Transportation Impact Study (Traffic Study). March 2023 (see **Appendix 5.12-1**).

5.12.2.2 Regulatory Background

State

California Traffic Operations Standards

In May 2020, Caltrans issued the Vehicle Miles Traveled Focused Transportation Impact Study Guide[2] This document provides Caltrans Districts, lead agencies, tribal governments, developers, and consultants guidance regarding Caltrans' review of a land use project or plan's transportation analysis using a VMT metric. This guidance document replaces the 2002 Caltrans Guide for the Preparation of Traffic Impact Studies, which is for use with local land use projects.

The 2002 Caltrans Guide for the Preparation of Traffic Impact Studies[3] includes criteria for evaluating the effects of land use development and changes to the circulation system on State highways. Caltrans maintains a target LOS at the transition between LOS C and LOS D for freeway facilities. This document is no longer directly applicable to analysis under CEQA to determine the significance of transportation impacts but is considered to assist in determining if the Project would lead to unacceptable roadway operations.

Senate Bill 743

Senate Bill (SB) 743, signed into law in 2013,[4] addressed transit-oriented infill projects, judicial review streamlining for environmental leadership development projects, and also directed the Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines to define new criteria for determining the significance of transportation impacts. These changes include elimination of auto delay and similar measures of traffic congestion as a basis for determining significant impacts.

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2 California Department of Transportation (Caltrans). *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*. May 20, 2020. https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf. Accessed July 2022.

3 Caltrans. *Guide for the Preparation of Traffic Impact Studies*. December 1, 2002. https://rosap.ntl.bts.gov/view/dot/27512/. Accessed July 2022.

4 California Legislative Information. *Senate Bill No. 743*. September 27, 2013. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743. Accessed July 2022.

In January 2016, OPR issued proposed changes to the State CEQA Guidelines.[5] These changes stated that projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor generally may be considered to have a less than significant transportation impact. In addition, the proposed guidelines advised that Transit Oriented Development (TOD) projects, development projects that result in net decreases in VMT, compared to existing conditions, and land use plans consistent with a Sustainable Communities Strategy (SCS) or that achieve similar reductions in VMT as projected to result from the SCS generally may be considered to have a less than significant impact.[6] In December 2018, the California Natural Resources Agency certified and adopted the State CEQA Guidelines update, including Section 15064.3 implementing Senate Bill 743.,[7] which identifies VMT as the most appropriate measure of the transportation impacts of a project. The provisions of this section applied Statewide on July 1, 2020.

Congestion Management Program (CMP)

To address public concern that traffic congestion was impacting the quality of life and economic vitality of the State, in 1990, Section 65089 of the California Government Code was adopted to require each county to prepare and adopt a CMP. The intent of the CMP is to provide the analytical basis for transportation decisions. The CMP meets federal requirements for a Congestion Management System (CMS) as required by the Intermodal Surface Transportation Efficiency Act of 1991 and continued in the Transportation Equity Act for the 21st Century in 1998, and Safe, Accountable, Flexible, and Efficient Transportation Equity Act. Information regarding the San Bernardino County CMP is provided below.

Complete Streets Act

The Complete Streets Act[8] was signed into law in 2008. This law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation

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5 California Office of Planning and Research (OPR). *Revised Proposal on Updates to CEQA Guidelines on Evaluating Transportation Impacts in CEQA*. January 20, 2016. http://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf. Accessed July 2022.

6 OPR. "Transportation Impacts (SB 743)." https://opr.ca.gov/ceqa/sb-743/. Accessed July 2022.

7 California Legislative Information. *Senate Bill No. 743*. September 27, 2013. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743. Accessed July 2022.

8 California Legislative Information. *Assembly Bill 1358*. Amended July 8, 2021. Government Code Sections 65040.2 and 65302.

requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as motorists.

Regional

SCAG Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the largest metropolitan planning organization in the nation and is responsible for developing long-range transportation plans and a sustainability strategy for the region. The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) charts a path toward a more mobile, sustainable, and prosperous region by making key connections between transportation networks, between planning strategies, and between people.[9]

Connect SoCal is an important planning document for the region, allowing public agencies who implement transportation projects to do so in a coordinated manner, while qualifying for federal and State funding. The plan includes robust financial analysis that considers operations and maintenance costs to ensure our existing transportation system's reliability, longevity, resilience, and cost effectiveness. In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's greenhouse gas emission reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries and more efficient use of resources.

Connect SoCal identifies goals related to housing, transportation technologies, equity, and resilience in order to adequately reflect the increasing importance of these topics in the region, and where possible the goals have been developed to link to potential performance measures and targets. The plan's guiding policies take these goals and focus them, creating a specific direction for plan investments. The following goals are included in the 2020-2045 RTP/SCS:

1) Encourage regional economic prosperity and global competitiveness.
2) Improve mobility, accessibility, reliability, and travel safety for people and goods.

9 Southern California Association of Governments (SCAG). *Connect SoCal – 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*. Adopted September 3, 2020. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176. Accessed August 2021.

3) Enhance the preservation, security, and resilience of the regional transportation system.
4) Increase person and goods movement and travel choices within the transportation system.
5) Reduce greenhouse gas emissions and improve air quality.
6) Support healthy and equitable communities.
7) Adapt to a changing climate and support an integrated regional development pattern and transportation network.
8) Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
9) Encourage development of diverse housing types in areas that are supported by multiple transportation options.
10) Promote conservation of natural and agricultural lands and restoration of habitats.

The RTP/SCS includes an Aviation and Ground Access appendix. The RTP/SCS notes that SCAG has no authority over airports or airport activity and that the FAA has this authority. SCAG is interested in how traffic going and coming from airports affects the roads, highways, and transit systems in the region. The Aviation and Ground Access appendix to the RTP/SCS has air cargo forecasts and SCAG modeling estimates truck trips for the 5 busiest airports in the region and Ontario is one of these airports. As shown in Table 14 in the Aviation and Ground Access appendix, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045.

Local

San Bernardino County Congestion Management Program

The San Bernardino County Transportation Agency (SBCTA) is San Bernardino's Congestion Management Agency. SBCTA prepares, monitors, and periodically updates the CMP to meet the federal Congestion Management Process requirement and the County's Measure I Program. The CMP defines a network of State highways and arterials, LOS standards and related procedures, the process for mitigation of impacts of new development on the transportations system, and technical justification for the approach.

The Ontario Plan

The Ontario Plan Mobility Element contains the following goals and policies related to transportation.

Goal M-1: A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.

Policy M-1.1: *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 City of Ontario Master Plan of Streets and Highways.

Be maintained in accordance with best practices;

Be compatible with the streetscape and surrounding land uses; and

Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies.

Policy M-1.2: *Mitigation of Impacts*. We require development to mitigate its traffic impacts.

Policy M-1.3: *Agency Coordination on Roadway Improvements.* We work with Caltrans, SBCTA, and others to identify, fund, and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.

Policy M-1.4: *Complete Streets.* We work to provide a balanced context sensitive, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods and users of public transportation.

Policy M-1.5: *Level of Service.* Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).

Policy M-1.6: *Reduce Vehicle Miles Traveled.* We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.

Goal M-2: A system of trails and corridors that facilitate and encourage active modes of transportation.

Policy M-2.1: *Active Transportation.* We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.

Policy M-2.2: *Bicycle System*. We provide off-street multipurpose trails and Class II bikeways as our primary paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.

Policy M-2.3: *Pedestrian Walkways*. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.

Policy M-2.4: *Network Opportunities.* We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed- use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.

Goal M-3: A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.

Policy M-3.11: *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.

Goal M-4: An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.

Policy M-4.1: *Truck Routes*. We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.

Policy M-4.2: *Regional Participation*. We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts.

Policy M-4.4: *Environmental Considerations.* We support both local and regional efforts to reduce/eliminate the negative

environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.

Policy M-4.5: *Air Cargo*. We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.

Goal M-5: A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.

Policy M-5.1: *Regional Leadership.* We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.

Policy M-5.2: *Land Use Compatibility with Regional Transportation Facilities.* We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.

City of Ontario VMT Impact Analysis Resolution (No. 2020-071)

The City adopted VMT Impact Analysis Resolution (No. 2020-071) on June 16, 2020, to conform with CEQA Guidelines Section 15064.3, requiring agencies to stop treating automobile delay/LOS as an environmental impact. The VMT Impact Analysis Resolution indicates the VMT thresholds of significance for determining the significance of transportation impacts be consistent with the Ontario Policy Plan. The Resolution determines that the City utilize the San Bernardino County Travel Demand Model (SBTAM) as its preferred methodology to measure VMT and as its preferred method to analyze a project' s VMT impact.

The City's June 2020 staff report on adoption of SB 743 VMT Thresholds notes that the Office of Planning and Research guidance on VMT analysis primarily addressed VMT associated with passenger vehicles and light duty trucks and did not address large truck trips associated with the transportation of goods. The City adopted an Origin Destination VMT/SP (vehicle miles traveled per service population) threshold, which aggregates all trips together, including trucks.

City of Ontario Municipal Code

The City of Ontario Municipal Code contains the following regulations regarding traffic:

- **Title 9, Development Code, Chapter 1, Zoning and Land Use Regulations** establishes standards for parking facilities based on land use designations.
- **Title 9, Development Code, Chapter 1, Zoning and Land Use Regulations**, Part 6, Development Code, Article 30. Parking and Loading Requirements establishes standards for off-street parking facilities and off-street loading facilities.

Development Fees – Streets, Signals, and Bridges Impact Fees

The purpose of the Streets, Signals, and Bridges impact fee is to ensure that new development finances its fair share of transportation infrastructure.[10]

5.12.3 ENVIRONMENTAL IMPACT ANALYSIS

5.12.3.1 Thresholds of Significance

The potential for the Project to result in impacts associated with transportation is based on Appendix G of the State CEQA Guidelines and is evaluated as follows:

Would the project:

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

10 City of Ontario. *Development Impact Fee Calculation and Nexus Update Report for the City of Ontario*. "Chapter 5 - Circulation (streets, signals and bridges) System." September 17, 2019. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Building/2019%20DIF%20Calculation%20and%20Nexus%20Update%20Report%20%289-17-19%29.pdf. Accessed July 2022.

5.12.3.2 Methodology

The traffic impacts analysis presented in this section is based upon the Traffic Study prepared for the Project (see **Appendix 5.12-1**). The following provides an overview of the methodology utilized to conduct the analysis presented in this section.

Vehicle Miles Traveled

VMT analysis for development projects in the City is based upon the version of the SCAG model developed for the 2016 RTP/SCS, the San Bernardino Transportation Analysis Model (SBTAM). At the time of this analysis, SBTAM was in the process of being updated with the SCAG 2020 RTP/SCS data, but the data was not available. This analysis uses the most current, available SBTAM model version consistent with the City's VMT Impact Resolution, which considers automobile, light duty trucks, and heavy-duty trucks.

A significant impact would occur if the proposed Project VMT/SP exceeds the Citywide average for Service Population under Ontario Plan Buildout Conditions. The City's significance threshold for Cumulative Impacts states that a significant impact would occur if the proposed Project would cause total daily VMT within the City to be higher than the no project alternative under cumulative conditions.

The most appropriate local validated and calibrated model available for use in estimating the VMT that would be induced by the Project is the San Bernardino County Transportation Agency (SBCTA) travel demand model SBTAM. The SBTAM is a travel demand forecasting model with socioeconomic and roadway network inputs, such as population, employment, and the regional and local roadway network that estimates current travel behavior and forecasts future changes in travel demand.

Due to the specialized nature of the proposed air cargo facility, the SBTAM was tested for sensitivity to verify if the model accurately projected the number of vehicle and truck trips, and whether the model accurately estimated vehicle and truck trip lengths. Comparing the SBTAM estimated trips to empirically collected data at a similar air cargo facility, it was determined that the SBTAM overestimated the number of trips for the Project for both truck trips and non-truck trips. Comparing the SBTAM estimated truck trip lengths to data for the proposed Project's truck trip origin and destinations, it was determined that the SBTAM underestimated truck trip lengths. As the truck trip lengths are not fully represented by the SBTAM, VMT associated with truck operations was estimated off-model using more conservative, project-specific truck operations and employee shift data to estimate trip generation and trip distance information. Therefore, a hybrid approach to estimating VMT was utilized for the Project because the proposed Air Cargo Sort Building is a unique use that is not adequately represented by the SBTAM traffic model

alone. Some of the model traffic data is appropriate, such as employee commute trip lengths and empty truck average trip lengths, while other metrics were estimated outside the model, such as trip generation and fixed-route truck trip lengths.

As discussed below, custom trip generation estimates developed for the Project were utilized. These include a higher number of employees needed for the sorting from planes to trucks, fixed truck schedule that results in off-peak employee travel not reflected in the ITE trip generation codes, and custom trip generation estimates developed differ from ITE rates which are typically lower in the peak hour and higher at the daily level.

Employee and daily business operation trip lengths were estimated by referencing average trip length data from SBTAM. The estimated trip lengths for the model were compared against Longitudinal Employer-Household Dynamics (LEHD) data compiled for the Ontario Policy Plan 2050 Update and confirmed that the trip length data was accurate and reasonable as compared to existing City averages.

Detailed truck routing information for the fixed-route trucks provided for the Project and measured truck trip lengths between the identified distribution facility origins and destinations were reviewed in the Traffic Study (see **Appendix 5.12-1**). Detailed data is unavailable for existing empty truck travel characteristics and, as such, the most applicable available truck trip length data derived from the SBTAM was referenced. The SBTAM data was reviewed and considered reasonable as the average trip length of empty trucks is typically low due to truck routing and scheduling by private trucking companies. This minimizes inefficient empty moves and reduces operating costs. Third-party providers typically locate as close to the Project as possible to maximize their own economic efficiencies. The latest version of SBTAM was run to extract trip length data for automobile trips and empty load trips. Office and transportation/warehouse employment were coded into the Project Traffic Analysis Zone (TAZ) in the base and future year models, and average trip length data extracted for passenger cars and trucks for the empty loads.

The City, the SBTAM roadway network, and socio-economic data were updated to be consistent with the Ontario Policy Plan EIR scenario modeling for Base Year (2019) and Adopted Ontario Plan Buildout (2050). Outside of the City, the SBTAM assumes datasets consistent with the 2016

SCAG RTP/SCS with a base year of 2012 and future year of 2040. The SBTAM assignment parameters were set to run up-to five loops with a minimum convergence criterion[11] of 0.01.

For employees, guests, deliveries and empty trucks, trip generation estimates were multiplied by average trip lengths to estimate average daily VMT. Average trip lengths from SBTAM were interpolated between base and future years to estimate project Opening Years Phase 1 (2025) and Phase 2 (2029) trip lengths for the employee trips. The fixed-route truck trips were each multiplied by the route distance to estimate fixed-route truck VMT. Fuel truck trips were also multiplied by the route distance to estimate fuel truck trip VMT.

Intersection Operations

Intersection operating conditions in the Study Area were evaluated using the Highway Capacity Manual (HCM) 6th Edition Transportation Research Board (TRB) methodology, which is consistent with the City, County of San Bernardino, and Caltrans analysis requirements. The HCM 7th Edition methodology for signalized intersections estimates the average control delay for vehicles at the intersection. The HCM 7th Edition methodology for unsignalized intersections estimate the average control delay for vehicles at all-way stop-controlled intersections and the worst movement delay for side-street stop-controlled intersections. After the quantitative delay estimates are complete, the methodology assigns a qualitative letter grade that represents the operations of the intersection, ranging from Level of Service (LOS) A to F, with LOS E representing at-capacity operations. The letter grades for signalized and unsignalized intersections are shown in Table 5.12-3.

LOS E is identified in the San Bernardino County CMP and The Ontario Plan as minimum level of service standard for roadways and intersections. Analysis of the operating conditions of intersections was conducted to determine the consistency of the Project with these transportation policies.

Traffic Forecasts

The SBTAM was used to develop traffic volume forecasts for the Study Area. Within the City, the SBTAM roadway network and socio-economic data were updated to be consistent with the Ontario Policy Plan EIR scenario modeling for Base Year (2019) and Adopted Ontario Plan

11 Convergence criteria refers to the acceptable difference in the traffic volumes produced by different loops of the vehicle assignment. A convergence criterion of 0.01 indicates that the model is producing similar outputs with an allowance of 1% difference between each loop. The Base Year and Future year models produce link and intersection turning movement volumes.

Buildout (2050). Outside of the City, the SBTAM assumes datasets consistent with the 2016 SCAG RTP/SCS with a base year of 2012 and future year of 2040.

The SBTAM assignment parameters were set to run up-to five loops with a minimum convergence criterion of 0.01. Convergence criteria refers to the acceptable difference in the traffic volumes produced by different loops of the vehicle assignment. A convergence criterion of 0.01 indicates that the model is producing similar outputs with an allowance of 1% difference between each loop. The Base Year and Future year models produce link and intersection turning movement volumes.

The proportional difference between the Base Year and Future Year model outputs were utilized to interpolate Horizon Year (2040) volume forecasts. This method is known as the difference method and is a state of the practice approach consistent with National Cooperative Highway Research Program (NCHRP) Report 765, which includes a variety of methods for developing intersection turning movement volume forecasts from travel demand model outputs. The Base Year and Future Year model outputs are compared to one another and are used in conjunction with existing traffic counts to develop future traffic forecasts.

The following assumptions were applied to the analysis of the operating conditions of intersections:

- Peak Hour Factor (PHF) were based on traffic counts collected in the field for all Existing Conditions and Opening Year Conditions analyses.
- PHF for all Year (2040) analysis were set to 0.95, unless the existing PHF was higher.
- Heavy vehicle percentage was assigned to zero.
- All traffic volumes were converted to passenger car equivalents (PCE).

The effects of heavy vehicles on traffic operations were determined by converting heavy vehicles to PCE. Heavy vehicles are classified as Classes 4-13. Medium-duty trucks typically represent Classes 4-5, whereas the heaviest trucks are represented by Classes 7-13. The most common heavy-duty trucks are Class 8 heavy-duty three or four-axle tractor-trailers. Due to the length and slower starting speeds, these trucks represent approximately three passenger cars at an intersection, which is consistent with Federal Highway Administration (FHWA) methods.[12] The

12 United States Federal Highway Administration (FHWA). *Traffic Data Computation Method Pocket Guide*. *Publication No. FHWA-PL-18-027*. August 2018. https://rosap.ntl.bts.gov/view/dot/57335. Accessed March 2022.

weighted PCE factor adjustments were applied to each roadway based on roadway classification data collected in October 2021. The AM and PM peak hour totals for each heavy vehicle classification were converted to PCEs. 3-axle trucks were converted to PCE based on a PCE factor of 2.0. 4-axle trucks were converted to PCE based on a PCE factor of 3.0.

The PCE factors for each roadway were determined by multiplying the percent of each heavy vehicle classification by the assigned PCE factor. The PCE factors in **Table 5.12-5: PCE Weighted Adjustment** were applied to all the study intersection volumes. Study Area intersections with multiple data points have multiple weighted PCE factor adjustments applied to one or more approaches.

TABLE 5.12-5
PCE WEIGHTED ADJUSTMENT

Roadway Segments		AM	PM
Roadway 1	Mission Blvd west of Grove Ave	1.09	1.06
Roadway 2	Vineyard Ave north of Philadelphia St	1.10	1.09
Roadway 3	Archibald Ave south of Cedar St	1.17	1.13
Roadway 4	Mission Blvd east of Archibald Ave	1.11	1.10
Roadway 5	Jurupa St east of Tower Dr	1.22	1.18
Roadway 6	Haven St south of Airport Dr	1.10	1.08
Roadway 7	Jurupa St east of Milliken Ave	1.22	1.21
Roadway 8	Vineyard Ave north of Mission Blvd[1]	1.10/1.22	1.09/1.18

Notes:

1. *Roadway 8 consists of multiple PCE factors from Roadways 2 and 5. Roadway 2's PCE factor applies to the north/south volumes, and Roadway 5's weighted PCE factor adjustment applies to the east/west volumes.*

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**).

The analysis of intersection operations evaluates the following scenarios:

- Existing (2021)
- Opening Year (2025) No Project
- Opening Year (2025) Plus Phase 1 Project
- Opening Year (2029) No Project

- Opening Year (2029) Plus Phase 1 and Phase 2 Project
- Year (2040) No Project
- Year (2040) Plus Phase 1 and Phase 2 Project

Trip Generation

The proposed Project includes a mix of cargo warehouse employees, office employees, and deliveries with trip-making behaviors unique to an air cargo facility. For this reason, the proposed Project is not represented by a land use description within the Institute of Transportation (ITE) Engineers Trip Generation Handbook, 3rd Edition. Trip generation calculations utilize custom daily and peak hour trip generation rates for air cargo facilities based on empirical data collected at a similar cargo facility in Ontario. Trips generated by the proposed Project are generated employee, truck, and delivery users.

The custom trip generation estimates differ from the ITE rates at comparable land use categories High-Cube Fulfilment Center Warehouse (ITE Code 155) and High-Cube Parcel Hub Warehouse (ITE Code 156). These uses are similar in nature to an air cargo facility; however, they operate differently from air cargo facilities. As such, the trips from the ITE generation rates are not representative of the proposed Project due to the specialized nature of the air cargo facilities. The custom trip generation estimates include a higher number of employees needed for the sorting from planes to trucks, fixed truck schedule that results in off-peak employee travel not reflected in the ITE trip generation codes, and custom trip generation estimates developed differ from ITE rates which are typically lower in the peak hour and higher at the daily level.

Empirical data was collected at a similar land use to develop a custom trip generation rate based on an operational air cargo facility. Employee trips at a similar facility were counted and used to prepare the trip generation estimate for the Project. Counts were collected at an employee driveway to isolate employee and delivery trips as the exact truck trip schedule is already defined for this proposed Project. The traffic counts were collected in October 2021, a peak time of the year for cargo facilities. This provides a higher estimate during the peak hours as overtime for employees is standard during peak seasons, meaning employees may be working earlier or later than the typical shift times.

The traffic counts were collected during the AM peak period (7:00 AM-9:00 AM) and PM peak period (4:00 PM-6:00 PM) at the 36 study intersections shown in Figure 5.12-1. Counts were collected over one day during fair weather, while school was in session, and during a typical (non-holiday) Thursday, consistent with industry standards and as identified in the San Bernardino CMP Guidelines.

Trip generation rates and estimates are indicated for Phase 1 in **Table 5.12-6: Trip Generation Rates and Estimates for Phase 1**. The Project is expected to generate approximately 3,125 daily net external trips for Opening Year (2025) Plus Phase 1 Project, including approximately 221 net external trips (107 inbound/114 outbound) during the morning peak hour, and approximately 283 net external trips (129 inbound/155 outbound) during the evening peak hour.

TABLE 5.12-6
TRIP GENERATION RATES AND ESTIMATES FOR PHASE 1

Project Trip Type	Qty	Units[1]	Daily Trip Rate	AM Peak		PM Peak		Daily Total	AM Peak			PM Peak		
				Trip Rate	In/ Out %	Trip Rate	In/ Out %		In	Out	Total	In	Out	Total
Phase 1														
Project Employees and Deliveries (No Trucks)	320	KSF	7.96	0.46	53/47	0.77	46/54	2,531	77	68	146	114	134	247
Truck Trips (empty) (PCE = 3.0)	48	trucks	-	-	-	-	-	144	21	3	24	12	0	12
Truck Trips (PCE = 3.0)	102	trucks	-	-	-	-	-	306	9	42	51	3	21	24
Fuel Truck Trips (PCE = 3.0)	48	trucks	-	-	-	-	-	144	-	-	-	-	-	-
Net External Trips								**3,125**	**107**	**114**	**221**	**129**	**155**	**283**

Trip generation rates and estimates are indicated for Phase 1 and 2 in **Table 5.12-7: Trip Generation Rates and Estimates for Phase 1 and 2 Combined**. The Project is expected to generate approximately 3,202 daily net external trips for Opening Year (2029) Plus Phase 1 and 2 Project and Year (2040) Plus Phase 1 and Phase 2 Project, including approximately 233 net external trips (110 inbound/123 outbound) during the morning peak hour, and approximately 283 net external trips (129 inbound/155 outbound) during the evening peak hour.

TABLE 5.12-7
TRIP GENERATION RATES AND ESTIMATES FOR PHASE 1 AND 2 COMBINED

Project Trip Type	Qty	Units[1]	Daily Trip Rate	AM Peak		PM Peak		Daily Total	AM Peak			PM Peak		
				Trip Rate	In/ Out %	Trip Rate	In/ Out %		In	Out	Total	In	Out	Total
Phase 1 and 2 Combined														
Project Employees and Deliveries (No Trucks)	320	KSF	7.96	0.46	53/47	0.77	46/54	2,531	77	68	146	114	134	247
Truck Trips (empty) (PCE = 3.0)	69	trucks	-	-	-	-	-	207	21	6	27	12	0	12
Truck Trips (PCE = 3.0)	155	trucks	-	-	-	-	-	465	12	48	60	3	21	24
Net External Trips								**3,202**	**110**	**123**	**233**	**129**	**155**	**283**

Employee Trips

Observations of similar facilities showed that trip arrivals and departures were variable. Trips at a similar facility were counted and used to prepare the trip generation estimate for the Project. Daily driveway counts were collected at a similar air cargo facility that currently operates at the Airport. Trip generation data collected at logistics facilities shows that arrival/departure patterns tend to be fluid and spread out over the course of the day. The similar facility also operates in a schedule with shifts that generated more peak hour trips outside the typical commute hours.

The majority of the trips generated by the Project will be employee trips. The Project will include three employee shift, seven days a week:

- Shift 1: 7:00 AM to 3:00 PM with 640 employees.
- Shift 2: 3:00 PM to 11:00 PM with 95 employees.
- Shift 3: 11:00 PM to 7:00 AM with 580 employees.

Employee shift change times do not occur during the typical commute peak periods, and observations at similar facilities have shown that actual trip arrivals and departures vary on a less rigid schedule. The morning shifts will begin between 5:00 and 7:00 AM with approximately 640 employees arriving and 47 employees leaving during the morning shift change. The midday shifts will begin between noon and 3:00 PM with 95 employees arriving.

The morning shift employees will leave between 11:00 AM and 4:30 PM. The evening shifts will begin between 7:00 and 9:30 PM with approximately 580 employees arriving. Most of the evening shift employees (533 employees) are anticipated to leave by 5:00 AM.

Truck Trips

The air cargo operation would generate truck trips on a daily fixed schedule with predetermined destinations throughout California and to neighboring states of Nevada and Arizona. Detailed truck trip information was provided by the Project proponent and describes precise operational arrival times, departure times, origins, and destinations that are routine and scheduled daily. Some of the trucks are owned by the Air Cargo Sort Building operator and travel back and forth between its distribution sites only. Others are independently owned and may arrive empty before their delivery trip or arrive with goods and leave empty without a destination related to the Air Cargo Sort Building.

Phase 1 also includes 24 round trips (48 total trips in and out) to account for fuel truck deliveries. Prior to the completion of Phase 2, OIAA will complete construction of an aviation fuel line that will serve the Project, and, for this reason, fuel will no longer be delivered by truck. Fuel truck trips are, therefore, not included in the Phase 2 and 2040 Long Range Planning Horizon Year Forecasts.

Deliveries

Delivery trips for fuel, materials, and supplies would occur throughout the day, though not typically during shift changes. Delivery trips were estimated based on empirically collected data from similar nearby air cargo facilities and other air cargo operations operated by the Project applicant.

Phase 1 operations include the assumption that the underground fuel line serving the Project would not be in operation and up to 24 fuel trucks per day would bring fuel from the northwest corner of the airport. These trips are assumed to occur outside of the peak hours. Phase 2 anticipates the underground fuel line would be in place and fuel trucks would no longer be needed.

Trip Distribution

Trip distribution is the directions of approach and departure that vehicles would use to travel to and from the Project site. Development of trip distribution for employee, truck, and delivery users utilizes local knowledge of the Study Area, travel pattern data and statistics, and professional judgment.

Employee trip distribution, home-to-work travel patterns, were referenced from the SBTAM and Census Bureau LEHD data. The SBTAM is a socio-economic model focusing on population and employment. As such, proposed Project employment is added to a Traffic Analysis Zone (TAZ) representative of the Project in the model. The results of a select zone model run from SBTAM show the AM trip distribution, which is the highest trip generating period, and utilize LEHD data to confirm how far employees travel and from which directions.

Truck trip distribution is based on the known destinations of each truck trip along the shortest designated truck routes. The truck trip distribution modeling utilizes the City's Truck Route Map and the trucking schedules of the proposed Project.

Active Transportation and Public Transit Methodology

Potential impacts to public transit, pedestrian facilities and travel, and bicycle facilities and travel, are evaluated based on conflicts with adopted policies, plans, or programs. This includes analysis of the proposed Project to examine if it is inconsistent with adopted policies, plans, or programs regarding active transportation, or public transit facilities, or otherwise decreases the performance or safety, and then to determine whether the proposed Project has the potential to conflict with existing or proposed facilities supporting these travel modes.

5.12.3.3 Project Impacts

Would the Project:

Threshold TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact.

Construction Impacts

Construction of the Project would generate traffic from construction worker travel, the arrival and departure of trucks delivering construction materials, and the removal of debris generated by on-site activities. Both the number of construction workers and trucks would vary throughout construction of the Project based on the phase of construction. Construction trip estimates for employees and trucks are presented in **Table 5.12-8: Construction Trip Estimates** by construction activity and each phase of construction.

TABLE 5.12-8
CONSTRUCTION TRIP ESTIMATES

Construction Activity	Daily Employee Trips	Daily Truck Trips	Daily Truck Trips (PCE[1])	Total Daily Trips (PCE)	Peak Hour (PCE)
Phase 1 Construction Trips					
Demo	-	7	21	21	3
Site Prep	-	102	306	306	39
Construction	280	100	300	580	73
Phase 2 Construction Trips					
Demo	-	18	54	54	7
Site Prep	-	51	153	153	20
Construction	240	100	300	540	68

Notes:
1. PCE = Passenger Car Equivalent assumed to be three passenger cars per truck.
Source: Truck trip estimates were developed by the Project proponent based on the Project construction plans and schedule.

The maximum number of daily construction trips, as converted to Passenger Car Equivalents (PCE), is approximately 82% less than the number of trips the Project will generate (3,202 daily trips) after completion of Phase 2 of the Project. The maximum number of PM peak hour construction trips is approximately 74% less than the number of PM peak hour trips the Project will generate (283 PM peak hour trips) after completion of Phase 2 of the Project. As there will be fewer construction trips than trips generated by the Project at completion of Phase 2, the improvements identified in the opening year analyses would provide sufficient capacity to accommodate traffic generated by construction of the Project.

Roadway facilities improvements to Intersection 1, Euclid Ave/SR-83 at Mission Boulevard, would occur as part of the proposed Project to be completed by Opening Year (2029). The improvements would optimize signal timing during the AM and PM peak hours, improving intersection operations to better than pre-project conditions, consistent with the Ontario Plan and CMP requirements related to LOS. Truck trips during construction would comply with truck route requirements identified within the Ontario Plan. Roadway improvements may result in temporary impacts through lane closures, noise, and dust. Construction of the proposed Project

would not conflict with any program, plan, ordinance, or policy related to roadway facilities. Impacts to roadway facilities during construction would be less than significant for these reasons.

Operational Impacts

The Project supports the City's General Plan and the SCAG RTP/SCS, as well as State goals for encouraging infill development and employment densification. In addition, the RTP/SCS includes an Aviation and Ground Access appendix that contain air cargo forecasts and SCAG modeling estimates of truck trips for the 5 busiest airports in the region; ONT is one of these airports. The RTP/SCS identifies 900 daily truck trips associated with Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045. As shown in **Table 5.12-7**, Trip Generation Rates and Estimates for Phase 1 and 2 Combined, the Project would generate 672 truck trips per day, which would be consistent with the 2045 projection for truck trips associated with activities at Ontario Airport.

Transit Facilities

The proposed Project would not substantially change or eliminate bus facilities or transit routes, nor would it conflict with a policy or program related to transit access. New transit trips are anticipated to be generated by the Project, but the Project would not modify transit stop locations or change transit headways. Additional transit ridership demand could increase boarding and alighting activity at existing bus stops and transit terminals located near the Project site. As determined by a Technical Advisory by the Governor's office of Planning and Research, a decrease of performance does not include increase in users.

The proposed Project would not conflict with the Ontario Plan policies regarding transit access and would not conflict with RTP/SCS policies regarding transit access and reliability. As such, the proposed Project is consistent with the adopted plans regarding public transit and is not expected to decrease the performance or safety of these facilities. Therefore, the proposed Project would not conflict with any standard related to public transit facilities or services and is considered to have a less than significant impact.

Bicycle Facilities

Bicycle facilities within the Project area include Class I Bike Paths, Class II Bike Lanes, and Class III Bike Routes. Class II Bike Lanes and Class III Bike Routes are located north of the Project site along Inland Empire Boulevard, approximately 1.2 miles to the north of the Project site, and along G Street, approximately 1.1 miles north of the Project site. The West Cucamonga Creek Flood Control Channel has an existing Class I Bike Path from Mission Boulevard to Philadelphia Street located approximately 0.2 mile to the south of the Project site.

Planned bicycle network improvements include installation of Class I Bike Path at Philadelphia Street between West Cucamonga Creek Flood Control Channel and Cucamonga Creek Multipurpose Trail.[13] Additional improvements will include bike routes, where the exact facility type and alignment are not known at this time. These will be located at Mission Boulevard between Benson Avenue and Milliken Avenue, Haven Avenue between Fourth Street and Riverside Drive, Euclid Avenue/SR-83 between I-10 Eastbound Ramps and Riverside Drive, and Grove Avenue between 8th Street and Mission Boulevard. The City's vision is to create a well-connected network of on-road and off-road bicycle facilities to accommodate users of all ages and abilities.

The Project does not include any changes to proposed or existing bicycle facilities. The proposed Project would not conflict with any existing or planned bicycle facilities. The Project is consistent with the adopted plans regarding bicycle facilities and is not expected to decrease the performance or safety of these facilities. Therefore, the proposed Project would not conflict with any standard related to bicycle facilities and is considered to have a less than significant impact.

Pedestrian Facilities

Pedestrian facilities within the Project area include sidewalks, crosswalks, pedestrian signals, and multi-use trails. Several roadways in the Study Area provide sidewalks on at least one side of the street intermittently along the roadway segment. However, there are multiple gaps in the pedestrian network within the Study Area. Corridors with significant gaps in pedestrian facilities are primarily located in the City's industrial areas and include Philadelphia Street from Grove Avenue to Proforma Avenue, East Francis Street, South Grove Avenue, Mission Boulevard, South Campus Avenue, and Euclid Avenue south of Riverside Drive.

Pursuant to the Ontario Active Transportation Master Plan, sidewalks, and Americans with Disabilities Act (ADA) ramps are planned along Mission Boulevard, west of South Bon View Avenue, approximately 1.6 miles west of the Project site. There are no proposed pedestrian facilities on Avion Street or Avion Drive outside the Project area. The City's vision is to create a well-connected network of on-road and off-road pedestrian facilities to accommodate users of all ages and abilities.

The *Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way* requires that new pedestrian facilities planned in the United States must be accessible and usable by persons with

13 Fehr & Peers. *Traffic Study.* (see **Appendix 5.12-1**).

disabilities (including physical, visual, hearing, or cognitive impairments).[14] This includes provisions for curb ramps and sidewalks where appropriate. These guidelines consider pedestrian facilities to include sidewalks, shared-use paths, shared streets, and off-road paths. The proposed Project would comply with all access requirements across the pedestrian network.

The Project will not conflict with any existing or planned pedestrian and bicycle facilities. The Project is consistent with the adopted plans regarding pedestrian facilities and is not expected to decrease the performance or safety of these facilities. Therefore, the Project would result in a less than significant impact related to active transportation facilities.

The potential impact to transit service or facilities was evaluated based on whether the Project would physically disrupt an existing facility/service or interfere with the implementation of a planned facility/service. In addition, the proposed Project was evaluated to determine if it would create potential conflicts with applicable policies, plans, or programs (as defined in the regulatory setting above) supporting transit such that the conflict could reduce transit trips or increase conflicts with other modes.

The proposed Project will not disrupt any existing transit facilities. New transit trips are anticipated to be generated by the Project, but the Project would not modify transit stop locations or change transit headways. Additional transit ridership demand could increase boarding and alighting activity at existing bus stops and transit terminals located near the Project site.

Roadway Facilities

The effect of the Project on the operating conditions of intersections in the area was analyzed to determine the consistency of the Project with the standards for intersection operations in The Ontario Plan and SBTCA CMP. LOS E is identified as the minimum acceptable operation standard for roadways and intersections in the Ontario Plan Mobility Element and SBCTA CMP. The proposed Project would be implemented in two phases, Phase 1 opening in 2025 and Phase 2 opening in 2029. Due to the unique use of an air cargo facility, roadway improvements have been proposed based on the phases of the proposed Project. These are Opening Year (2025) Plus Phase 1 Project Conditions, Opening Year (2029) Plus Phase 1 and Phase 2 Project Conditions, and Year (2040) Plus Phase 1 and Phase 2 Project Conditions.

14 Architectural and Transportation Barriers Compliance Board. Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way; Shared Use Paths. February 2, 2013. (36 CFR Part 1190).

OPENING YEAR (2025) CONDITIONS INTERSECTION OPERATIONS ANALYSIS

This section analyzes Opening Year (2025) Traffic Conditions and compares the LOS results of Opening Year (2025) No Project and Plus Phase 1 Project.

The City identified nearby approved development projects within two miles of the Project site that could affect the intersections traffic from the Project could also affect. A list of approved development projects can be found in **Section 4.0: Environmental Setting**. Trip generation rates were applied for each approved project from *Trip Generation, 11th Edition* (Institute of Transportation Engineers [ITE], 2021), and the trips were assigned to the Study Area based on professional judgement and knowledge of the land uses and their typical peak hour travel patterns in the Traffic Study. The forecast trip assignments were converted to appropriate PCEs based on the land use types, as shown in **Appendix 5.12-1**. All pending and approved development projects provided by the City were assumed to be in operation by Opening Year (2025).

The following planned roadway improvements are expected to be in place by the Project Opening Year (2025):

- Avion Street widening between Vineyard Street and Jurupa Street from two to four lanes. This includes the realignment of Avion Street to connect with (instead of intersecting at) Jurupa Street.

OPENING YEAR (2025) NO PROJECT CONDITIONS

Under Opening Year (2025) No Project Conditions, the following intersections are projected to operate at LOS F under Opening Year (2025) conditions:

1. **Euclid Avenue/SR-83 at Mission Boulevard**
4. **Bon View Avenue at Mission Boulevard**

OPENING YEAR (2025) PLUS PHASE 1 PROJECT CONDITIONS

Under the Opening Year (2025) Plus Phase 1 Project Conditions, the following intersections are projected to operate at LOS F under Opening Year (2025) Plus Phase 1 Project Conditions:

1. **Euclid Avenue/SR-83 at Mission Boulevard**
4. **Bon View Avenue at Mission Boulevard**

Although these intersections are operating below the desired LOS standard under Opening Year (2025) Plus Phase 1 Project Conditions, the Project will not degrade the intersections or add

additional delay to those intersections. Generally, most intersections operate with similar delay relative to Opening Year (2025) No Project Conditions.

The Project is forecast to add trips to these intersections projected to operate at LOS F, but the addition of this Project traffic decreases the estimate of average delay at these intersections. This occurs because the average delay estimates in isolated intersection analysis are a weighted average of all movements. When trips are added to movements with excess green time that experience lower delay than the weighted average, such as the east/west through movements on Mission Boulevard, this results in the overall weighted average delay estimate being reduced. The intersection level of service for both Opening Year (2025) No Project and Plus Phase 1 Project Conditions is in **Table 5.12-9: Opening Year (2025) Intersection Level of Service**.

TABLE 5.12-9
OPENING YEAR (2025) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2025) No Project	Opening Year (2025) Plus Phase 1 Project
				LOS / Average Delay	LOS / Average Delay
1	Mission Blvd & Euclid Ave/SR-83[4]	Signalized	AM	E / 78	E / 79
			PM	**F / 88**	**F / 86**
2	Mission Blvd & Sultana Ave	Signalized	AM	B / 15	B / 15
			PM	B / 16	B / 16
3	Mission Blvd & Campus Ave	Signalized	AM	C / 21	C / 21
			PM	C / 24	C / 24
4	Mission Blvd & Bon View Ave[5]	Signalized	AM	E / 72	E / 72
			PM	**F / 320**	**F / 318**
5	Mission Blvd & Grove Ave	Signalized	AM	E / 68	E / 69
			PM	E / 69	E / 69
6	Baker Ave & Mission Blvd	Signalized	AM	A / 8	A / 8
			PM	A / 8	A / 8
7	Vineyard Ave & Avion St[4]	AWSC[1]	AM	A / 8	A / 8
			PM	A / 8	A / 9

TABLE 5.12-9
OPENING YEAR (2025) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2025) No Project	Opening Year (2025) Plus Phase 1 Project
				LOS / Average Delay	LOS / Average Delay
8	Vineyard Ave & Avion Dr	TWSC[2]	AM	A / 0	A / 0
			PM	A / 0	A / 0
9	Vineyard Ave & Mission Blvd	Signalized	AM	B / 19	C / 22
			PM	C / 24	C / 24
10	Vineyard Ave & Francis St	Signalized	AM	B / 18	B / 18
			PM	C / 25	C / 24
11	Vineyard Ave & Philadelphia St	Signalized	AM	C / 22	C / 22
			PM	D / 36	C / 35
12	Vineyard Ave & Raymond Kay Way	Signalized	AM	C / 25	C / 25
			PM	B / 18	B / 18
13	Vineyard Ave & SR-60 WB Ramps	Signalized	AM	B / 17	B / 17
			PM	C / 26	C / 25
14	Vineyard Ave & SR-60 EB Ramps	Signalized	AM	C / 33	D / 40
			PM	C / 24	C / 24
15	Archibald Ave & Jurupa St	Signalized	AM	C / 16	C / 19
			PM	C / 17	C / 22
16	Archibald Ave & Tracy Paseo	Signalized	AM	A / 9	A / 9
			PM	A / 10	A / 9
17	Archibald Ave & Mission Blvd[5]	Signalized	AM	E / 64	E / 68
			PM	E / 74	E / 80

TABLE 5.12-9
OPENING YEAR (2025) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2025) No Project	Opening Year (2025) Plus Phase 1 Project
				LOS / Average Delay	LOS / Average Delay
18	Archibald Ave & Francis St	Signalized	AM	C / 23	C / 23
			PM	C / 28	C / 27
19	Archibald Ave & Cedar St	Signalized	AM	B / 16	B / 16
			PM	C / 20	C / 20
20	Archibald Ave & Philadelphia St	Signalized	AM	C / 32	C / 32
			PM	C / 33	C / 33
21	Archibald Ave & SR-60 WB Ramps	Signalized	AM	B / 18	B / 19
			PM	C / 29	C / 29
22	Archibald Ave & SR-60 EB Ramps	Signalized	AM	C / 26	C / 27
			PM	C / 22	C / 22
23	Haven Ave & I-10 WB Ramps	Signalized	AM	C / 29	C / 29
			PM	B / 17	B / 17
24	Haven Ave & I-10 EB Ramps	Signalized	AM	C / 34	C / 34
			PM	C / 27	C / 27
25	Haven Ave & Guasti Rd	Signalized	AM	C / 24	C / 24
			PM	C / 32	C / 32
26	Haven Ave & Airport Dr	Signalized	AM	D / 43	D / 43
			PM	D / 54	D / 54
27	Hofer Ranch Rd & Jurupa St	Signalized	AM	C / 21	C / 21
			PM	C / 21	C / 21
28	Jurupa St & Turner Ave	Signalized	AM	A / 9	A / 9
			PM	B / 11	B / 11

TABLE 5.12-9
OPENING YEAR (2025) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2025) No Project	Opening Year (2025) Plus Phase 1 Project
				LOS / Average Delay	LOS / Average Delay
29	Jurupa St & Haven Ave	Signalized	AM	D / 41	D / 42
			PM	D / 48	D / 48
30	Jurupa St & Carnegie Ave	Signalized	AM	A / 8	A / 8
			PM	A / 8	A / 8
31	Jurupa St & Commerce Pkwy	Signalized	AM	C / 26	C / 27
			PM	D / 45	D / 44
32	Jurupa St & Dupont Ave	Signalized	AM	B / 14	B / 14
			PM	A / 8	A / 8
33	Jurupa St & Milliken Ave	Signalized	AM	D / 38	D / 39
			PM	D / 42	D / 42
34	Jurupa St & Rockefeller Ave	Signalized	AM	C / 22	C / 22
			PM	D / 41	D / 41
35	Jurupa St & I-15 SB Ramps	Signalized	AM	C / 33	C / 34
			PM	C / 29	C / 29
36	Jurupa St & I-15 NB Ramps	Signalized	AM	C / 23	C / 24
			PM	B / 19	B / 19

Notes:

1. AWSC = All-Way Stop Controlled.

2. TWSC = Two-Way Stop Controlled.

3. Bolded results operate below adopted LOS standards.

4. Intersection delay decreases from Opening Year (2025) No Project with the addition of project traffic in one or both peak hours.

5. The LOS results at this intersection as reported by Synchro do not reflect the additional delays caused by trains. This intersection is expected to experience an additional average of seven minutes of delay per hour, which is not reflected in the LOS results.

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**).

Since the Project is not forecast to worsen delay at any intersections that would be operating at LOS F under the Opening Year (2025) No Project Conditions, improvements are not needed at any study locations for Opening Year (2025) Plus Phase 1 Project conditions to maintain consistency with applicable performance standards. As such, the proposed Project would not conflict with any standard related to roadway facilities or services under Opening Year (2025) Conditions with the implementation of recommended roadway improvements.

OPENING YEAR (2029) CONDITIONS INTERSECTION OPERATIONS ANALYSIS

This section analyzes Opening Year (2029) Traffic Conditions and compares the LOS results between No Project and Plus Phase 1 and Phase 2 Project. All pending and approved development projects provided by the City were assumed to be in operation by Opening Year (2029).

The Avion Street widening and realignment between Vineyard and Jurupa Street which will be constructed by OIAA as a separate project, assumed to be completed by Opening Year (2025). No additional planned roadway improvements were assumed to be completed by Opening Year (2029).

OPENING YEAR (2029) NO PROJECT CONDITIONS

Under the Opening Year (2029) No Project Conditions, the following intersections are projected to operate at LOS F:

1. Euclid Ave/SR-83 at Mission Boulevard
4. Bon View Avenue at Mission Boulevard

OPENING YEAR (2029) PLUS PHASE 1 AND PHASE 2 PROJECT CONDITIONS

Under the Opening Year (2029) Plus Phase 1 and Phase 2 Project Conditions, the following intersections are projected to operate at LOS F:

1. Euclid Ave/SR-83 at Mission Boulevard
4. Bon View Avenue at Mission Boulevard
17. Archibald Avenue at Mission Boulevard

The addition of Project traffic is forecast to add delay to two intersections already operating at LOS F (Intersection 1 and Intersection 17). The proposed Project is anticipated to add zero seconds of delay in the AM peak hour to Intersection 1 operating at LOS F and one second of delay in the PM peak hour to the intersection operating at LOS F. The proposed Project is anticipated to add eight seconds of delay in the PM peak hour to the intersection operating at

LOS F at Intersection 17. Intersection 1 and Intersection 17 would see optimized signal timing in the AM and PM peak hours to improve intersection operations to better than pre-project conditions. Although intersection 4 is operating below adopted LOS standards under Opening Year (2029) Plus Phase 1 and Phase 2 Project Conditions, the proposed Project will not degrade the intersection or add additional delay to the intersection.

The intersection level of service for both Opening Year (2029) No Project and Plus Phase 1 Project Conditions is seen in **Table 5.12-10: Opening Year (2029) Intersection Level of Service**.

TABLE 5.12-10
OPENING YEAR (2029) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2029) Without Project	Opening Year (2029) Plus Phase 1 and Phase 2 Project
				LOS / Average Delay	LOS / Average Delay
1	Mission Blvd & Euclid Ave/SR-83	Signalized	AM	**F / 87**	**F / 87**
			PM	**F / 96**	**F / 97**
2	Mission Blvd & Sultana Ave	Signalized	AM	B / 15	B / 15
			PM	B / 16	B / 16
3	Mission Blvd & Campus Ave	Signalized	AM	C / 22	C / 22
			PM	C / 25	C / 25
4	Mission Blvd & Bon View Ave[5]	Signalized	AM	E / 76	E / 76
			PM	**F / 341**	**F / 337**
5	Mission Blvd & Grove Ave	Signalized	AM	E / 73	E / 75
			PM	E / 76	E / 79
6	Baker Ave & Mission Blvd	Signalized	AM	A / 8	A / 8
			PM	A / 9	A / 9
7	Vineyard Ave & Avion St	AWSC1	AM	A / 8	A / 8
			PM	A / 8	A / 9
8		TWSC2	AM	A / 0	A / 0

TABLE 5.12-10
OPENING YEAR (2029) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2029) Without Project	Opening Year (2029) Plus Phase 1 and Phase 2 Project
				LOS / Average Delay	LOS / Average Delay
	Vineyard Ave & Avion Dr		PM	A / 0	A / 0
9	Vineyard Ave & Mission Blvd	Signalized	AM	C / 20	C / 23
			PM	C / 27	C / 27
10	Vineyard Ave & Francis St	Signalized	AM	B / 19	B / 18
			PM	C / 25	C / 25
11	Vineyard Ave & Philadelphia St	Signalized	AM	C / 23	C / 22
			PM	D / 38	D / 38
12	Vineyard Ave & Raymond Kay Way	Signalized	AM	C / 25	C / 25
			PM	B / 18	B / 17
13	Vineyard Ave & SR-60 WB Ramps	Signalized	AM	B / 18	B / 18
			PM	C / 27	C / 26
14	Vineyard Ave & SR-60 EB Ramps	Signalized	AM	D / 35	D / 40
			PM	C / 25	C / 25
15	Archibald Ave & Jurupa St	Signalized	AM	B / 18	B / 19
			PM	B / 16	B / 18
16	Archibald Ave & Tracy Paseo	Signalized	AM	A / 10	A / 9
			PM	B / 10	A / 10
17	Archibald Ave & Mission Blvd[5]	Signalized	AM	E / 71	E / 78
			PM	**F / 82**	**F / 90**
18	Archibald Ave & Francis St	Signalized	AM	C / 24	C / 23
			PM	C / 28	C / 28

TABLE 5.12-10
OPENING YEAR (2029) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2029) Without Project	Opening Year (2029) Plus Phase 1 and Phase 2 Project
				LOS / Average Delay	LOS / Average Delay
19	Archibald Ave & Cedar St	Signalized	AM	B / 17	B / 17
			PM	C / 21	C / 21
20	Archibald Ave & Philadelphia St	Signalized	AM	C / 33	C / 32
			PM	C / 33	C / 33
21	Archibald Ave & SR-60 WB Ramps	Signalized	AM	C / 25	B / 18
			PM	C / 30	C / 30
22	Archibald Ave & SR-60 EB Ramps	Signalized	AM	C / 27	C / 27
			PM	C / 23	C / 24
23	Haven Ave & I-10 WB Ramps	Signalized	AM	C / 32	C / 32
			PM	B / 18	B / 17
24	Haven Ave & I-10 EB Ramps	Signalized	AM	D / 36	D / 36
			PM	C / 29	C / 29
25	Haven Ave & Guasti Rd	Signalized	AM	C / 24	C / 24
			PM	C / 34	C / 34
26	Haven Ave & Airport Dr	Signalized	AM	D / 47	D / 47
			PM	E / 58	E / 59
27	Hofer Ranch Rd & Jurupa St	Signalized	AM	C / 21	C / 21
			PM	C / 21	C / 21
28	Jurupa St & Turner Ave	Signalized	AM	A / 10	B / 10
			PM	B / 12	B / 12
29		Signalized	AM	D / 46	D / 47

TABLE 5.12-10
OPENING YEAR (2029) INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Opening Year (2029) Without Project	Opening Year (2029) Plus Phase 1 and Phase 2 Project
				LOS / Average Delay	LOS / Average Delay
	Jurupa St & Haven Ave		PM	D / 53	D / 55
30	Jurupa St & Carnegie Ave	Signalized	AM	A / 8	A / 8
			PM	A / 8	A / 8
31	Jurupa St & Commerce Pkwy	Signalized	AM	C / 27	C / 27
			PM	D / 47	D / 46
32	Jurupa St & Dupont Ave	Signalized	AM	B / 14	B / 14
			PM	A / 9	A / 9
33	Jurupa St & Milliken Ave	Signalized	AM	D / 39	D / 39
			PM	D / 44	D / 44
34	Jurupa St & Rockefeller Ave	Signalized	AM	C / 23	C / 23
			PM	D / 44	D / 45
35	Jurupa St & I-15 SB Ramps	Signalized	AM	D / 48	D / 41
			PM	C / 29	C / 29
36	Jurupa St & I-15 NB Ramps	Signalized	AM	C / 24	C / 25
			PM	B / 20	B / 20

Notes:

1. AWSC = All-Way Stop Controlled.

2. TWSC = Two-Way Stop Controlled.

3. Bolded results operate below adopted LOS standards.

4. Intersection delay decreases from Opening Year (2029) Without Project with the addition of project traffic in one or both peak hours.

5. The LOS results at this intersection as reported by Synchro do not reflect the additional delays caused by trains. This intersection is expected to experience an additional average of seven minutes of delay per hour, which is not reflected in the LOS results.

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**).

Additional delay is added to one intersection that is currently operating below adopted LOS standards under the Opening Year (2029) Plus Phase 1 and Phase 2 Project Conditions. Improvements are identified that would improve intersection operations to better than pre-project conditions to meet the applicable LOS standard.

1. Euclid Avenue/SR-83 at Mission Boulevard

The addition of Project traffic adds delay to the intersection, which is forecast to operate at LOS F in the AM and PM peak hours under Opening Year (2029) Conditions. Optimizing signal timing in the AM and PM peak hours would improve intersection operations to better than pre-project conditions.

This intersection is within both the City and Caltrans jurisdiction and the improvement will require cooperation with Caltrans, which is standard engineering practice with the City responsible to implement the improvement. With the identified improvement, intersection operations improve to better than pre-project conditions during both peak hours.

17. Archibald Avenue at Mission Boulevard

The addition of project traffic adds delay to the intersection, which is forecast to operate at LOS F in the PM peak hours under Opening Year (2029) Conditions. With the following improvements, the intersection would operate at LOS E under Opening Year (2029) No Project and Plus Phase 1 and 2 Project Conditions:

- Add a dedicated left-turn pocket for the southbound approach with protected left-turn phasing for the northbound and southbound left-turn phases.

With the identified improvement, intersection operations improve to better than pre-project conditions during both peak hours. Please note that Archibald is programmed in the SCAG RTP to be widened to six lanes in each direction which is greater than the improvements identified as needed to improve this intersection to better than pre-project conditions.

Table 5.12-11: Opening Year (2029) LOS Comparison with Improvements, below, compares the average delay/LOS for the Opening Year (2029) No Project and Opening Year (2029) Plus Phase 1 and Phase 2 Project Conditions with the identified improvements noted above. The identified measures improve the intersection operations to better than pre-project conditions. As such, the proposed Project would not conflict with any standard related to roadway facilities or services under Opening Year (2029) Conditions with the implementation of recommended roadway improvements. Therefore, impacts are considered to be less than significant.

TABLE 5.12-11
OPENING YEAR (2029) LOS COMPARISON WITH IMPROVEMENTS

	Intersection	Control	Peak Hour	Opening Year (2029) Without Project Conditions	Opening Year (2029) Plus Phase 1 and Phase 2 Project	Opening Year (2029) Plus Phase 1 and Phase 2 Project with Improvements
				LOS / Average Delay	LOS / Average Delay	LOS / Average Delay
1	Mission Blvd & Euclid Ave/ SR-83	Signalized	AM	**F / 87**	**F / 87**	E / 75
			PM	**F / 96**	**F / 97**	**F / 93**
17	Archibald Ave & Mission Blvd	Signalized	AM	E / 71	E / 78	E / 63
			PM	**F / 82**	**F / 90**	E / 60

YEAR (2040) CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Year (2040) Traffic Conditions are compared with the No Project and Plus Project LOS results. "No Project" conditions assume development at the Project site remains as is. Note that signal timings were optimized at most signalized intersections.

The SBTAM Future Year land use data set for all pending and approved development projects provided by the City was reviewed as part of the analysis.

The following planned roadway improvements are assumed to be in place by 2040 and, for this reason, are assumed to be in place, consistent with the 2020 SCAG RTP/SCS:

- RTP ID 4160002: Widen interchange for I-10 at Vineyard Avenue from four to six lanes, widen on/off ramps from two to four lanes.
- RTP ID 4A07233: Widen Mission Boulevard from Benson Avenue to Milliken Avenue from four to six lanes.
- RTP ID 4160025: Widen Bon View Avenue from Mission Boulevard to Belmont Avenue from two to four lanes.
- RTP ID 4A07138: Widen Philadelphia Street from Vineyard Avenue to Cucamonga Creek from two to four lanes, including bridge over Cucamonga Creek.
- RTP ID 4A07215: Construct bridge on Mission Boulevard over West Cucamonga Creek and widen from four to six lanes.

- RTP ID 4A01213: Widen Jurupa Street from Turner Avenue to Hofer Ranch Road from two to six lanes
- RTP ID 200804: South Archibald Avenue grade separation at Mission Boulevard. Construct grade separation at existing at-grade crossing south of Archibald Avenue and the upper Los Angeles line. Widen from two to six lanes.
  - Assumed future configuration of Archibald Avenue at Mission Boulevard will require protected phasing with the widening to six lanes with dedicated left-turn lanes.

The intersection of Archibald Avenue and Jurupa Street is also planned to be signalized and widened by Year (2040), as identified by OIAA for another development project at the Airport. This intersection is forecast to meet peak hour signal warrant under Opening Year (2025) Plus Phase 1 and Phase 2 Project Conditions in the PM peak hour. Peak hour traffic signal warrants for Opening Year (2025), Opening Year (2029), and Year (2040) conditions are provided in **Appendix 5.12-1**.

YEAR (2040) NO PROJECT CONDITIONS

Under the Year (2040) No Project Conditions, the following intersections are projected to operate at LOS F:

1. **Euclid Avenue/SR-83 at Mission Boulevard**
5. **Grove Avenue at Mission Boulevard**
26. **Airport Drive at Haven Avenue**

YEAR (2040) PLUS PHASE 1 AND PHASE 2 PROJECT CONDITIONS

Under the Year (2040) Plus Phase 1 and Phase 2 Project Conditions, the following intersections are projected to operate at LOS F:

1. **Euclid Avenue/SR-83 at Mission Boulevard**
5. **Grove Avenue at Mission Boulevard**
26. **Airport Drive at Haven Avenue**

The intersection level of service for both Opening Year (2025) No Project and Plus Phase 1 Project Conditions is shown in **Table 5.12-12: Year (2040) No Project and Year (2040) Plus Phase 1 and Phase 2 Project Intersection Level of Service**.

TABLE 5.12-12
YEAR (2040) NO PROJECT AND YEAR (2040) PLUS
PHASE 1 AND PHASE 2 PROJECT INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Year (2040) No Project LOS / Average Delay	Year (2040) Plus Phase 1 and Phase 2 Project LOS / Average Delay
1	Mission Blvd & Euclid Ave/SR-83	Signalized	AM	**F / 115**[3]	**F / 115**
			PM	**F / 88**	**F / 89**
2	Mission Blvd & Sultana Ave	Signalized	AM	B / 13	B / 13
			PM	B / 15	B / 15
3	Mission Blvd & Campus Ave	Signalized	AM	D / 38	D / 37
			PM	D / 50	D / 50
4	Mission Blvd & Bon View Ave	Signalized	AM	B / 19	B / 19
			PM	C / 29	C / 29
5	Mission Blvd & Grove Ave	Signalized	AM	**F / 103**	**F / 104**
			PM	**F / 132**	**F / 137**
6	Baker Ave & Mission Blvd	Signalized	AM	A / 10	A / 10
			PM	A / 8	A / 8
7	Vineyard Ave & Avion St	AWSC[1]	AM	B / 13	C / 15
			PM	B / 11	B / 13
8	Vineyard Ave & Avion Dr	TWSC[2]	AM	A / 0	A / 0
			PM	A / 0	A / 0
9	Vineyard Ave & Mission Blvd[4]	Signalized	AM	C / 25	C / 27
			PM	C / 28	C / 30
10	Vineyard Ave & Francis St	Signalized	AM	C / 22	C / 22
			PM	C / 25	C / 25
11		Signalized	AM	D / 38	D / 37

TABLE 5.12-12
YEAR (2040) NO PROJECT AND YEAR (2040) PLUS
PHASE 1 AND PHASE 2 PROJECT INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Year (2040) No Project LOS / Average Delay	Year (2040) Plus Phase 1 and Phase 2 Project LOS / Average Delay
	Vineyard Ave & Philadelphia St		PM	E / 66	E / 68
12	Vineyard Ave & Raymond Kay Way	Signalized	AM	C / 23	C / 23
			PM	B / 15	B / 15
13	Vineyard Ave & SR-60 WB Ramps	Signalized	AM	B / 15	B / 15
			PM	C / 26	C / 26
14	Vineyard Ave & SR-60 EB Ramps	Signalized	AM	C / 32	C / 31
			PM	C / 24	C / 24
15	Archibald Ave & Jurupa St	Signalized	AM	B / 19	B / 19
			PM	B / 17	C / 22
16	Archibald Ave & Tracy Paseo	Signalized	AM	B / 11	B / 11
			PM	B / 11	B / 11
17	Archibald Ave & Mission Blvd[4]	Signalized	AM	C / 31	C / 32
			PM	E / 60	E / 61
18	Archibald Ave & Francis St	Signalized	AM	C / 28	C / 28
			PM	C / 28	C / 28
19	Archibald Ave & Cedar St	Signalized	AM	C / 20	C / 20
			PM	C / 23	C / 23
20	Archibald Ave & Philadelphia St	Signalized	AM	C / 32	C / 32
			PM	D / 48	D / 50
21	Archibald Ave & SR-60 WB Ramps	Signalized	AM	C / 29	C / 26
			PM	C / 27	C / 27

TABLE 5.12-12
YEAR (2040) NO PROJECT AND YEAR (2040) PLUS
PHASE 1 AND PHASE 2 PROJECT INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Year (2040) No Project LOS / Average Delay	Year (2040) Plus Phase 1 and Phase 2 Project LOS / Average Delay
22	Archibald Ave & SR-60 EB Ramps	Signalized	AM	C / 27	C / 26
			PM	C / 26	C / 26
23	Haven Ave & I-10 WB Ramps	Signalized	AM	D / 51	C / 24
			PM	B / 18	B / 18
24	Haven Ave & I-10 EB Ramps	Signalized	AM	C / 29	C / 30
			PM	C / 28	C / 28
25	Haven Ave & Guasti Rd	Signalized	AM	C / 25	C / 25
			PM	C / 32	C / 32
26	Haven Ave & Airport Dr	Signalized	AM	E / 74	E / 75
			PM	**F / 90**	**F / 91**
27	Hofer Ranch Rd & Jurupa St	Signalized	AM	D / 43	D / 44
			PM	D / 42	D / 43
28	Jurupa St & Turner Ave	Signalized	AM	B / 11	B / 11
			PM	B / 16	B / 17
29	Jurupa St & Haven Ave	Signalized	AM	E / 67	E / 69
			PM	E / 63	E / 66
30	Jurupa St & Carnegie Ave	Signalized	AM	A / 8	A / 8
			PM	A / 8	A / 9
31	Jurupa St & Commerce Pkwy	Signalized	AM	D / 50	D / 50
			PM	D / 55	D / 55
32		Signalized	AM	B / 19	B / 19

TABLE 5.12-12
YEAR (2040) NO PROJECT AND YEAR (2040) PLUS
PHASE 1 AND PHASE 2 PROJECT INTERSECTION LEVEL OF SERVICE

	Intersection	Control	Peak Hour	Year (2040) No Project LOS / Average Delay	Year (2040) Plus Phase 1 and Phase 2 Project LOS / Average Delay
	Jurupa St & Dupont Ave		PM	B / 11	B / 11
33	Jurupa St & Milliken Ave	Signalized	AM	D / 46	D / 46
			PM	E / 60	E / 69
34	Jurupa St & Rockefeller Ave	Signalized	AM	C / 25	C / 25
			PM	D / 50	D / 52
35	Jurupa St & I-15 SB Ramps	Signalized	AM	D / 44	D / 45
			PM	C / 30	C / 29
36	Jurupa St & I-15 NB Ramps	Signalized	AM	C / 25	C / 26
			PM	C / 22	C / 22

Notes:
1. AWSC = All-Way Stop Controlled.
2. TWSC = Two-Way Stop Controlled.
3. Bolded results operate below adopted LOS standards.
4. Intersection delay decreases from Opening Year (2029) Without Project with the addition of project traffic in one or both peak hours.

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**).

Additional delay is added to six (6) intersections that are currently operating below the applicable LOS standards under the Year (2040) Plus Phase 1 and Phase 2 Project Conditions. Improvements are identified that would result in acceptable operating conditions at these intersections.

1. Euclid Avenue/SR-83 at Mission Boulevard

The addition of Project traffic adds delay to the intersection, which is forecast to operate at LOS F in both the AM and PM peak hours under Year (2040) conditions.

The following lane configurations would improve intersection operations to acceptable conditions under Year (2040) conditions:

- Add a second eastbound left-turn lane.
- Convert the eastbound shared through-right lane into a through lane (three through lanes in total).
- Convert the westbound shared through-right lane into a through lane (three through lanes in total).
- Add a designated eastbound right-turn lane.
- Add a designated westbound right-turn lane.

The improvements are consistent with the Ontario Plan, which classifies Mission Boulevard as six-lane facilities. This improvement is consistent with the Ontario Plan designation as an enhanced intersection. This intersection is within both the City and Caltrans jurisdiction and the improvements would require cooperation with Caltrans. With the improvements described, the improvements would require the removal of the existing median so the improvements can be completed within the existing right-of-way (ROW). With the identified lane configurations, the intersection operations improve to LOS E or better. This intersection is within both the City of Ontario and Caltrans jurisdiction and the improvements will require cooperation with Caltrans, which is standard engineering practice with the City responsible to implement the improvement when needed. The estimated project fair share contribution towards the improvement is two percent.

5. Grove Avenue at Mission Boulevard

The addition of Project traffic adds delay to the intersection, which is forecast to operate at LOS F in both the AM and PM peak hours under Year (2040) conditions.

The following lane configurations would improve intersection operations to acceptable conditions under Year (2040) conditions:

- Add an additional westbound right-turn lane.
- Add an additional southbound left turn lane (two left-turn lanes in total).
- Remove the southbound right turn to maintain three southbound through lanes by striping the southbound right turn lane as a southbound through-right turn lane.
  - Will require removal of the existing southbound right-turn overlap phase.

The improvements can be completed within the existing ROW but will require restriping of the westbound right (WBR) turn buffer marking. This improvement is consistent with the Ontario Plan designation as an enhanced intersection. With the identified lane configurations, the intersection operations improve to LOS E or better. The City would be responsible for implementation of this improvement when needed. The estimated project fair share contribution towards the improvement is four percent.

26. Airport Drive at Haven Avenue

The addition of Project traffic adds delay to the intersection, which is forecast to operate at LOS E in the AM peak hour and LOS F in the PM peak hour under Year (2040) conditions.

The following lane configurations would improve intersection operations to acceptable conditions under Year (2040) conditions:

- Convert the existing eastbound shared through-right lane to a through lane (two eastbound through lanes total).
- Add two designated eastbound right-turn turn lanes.

The improvements would require ROW acquisition for the west leg of the intersection. This intersection is classified by the Ontario Plan as an enhanced intersection. With the identified improvements, the intersection operations improve to LOS E or better. The City would be responsible for implementation of this improvement when needed. The estimated project fair share contribution towards the improvement is two percent.

Table 5.12-13: Year (2040) LOS Comparison with Improvements, below, compares the delay and LOS for the Year (2040) and Year (2040) Plus Phase 1 and Phase 2 Project Conditions with the identified improvements noted above. For all locations, the identified measures improve the intersection operations to acceptable conditions. As such, the Project would not conflict with any standard related to roadway facilities or services under Year (2040) Conditions with the implementation of recommended roadway improvements.

TABLE 5.12-13
YEAR (2040) LOS COMPARISON WITH IMPROVEMENTS

Intersection		Control	Peak Hour	Year (2040) No Project Conditions	Year (2040) Plus Phase 1 and 2 Project	Year (2040) Plus Improvements
				LOS / Average Delay	LOS / Average Delay	LOS / Average Delay
1	Mission Blvd & Euclid Ave/SR-83	Signalized	AM	**F / 115**	**F / 115**	E / 77
			PM	**F / 88**	**F / 89**	E / 68
5	Mission Blvd & Grove Ave	Signalized	AM	**F / 103**	**F / 104**	D / 55
			PM	**F / 131**	**F / 137**	E / 63
26	Haven Ave & Airport Dr	Signalized	AM	E / 74	E / 75	D / 48
			PM	**F / 90**	**F / 91**	E / 80

OFF RAMP QUEUING ANALYSIS

Storage capacities for all SR-60, I-10, and I-15 off ramps in the Study Area were evaluated using HCM 6th Edition methodologies. Storage capacities were compared against 95th percentile queue estimates using the Synchro 11 software. The results of the queuing analysis are summarized in **Table 5.12-14: Key Turning Movement 95th Percentile Queues** and the queuing information can be found in the LOS worksheets included in **Appendix 5.12-1**. Because some of the turning movements have shared left-turn or shared right-turn lanes, these shared lanes provide additional capacity to the turn pockets. The queues of all these movements at the off-ramps do not exceed the storage capacity defined by Caltrans (see **Appendix 5.12-1)**.[15] As such, the proposed Project would not conflict with any program, plan, ordinance, or policy related to roadway facilities or services.

15 Caltrans. *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*.

TABLE 5.12-14
KEY TURNING MOVEMENT 95TH PERCENTILE QUEUES

Intersection		Control	Turning Movement	Storage Length (ft)	Peak Hour	Existing (ft)	2025 No Project (ft)	2025 Plus Project (ft)	2029 No Project (ft)	2029 Plus Project (ft)	2040 No Project (ft)	2040 Plus Project (ft)
13	SR-60 WB Off Ramp at Vineyard Ave	Signal	WBL/T	>1,000	AM	150	150	150	150	150	150	150
					PM	200	300	275	300	300	525	525
			WBR	360	AM	250	275	300	325	325	325	325
					PM	50	50	50	50	50	50	50
14	SR-60 EB Off Ramp at Vineyard Ave	Signal	EBL/T	>1,100	AM	275	500	525	525	550	475	525
					PM	50	100	100	100	200	100	100
			EBR	430	AM	0	50	50	50	50	50	50
					PM	0	75	75	75	150	150	150
21	SR-60 WB Off Ramp at Archibald Ave	Signal	WBL	>1,000	AM	225	250	250	250	250	250	275
					PM	175	200	200	225	225	225	225
			WBLTR	>1,000	AM	150	175	175	175	200	200	200
					PM	125	150	150	150	150	175	175
			WBR	>1,000	AM	150	150	175	175	175	200	200
					PM	75	75	75	75	75	75	75
22	SR-60 EB Off Ramp	Signal	EBL	>1,000	AM	200	225	225	225	225	250	250
					PM	75	75	75	75	75	125	125

TABLE 5.12-14
KEY TURNING MOVEMENT 95TH PERCENTILE QUEUES

Intersection		Control	Turning Move-ment	Storage Length (ft)	Peak Hour	Existing (ft)	2025 No Project (ft)	2025 Plus Project (ft)	2029 No Project (ft)	2029 Plus Project (ft)	2040 No Project (ft)	2040 Plus Project (ft)
	at Archibald Ave		EBLTR	>1,000	AM	125	150	150	150	150	200	200
					PM	125	125	125	150	150	125	125
			EBR	>1,000	AM	75	100	100	100	100	150	150
					PM	125	125	125	150	150	125	125
23	I-10 WB Off Ramp at Haven Ave	Signal	WBL	>800	AM	275	325	325	350	350	325	425
					PM	150	250	250	250	250	200	225
			WBL/R	>800	AM	175	200	200	200	200	300	375
					PM	150	200	200	200	200	200	200
			WBR	>1,000	AM	175	200	200	225	225	325	400
					PM	175	200	200	225	225	200	200
24	I-10 EB Off Ramp at Haven Ave	Signal	EBL	>1,200	AM	775	950	950	975	1,000	725	725
					PM	300	700	700	725	725	725	725
			EBL/R	>1,200	AM	0	225	225	225	225	300	300
					PM	01	125	125	125	125	150	150
			EBR	>1,200	AM	150	250	250	250	250	325	325
					PM	75	125	125	125	125	175	175

TABLE 5.12-14
KEY TURNING MOVEMENT 95TH PERCENTILE QUEUES

	Intersection	Control	Turning Movement	Storage Length (ft)	Peak Hour	Existing (ft)	2025 No Project (ft)	2025 Plus Project (ft)	2029 No Project (ft)	2029 Plus Project (ft)	2040 No Project (ft)	2040 Plus Project (ft)
35	I-15 SB Off Ramp at Jurupa St	Signal	SBL	>1,500	AM	525	550	550	575	600	450	450
					PM	200	200	200	225	225	275	275
			SBLTR	>1,500	AM	450	575	600	625	650	700	725
					PM	75	100	100	100	100	250	250
			SBR	>1,500	AM	425	550	550	575	575	650	650
					PM	75	75	75	75	75	225	225
36	I-15 NB Off Ramp at Jurupa St	Signal	NBL	>1,200	AM	200	250	250	250	250	200	200
					PM	100	125	125	125	125	200	225
			NBLTR	>1,200	AM	150	175	175	200	200	225	225
					PM	75	100	100	100	100	150	150
			NBR	>1,200	AM	150	175	175	175	175	200	200
					PM	75	100	100	100	100	150	150

Note:

1. Queues are rounded up to the nearest 25-foot increments assuming each vehicle takes up approximately 25 feet.

2. Bold symbolizes queue lengths over available capacity.

3. Signal timing was optimized all intersections in all Year (2040) scenarios. Peak hour factor was set to 0.95 in all Year (2040) scenarios.

Source: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see Appendix 5.12-1).

Threshold TRA-2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Potentially Significant Impact.

For land use projects, CEQA Guidelines Section 15064.3 (b) state that vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. The CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (State of California, December 2018) ["OPR Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments, as these projects tend to have the greatest influence on VMT. The VMT analysis for the Project was conducted in accordance with the VMT guidelines in the City of Ontario's VMT Impact Resolution, adopted in June 2020.

As discussed above in **Section 5.12.3.2 Methodology**, for employees, guests, deliveries and empty trucks, trip generation estimates were multiplied by average trip lengths to estimate average daily VMT. Average trip lengths from SBTAM were interpolated between base and future years to estimate project Opening Years Phase 1 (2025) and Phase 2 (2029) trip lengths for the employee trips. The fixed-route truck trips were each multiplied by the route distance to estimate fixed-route truck VMT. Fuel truck trips were also multiplied by the route distance to estimate fuel truck trip VMT. Total daily Project-level VMT estimates are presented in **Table 5.12-15: Daily Project VMT Estimates**.

TABLE 5.12-15
DAILY PROJECT VMT ESTIMATES

Attribute	Phase 1 Opening Year (2025)	Phase 2 Opening Year (2029)	Year (2040)
Employees, Guests, Deliveries			
Trips[1]	2,531	2,531	2,531
Average Trip Length[2]	14.0	14.0	14.2
VMT	35,402	35,540	35,842
Trucks (Fixed Route)			
Trips	150	224	224

TABLE 5.12-15 DAILY PROJECT VMT ESTIMATES			
Attribute	**Phase 1 Opening Year (2025)**	**Phase 2 Opening Year (2029)**	**Year (2040)**
Average Trip Length[3]	61.6	61.1	61.1
VMT	9,240	13,690	13,690
Empty Trucks			
Trips	48	69	69
Average Trip Length[2]	13.5	13.5	13.5
VMT	649	933	933
Fuel Trucks[4]			
Trips	48	-	-
Average Trip Length	2.5	-	-
VMT	120	-	-
Total Project			
VMT	**45,411**	**50,163**	**50,465**

Notes:

1. *Trips based on 7.92 trips per KSF rate derived from counts collected at the FedEx Ontario Airport Hub.*
2. *Base Year (2019) and Year (2040) model scenarios used for linear interpolation for average trip lengths for Phase 1 and Phase 2 for these trip types.*
3. *Trip length estimates provided by the project sponsor based on actual truck routing and destination information.*
4. *Fuel trip length information based on information provided by the project sponsor. Only Opening Year (2025) scenario assumes fuel trucks are part of the Project.*

Sources: Fehr & Peers. Ontario International Airport South Airport Cargo Center Transportation Impact Study (Traffic Study). March 2023 (see **Appendix 5.12-1**). SBTAM, 2022.

The proposed Project's daily commute VMT estimates are presented in **Table 5.12-16: Daily Project Commute VMT Estimates**.

TABLE 5.12-16 DAILY PROJECT COMMUTE VMT ESTIMATES				
Attribute	**Warehouse**	**Office**	**Total Project**	**City Average**
Base Year (2019) Model Estimates				
Commute Trips	1,507	444	1,951	--
Average Commute Trip Length	14.9	15.5	15.0	--
Commute VMT	22,412	6,886	29,298	--
Employees	1,035	280	1,315	--

TABLE 5.12-16 DAILY PROJECT COMMUTE VMT ESTIMATES				
Attribute	Warehouse	Office	Total Project	City Average
Commute VMT/Employee	21.65	24.59	22.28	19.74
Future Year (2050) Model Estimates				
Commute Trips	1,278	339	1,617	--
Average Commute Trip Length	14.8	14.8	14.8	--
Commute VMT	18,903	5,000	23,903	--
Employees	1,035	280	1,315	--
Commute VMT/Employee	18.26	17.86	18.18	16.33

Notes: Base Year (2019) and Year (2040) model scenarios used to prepare estimates.

Sources: Fehr & Peers. *Ontario International Airport South Airport Cargo Center Transportation Impact Study* (Traffic Study). March 2023 (see **Appendix 5.12-1**). SBTAM, 2022

The Total VMT per service population of the Project site is compared to the Ontario Plan Buildout Conditions VMT per service population to determine if it exceeds the City's impact threshold for VMT under Phase 1 Opening Year (2025), Phase 2 Opening Year (2029), and Year (2040) conditions. Trip generation estimates were multiplied by average trip lengths to estimate average daily VMT. VMT forecasts for the proposed Project and Citywide average are presented in **Table 5.12-17: Project Daily VMT Estimates**. The Citywide average was estimated in accordance with the City's VMT analysis requirements utilizing the most current and available version of SBTAM. The proposed Project VMT was estimated off-model using more conservative, - information specific to the Project.

TABLE 5.12-17 PROJECT DAILY VMT ESTIMATES				
Scenario	Population	Employment	Total VMT	Total VMT/SP
Phase 1 (2025) Conditions	-	1,315	45,411	**34.53**
Phase 2 (2029) Conditions	-	1,315	50,163	**38.15**
Long Range Planning Horizon (2040) Conditions	-	1,315	50,465	**38.38**
Citywide Average (Threshold of Significance)	357,957	313,067	19,968,991	29.76

*Notes: **Bold** indicates that the total VMT/SP is above the Citywide average (threshold of significance).*

Source: SBTAM, 2022

Given the limitation of the SBTAM for estimating trips, trip length, or VMT associated with the proposed Project's unique trucking operations, a travel demand model is the best way to perform boundary method VMT forecasts consistent with the City's Adopted VMT Resolution. Utilization of boundary method assessment to understand the proposed Project's effect on VMT would be inaccurate for the proposed Project. As such, a qualitative assessment of the proposed Project's effect on VMT was performed. This is a compilation of substantial evidence that describes why the project would or would not have a significant impact on VMT, utilized for projects with unique characteristics that cannot be accurately analyzed using SBTAM or the SCAG RTP/SCS model.

The Long Range Planning Horizon (2040) Conditions includes 2,824 new Project trips and 50,465 new proposed Project VMT that would increase Citywide VMT on a daily level in the City. The truck VMT is anticipated to be slightly higher compared to more urbanized airports, given the frequency of trips between these airports and other locations. The proposed Project would cause total daily VMT within the City to be higher than the no project alternative under cumulative conditions, based on the qualitative assessment.

The proposed Project Total VMT per service population is 23 percent above the City's VMT significance threshold. The majority of the proposed Project VMT would be generated by trucks, as the proposed Project is a logistics facility. The operations and economic viability of the proposed Project relies on trucks picking up and delivering goods.

As discussed above, SCAG identifies 900 daily truck trips for Ontario Airport in 2016 and projects 1,725 daily truck trips in 2045 (Table 14 in the Aviation and Ground Access appendix to the RTP/SCS). The Project would generate 672 truck trips per day, an amount that is within, and consistent with, the 2045 truck trip estimate for Ontario Airport. When these truck trips are considered as part of the total project VMT, the impact of the Project is significant in relation to the City's VMT threshold.

VMT reduction strategies have been identified for the proposed Project. The total VMT per service population would need to be reduced by 23 percent to be at or below the threshold of significance for the City. A majority of Project VMT is generated by trucks. These truck trips for the distribution of air cargo are difficult to reduce as the proposed Project is an air cargo facility serving a large region, and the operations and economic viability of the proposed Project relies on trucks picking up and delivering cargo.

To mitigate the Project VMT impact focusing solely on passenger vehicles, the passenger car VMT would need to be reduced by 33 percent. A range of Transportation Demand Management (TDM) measures are available for the proposed Project which are consistent with measures recommended in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing*

Climate Vulnerabilities, and Advancing Health and Equity (California Air Pollution Control Officers Association (CAPCOA), 2021). **Mitigation Measures TRANS-1 through TRANS-5** would be implemented to reduce proposed Project VMT to the maximum extent feasible.

Implementation of these mitigation measures is not anticipated to reduce the VMT impact of the proposed Project to a less-than significant level. Because of duplicative dampening, which occurs when multiple TDM measures are applied that target the same users, the effectiveness of these mitigation measures is reduced when they are implemented together. CAPCOA suggests that measures, such as the ones proposed in **Mitigation Measures TRANS-1 through TRANS-5**, have a maximum effectiveness of 10% under ideal conditions in dense urban areas. As the City of Ontario is not a dense urban environment, access to transit will be limited during the start and end times of some of the three daily shifts, and duplicative dampening, the reduction in VMT that is anticipated to result from implementation of these programs is 5.10 percent as shown in **Table 5.12-18: VMT Mitigation.**[16]

TABLE 5.12-18: VMT MITIGATION

VMT Reduction Goal	22 %
T-5. Voluntary Commute Reduction Program[1]	0.00-4.00%
T-8. Provide Ridesharing Program	0.00-4.00%
T-9a. Subsidized Transit Passes	0.00-0.25%
T10. Bike Facilities	0.00-0.75%
T-11. Employer Sponsored Vanpool	0.00-5.17%
Maximum Reduction	**5.10%**

Notes:

1. *Measure T-5 is a TDM program with a high-end maximum of a four percent reduction. The more detailed measures recommended measures combine for a higher reduction potential than four percent and therefore additional reduction was not taken for this measure to prevent double counting.*

Source: California Air Pollution Control Officers Association (CAPCOA). *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. 2021.

16 As noted above, due to duplicative dampening, the effective total of implementing these strategies together would likely be less than 14%.

TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact.

The proposed Project includes the realignment of and widening of arterial roadways and intersections. The existing roadway network consists of industrial-scaled, block-defining thoroughfares that enable goods movements to and from the Project site and functions well for pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. The Project site can be accessed through Avion Street, Jurupa Street, and Vineyard Avenue. Primary access is provided along Avion Street.

Roadway improvements as part of the proposed Project are expected for Phase 2 Opening Year (2029). Improvements to Intersection 1, Euclid Avenue/SR-83 at Mission Boulevard, would include optimizing signal timing in the AM and PM peak hours. This would improve intersection operations to better than pre-Project conditions.

Year (2040) roadway improvements, as part of the proposed Project, include intersection realignments and widening. Intersection 1, Euclid Avenue/SR-83 at Mission Boulevard, would include lane configurations that would improve intersection operations to acceptable conditions. This includes adding a second eastbound left-turn lane, converting the eastbound shared through-right lane into a through lane for three eastbound through lanes in total, converting the westbound shared through-right lane into a through lane for three westbound through lanes in total, adding a designated eastbound right-turn lane, and adding a designated westbound right-turn lane. The improvements are consistent with the Ontario Plan, which classifies Mission Boulevard as six-lane facilities. The improvements are also consistent with the Ontario Plan designation as an enhanced intersection.[17] Intersection 1 is within both the City and Caltrans jurisdiction and the improvements will require cooperation with Caltrans. With the improvements described, the improvements will require the removal the existing median so the improvements can be completed within the existing ROW.

[17] Enhanced intersection as classified by the Ontario Plan allow flexibility from the standard intersection configuration to increase capacity, improve operation, and respond to local conditions. Enhancements may include additional lanes, reduced median width, increased right-of-way width, removal of on-street bike lanes, or reduction of parkway width. Detailed engineering studies are necessary to identify the most effective types of improvements.

Year (2040) roadway improvements include Intersection 5, Grove Avenue at Mission Boulevard, and would include lane configurations that would improve intersection operations to acceptable conditions. This includes adding an additional westbound right-turn lane, adding an additional southbound left turn lane for two left-turn lanes in total, and removing the southbound right turn to maintain three southbound through lanes by striping the southbound right turn lane as a southbound through-right turn lane. This would require removal of the existing southbound right-turn overlap phase. The improvements can be completed within the existing ROW. This improvement is consistent with the Ontario Plan designation as an enhanced intersection.

Year (2040) roadway improvements include Intersection 26, Airport Drive at Haven Avenue, and would include lane configurations that would improve intersection operations to acceptable conditions. This includes converting the existing eastbound shared through-right lane to a through lane for two eastbound through lanes total and adding two designated eastbound right-turn turn lanes. The improvements would require ROW acquisition for the west leg of the intersection. This intersection is classified by the Ontario Plan as an enhanced intersection.

The proposed roadway network identifies access points on the surrounding streets at appropriate locations that would not create any hazards. This includes new driveways to access the proposed Project along East Avion Street. A 40-foot-wide driveway with four lanes, two inbound and two outbound, would provide ingress and egress access from East Avion Street for vans and trucks, located on the north side of Avion Street. A 24-foot-wide driveway would provide ingress and egress from East Avion Street to the visitor parking lot, located on the northside of East Avion Street. A 24-foot-wide driveway would provide ingress and egress access to the employee parking garage, located on the south side of East Avion Street. The new driveways would comply with federal, State, and local design and safety standards.

No pedestrian or bicycle facilities are proposed for East Avion Street. All sidewalk and crosswalk improvements as a result of roadway improvements would comply with federal, State, and local design and safety standards. All roadway and driveway improvements would comply with federal, State, and local design and safety standards. All driveway access points are perpendicular to the public right-of-way and adequately spaced from existing signalized intersections. Further, the proposed air cargo facility uses are consistent with surrounding uses. Accordingly, the Proposed Project would not create or substantially increase safety hazards due to a design feature or incompatible use. The Project does not increase hazards due to a geometric design feature. Therefore, impacts due to a geometric design feature or incompatible uses would be less than significant.

TRA-4: Result in inadequate emergency access?

Less Than Significant Impact.

No hazards would be associated with construction of the proposed Project. All proposed Project-related construction traffic would be required to comply with a temporary traffic control plan that meets the applicable requirements of the California Manual on Uniform Traffic Control Devices. The proposed Project would maintain adequate emergency access during construction to ensured impacts would be less than significant.

The roadway network enable goods movements to and from the Project site would accommodate users, including pedestrians, bicyclists, drivers, transit users, and those operating emergency vehicles. As discussed previously, primary access to the Project area is proposed from East Avion Street. The proposed Project provides emergency access on East Avion Street to major arterials Archibald Avenue, Jurupa Street, and Vineyard Avenue. The location and design of these access points is adequate for emergency access. The proposed roadway network improvements would not result in inadequate emergency access to the site and would not impede existing emergency access to the existing surrounding uses. Impacts during operation would be less than significant.

5.12.4 CUMULATIVE IMPACTS

Construction-related cumulative impacts would be less than significant.

As discussed above, a hybrid approach was used to estimate Project VMT because the available travel demand models for the region (SBTAM and the SCAG Model) are not as accurate at estimating trips, trip length, or VMT associated with the trucking activity associated with an air cargo facility serving a large region. The best way to perform boundary method VMT forecasts consistent with the City's Adopted VMT Resolution would be with a travel demand model. Given the model limitations noted above, the value in the results of the boundary method assessment to understand the Project's effect on VMT would be erroneous.

Given these limitations, a qualitative assessment of the Project's effect on VMT was performed. A qualitative assessment of VMT is a compilation of substantial evidence that describes why a project would or would not have a significant impact on VMT. Qualitative assessments may be used for projects that have unique characteristics that cannot be accurately analyzed using SBTAM or the SCAG RTP/SCS model. Qualitative assessments can include economic or market analysis, socioeconomic or demographic data, or other substantial evidence to support the significance finding.

The City boundary VMT was evaluated, finding under baseline conditions, 5,501,208 daily VMT, and under future general plan buildout conditions, 8,320,682 daily VMT. As shown in **Table 5.12-16**, above, VMT under Year (2040) conditions would be above the citywide average threshold of significance.

Based on the 2,824 new trips estimated for the Project with an average travel length of approximately five miles within the City boundary, it is estimated that the boundary VMT would increase by approximately 14,120 VMT. This would equate to an increase in Base Year boundary VMT of approximately 0.25 percent in Base Year conditions and 0.17 percent in future buildout conditions. Based on these estimates, it is reasonable to conclude that the Project would increase citywide VMT on a daily level in the City.

Truck VMT was reviewed associated with the Project as proposed based on other available airports in the SCAG region and based on the known Project origins and destinations for Project trucks and known truck routes. The truck VMT is anticipated to be slightly higher as compared to more urbanized airports given the frequency of trips between Long Beach Airport, LAX, and the Airport, and other locations to the north. It is anticipated that commute VMT in Los Angeles would be lower due to higher densities and better access to transit such that the overall VMT would be higher in the City.

Based on this qualitative assessment, it was concluded that the Project would cause total daily VMT within the City to increase under cumulative conditions (see **Appendix 5.12-1**).[18] Though development of the proposed Project is expected to occur over an 8-year timeframe, the operational improvement measures would be implemented to ensure the safe and efficient operation of the roadway system. Therefore, the Project's contribution to cumulative VMT impacts would be cumulatively considerable.

5.12.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

The proposed Project would result in less than significant impacts under thresholds TRA-1, Conflict with applicable transportation programs, plans, ordinances, or policies; TRA-3, Substantially increase traffic hazards; and TRA-4, Result in inadequate emergency hazard. Without mitigation, the Project would result in significant impacts under TRA-2 related to the VMT the Project would induce in relation to the City's VMT impact thresholds.

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18 Fehr & Peers. *Traffic Study*. (see **Appendix 5.12-1**).

Impact TRA-2: **Impacts to VMT.**

The Project-level VMT/SP is forecast to be higher than the citywide average threshold of significance under Phase 1 Opening Year (2025), Phase 2 Opening Year (2029), and under Horizon (2040) Conditions. The Project is anticipated to increase citywide daily VMT within the City boundary. For these reasons noted above, the Project is expected to result in a significant and unavoidable transportation impact related to VMT. Feasible VMT reduction strategies that would be appropriate for the Project are recommended.

5.12.6 MITIGATION MEASURES

The following mitigation measures are recommended to reduce potentially significant impacts on transportation.

MM TRANS-1: **Commute** Reduction **Program**

The proposed Project shall implement Commute Trip Reduction (CTR) programs that discourage single-occupancy vehicle trips and encourage alternative modes of transportation, such as carpooling, taking transit, walking, and biking. CTR programs shall include the following elements to apply the VMT reductions reported in literature:

- Employer-provided services, infrastructure, and/or incentives for commuting to work using alternative modes (e.g., walking, biking, carpooling/vanpooling, or taking transit).
- Provide information, coordination, and marketing for employee rideshare services, provide onsite infrastructure to support carpools/vanpools, and provide incentives (e.g., free transit passes, monthly bonus for carpooling 3 or more times a week, etc.).

Employer costs may include recurring costs for carpool/vanpool subsidies, capital and maintenance costs for the alternative transportation infrastructure (e.g., showers and lockers), and labor costs for staff to manage the program.

MM TRANS-2: **Ridesharing Program**

A ridesharing program shall be implemented for employees of the site. The following elements designed to support the Project's ridesharing program:

- Provide vanpool parking with designated passenger loading/unloading area near employee entrance.
- Create a Carpool Incentive Program.
  - Provide a minimum of ten (10) carpool parking spaces provided closer to the employee entrance than standard parking spaces.
  - Provide access to a carpool database (Metro rideshare) and/or an on-site matching program for employees.
  - Provide a monthly incentive for employees that carpool a minimum of three (3) days per week (e.g., $50 gas card or a $50 green commuter bonus).

In addition, a staff person would be designated to for provide rideshare information to employees and monitoring the effectiveness of the program.

It is assumed all employees are eligible and that additional carpool spaces could be designated if warranted by demand.

MM TRANS-3: Implement Subsidized or Discounted Transit Program

Subsidized, discounted, or free Omnitrans, Metrolink or Amtrak transit passes shall be provided to employees to encourage use of transit routes/stops located less than a mile from the Project. It is assumed free transit passes are available to all employees.

Based on the given shift times of the Project, shifts that start or end at 11:00 PM shall have limited available options as most routes do not provide service that late. This shall limit approximately half the employees from the ability to rely on transit.

MM TRANS-4: Bicycle Facilities

On-site bicycle parking and end-of-trip facilities shall be provided for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers.

A bike share program (standard or electric bikes) for employees shall supplement bicycle facilities.

TRANS-5: Employer-Sponsored Vanpool Program

An employer-sponsored vanpool service shall be implemented and be fully funded by the tenant as follows:

- Provide a minimum of one (1) and up to three (3) vanpool vehicles and associated parking with designated passenger loading/unloading area near employee entrance.
- Pay for the lease of a minimum of one (1) van and up to three (3) vans for the purpose of employee vanpooling. .3
- A ten percent voluntary participation rate is assumed to be the high end of the range for this project.

5.12.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project is anticipated to increase citywide daily VMT within the City boundary. For these reasons, the Project VMT impacts are significant. Feasible VMT reduction strategies that would be appropriate for the proposed Project are recommended. However, given the maximum reduction potential associated with Mitigation Measures TRANS-1 through TRANS-5, the VMT impacts of the Project would remain significant.

5.12.8 REFERENCES

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5.13.1 INTRODUCTION

This section evaluates the potential for implementation of the proposed South Airport Cargo Center (Project) to impact tribal cultural resources. Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American Tribe. Impacts to cultural resources (e.g., historic, archaeological, etc.) are discussed in **Section 5.4: Cultural Resources**, and discussion on paleontological resources is provided in **Section 5.6: Geology and Soils**. The analysis in this section is based in part on the following technical report:

- PaleoWest. *Archeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023. (**DEIR Appendix 5.4-1**).
- Consultation with Native American Tribes (**DEIR Appendix 5.13-1**).

5.13.2 ENVIRONMENTAL SETTING

5.13.2.1 Existing Conditions

The climate of the Project site and surrounding area is characterized as Mediterranean, with hot, dry summers and cool, moist winters. Prior to its current developed state with airport uses, the biotic environment in the Project area could be characterized with various floral species, from early spring until winter. The leaves, stems, seeds, fruits, roots, and tubers from many of these plant species were an important subsistence base for the Native American inhabitants of the area.

Prehistoric Period

About 500 years before present (B.P.), ethnic patterns developed among native populations in Southern California. During this period, Lake Cahuilla (in La Quinta, approximately 80 miles southeast of the Project site) began to recede; native populations occupying its shores shifted from the lakebed into the Peninsular Ranges to the west and the Colorado River regions to the east.

During the prehistoric period, hunting efficiency was increased by enhanced use of the bow and arrow. Discoveries of an abundance of mortars and pestles have been made, indicating extensive use of hard nuts and berries. As a result of the increased use in resources, small villages began to form. This is evidenced by middens, or older dump sites of domestic waste, suggesting more

permanent habitation.[1] Items manufactured and traded during this period include ceramic vessels and ceramic smoking pipes, imported Obsidian Butte obsidian, Cottonwood Triangular points, and Desert Side-notched points, as well as European traded goods such as glass trade beads.

Ethnographic Setting

The Project site is within traditional territories of the Serrano, Cahuilla, and Gabrielino Native American Tribes. All three tribes spoke languages belonging to the Takic branch of the Shoshonean family, a part of a larger language stock, called Uto-Aztecan. The Cahuilla and Serrano tribes belonged to a nonpolitical, nonterritorial group that governed marriage patterns, as well as clans and lineages based on relationships through the paternal line. Each clan was comprised of three to ten lineages and owned a large territory in which each lineage owned a village site with specific resource areas. Clan lineages cooperated in defense, large communal subsistence activities, as well as performed rituals. Clans tended to own land in the valley, foothill, and mountain areas, which provided them with resources from different ecological settings. The Gabrielino, unlike the Cahuilla and Serrano, had hierarchically ordered social classes. Class membership, ancestry, and wealth determined individual lifestyles.

Shelters are believed to have been dome-shaped; after European contact, they tended to be rectangular in shape. Cahuilla and Serrano shelters were made of brush, palm fronds, or arrowweed, while the Gabrielino used reed. Most of the Serrano and Cahuilla domestic activities were performed outside of shelters, within the shade of expansive ramadas. Windbreaks made of vertical poles covered with rush mats provided open-air food preparation and cooking areas for Gabrielino settlements.

The Cahuilla, Gabrielino, and Serrano were largely hunting, collecting, harvesting, and proto-agricultural peoples. Acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants—including rye grass (Leymus condensatus), blue grass (Poa secunda), bent grass (Agrostis spp.), needlegrass (Stipa spp.), three-awn (Aristida divaricate), and members of the sunflower family (Asteraceae)—also were used. Fish, birds, insects, and large and small mammals were also used and consumed. To gather and prepare these food resources, the Cahuilla, Gabrielino, and Serrano had an extensive inventory of equipment, including bows and arrows, traps, nets, disguises, blinds, spears, hooks and lines, poles for shaking down pine nuts and

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1 Prehistoric period information is based on archeological research conducted at Diamond Valley Lake as part of the Eastside Reservoir Project (ESRP), approximately 36 mi southeast of the Project area. PaleoWest. *Archeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023. (**DEIR Appendix 5.4-1**).

acorns, cactus pickers, seed beaters, digging sticks, weights, and pry bars. The Cahuilla also had an extensive inventory of food processing equipment including hammers and anvils, mortars and pestles, manos and metates, winnowing shells and baskets, strainers, leaching baskets and bowls, knives made of stone, bone, wood, and carrizo cane, in addition to bone saws and drying racks made of wooden poles to dry fish.

Mountain tops, unusual rock formations, springs, streams, rock art sites, and burial and cremation sites are held sacred to the Cahuilla, Gabrielino, and Serrano. Various birds are revered as sacred, sometimes being ritually killed and mourned, and as such bird cremation sites are sacred.

5.13.2.2 Regulatory Background

Federal

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) of 1979[2] regulates the protection of archaeological resources and sites that are on federal lands and Indian lands. ARPA mandates consultation procedures before initiation of archaeological research on Indian lands or research involving Indian archaeological resources. Indian tribes are required to be notified of possible harm to or destruction of sites having religious or cultural significance to that group. Permits to excavate or remove archaeological resources from Indian lands require consent of the Indian or Indian tribe owning or having jurisdiction over the lands. The permit must include terms and conditions, as may be requested by the affected Native Americans. ARPA stipulates that any exchange or ultimate disposition of archaeological resources excavated or removed from Indian lands must be subject to the consent of the Indian or Indian tribe owning or having jurisdiction over such lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants and culturally affiliated Indian tribes.

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2 United States Code, tit. 16, sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law 96-95, as amended.

State

Assembly Bill 52

AB 52 was approved by California State Governor Jerry Brown, Jr., on September 25, 2014. The legislation amended Public Resources Code (PRC) Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. The primary intent of AB 52 was to include California Native American tribes early in the environmental review process and to establish a new category of resources related to Native Americans, known as tribal cultural resources, that require consideration under the California Environmental Quality Act (CEQA). PRC Sections 21074(a)(1) and (2) define tribal cultural resources as either (1) "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either" included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register), or included in a local register of historical resources; or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be a significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 (i.e., criteria for listing a resource in the California Register). On July 30, 2016, the California Natural Resources Agency adopted the final text for the tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, a lead agency must consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; and project alternatives or appropriate measures for preservation or mitigation that the tribe(s) may recommend to the lead agency. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, the information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

In addition, PRC Section 21082.3(d) states that if a California Native American tribe has requested consultation pursuant to PRC Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND for a project with a significant impact on an identified tribal cultural resources.

Discovery of Sacred Lands and Human Remains

Health and Safety Code (Section 7050.5)

The California Health and Safety Code Section 7050.5 identifies protocols if human remains are encountered unexpectedly. In such circumstance, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98.

Public Resources Code (Section 5097.9 to 5097.991)

Public Resources Code Sections 5097.9 to 5097.991 stipulate that whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, those persons believed to be most likely descended from the deceased Native American must be notified. The descendants may, with the permission of the owner of the land or their authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the NAHC. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

5.13.3 ENVIRONMENTAL IMPACT ANALYSIS

5.13.3.1 Thresholds of Significance

The potential for the Project to result in impacts associated with tribal and cultural resources is based on Appendix G of the CEQA Guidelines and are as follows:

TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

TCR-2: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

5.13.3.2 Methodology

Archeological Records Search

A literature review and records search were conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, on November 17, 2021. The search includes the Project site and one-mile buffer to identify prehistoric or historical cultural resources that have been previously recorded within the study area during prior cultural resource investigations. Historical maps and aerial images were evaluated to characterize the developmental history of the Project site and surrounding area. Prehistoric Period information is based on archeological research conducted at Diamond Valley Lake as part of the Eastside

Reservoir Project (ESRP), approximately 36 mi southeast of the Project area.[3] The Native American Heritage Commission (NAHC) was also consulted on August 26, 2021, for a review of the Sacred Lands File to identify known Native American cultural resources that may be present. The results of the records review and Sacred Lands File search were negative.

Archeological Field Survey

A reconnaissance survey of the entire Project site was completed by a cultural resource specialist on September 29, 2021. All areas likely to contain or exhibit sensitive cultural resources were inspected to ensure discovery and documentation of any visible, potentially significant cultural resources.

Consultation with Native American Tribes

The Lead Agency contacted 18 individuals representing 12 Native American tribal groups for local knowledge of tribal cultural resources in the project area:

- Gabrieleño Band of Mission Indians, Kizh Nation
- Gabrieleño Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino Tongva Tribe
- Agua Caliente Band of Cahuilla Indians
- Morongo Band of Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- San Manuel Band of Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Serrano Nation of Mission Indians
- Soboba Band of Luiseño Indians

Two of the 12 tribes, the Agua Caliente Band of Cahuilla Indians and San Manuel Band of Mission Indians, responded that the Project site is not within their ancestral territory.[4] [5] No other tribes have responded to date and requested consultation. Consultation letters and responses to the Native American tribal groups are in **Appendix 5.13-1** to this EIR.

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3 PaleoWest. *Archeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023. (**DEIR Appendix 5.4-1**).

4 Lucy Padilla, Archaeologist. Agua Caliente Band of Cahuilla Indians. Email message to Nicole Walker. December 3, 2021 (see **Appendix 5.13-1**).

5 Ryan Nordness, Cultural Resource Analyst. San Manuel Band of Mission Indians. Email message to Nicole Walker. December 16, 2021 (see **Appendix 5.13-1**).

5.13.3.3 Project Impacts

TCR-1: **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

Less Than Significant with Mitigation Incorporated.

Based on literature review (i.e., records check and archival research), no prehistoric resource sites or isolates—including tribal cultural resources (TCR)—as defined by PRC Section 5020.1(k) have been identified on the Project site. Additionally, observations made during the field survey did not identify any tribal cultural resources, including features, places, cultural landscapes, or objects that could be of cultural value to a California Native American tribe. Additionally, no consultation from the 18 individuals representing 12 Native American tribal groups was requested and no tribes identified any TCRs on site. A review of the NAHC's Sacred Lands File was negative (see **Appendix 5.4-1**). Therefore, no tribal cultural resources were identified on the Project site. Nevertheless, archival research indicates the Project site in the 1940s contained plowed fields and was adjacent to Cucamonga Channel, which was minimally altered at that time, which flowed into native habitat areas farther east. Accordingly, it is possible that objects and features associated with the prehistoric occupation of local tribes in the Project area are buried in the native soils, underlying the artificial fill at the Project site.

Because the Project's ground disturbing activities could extend to a depth of 20 feet below ground surface, there is the potential to encounter native soils and impact any resources that may be present. Impacts related to unidentified tribal cultural resources would be significant. **Mitigation Measure CUL-1** would require an archaeological monitor to observe all ground disturbing activities associated with the Project. If objects are encountered, work in the immediate area will halt and the resources will be evaluated. **Mitigation Measure TCR-1** further requires that if the object appears to have cultural value to a California Native American tribe, then the archaeological monitor will contact local Native American tribes to provide Tribal input with regards to the significance and treatment. **Mitigation Measure TCR-2** and **TCR-3** require coordination and procedures with the appropriate Native American Tribe(s) should Native American human remains be discovered or recognized on the Project site. Implementation of **Mitigation Measures CUL-1 and TCR-1** through **TCR-3** would reduce potentially significant impacts to tribal cultural resources eligible for listing in the CRHR to less than significant.

TCR-2: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant with Mitigation Incorporated.

According to NAHC's Sacred Lands Inventory search, the Project site has not been cataloged as a Native American sacred or cultural place of special religious or social significance, and the NAHC does not have knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) at and within the immediate vicinity of the Project site. Separate from the SLF consultation with the NAHC, 18 individuals representing 12 Native American tribal groups in southern California were also contacted to request local knowledge of tribal cultural resources. Two of the 12 tribes—Agua Caliente Band of Cahuilla Indians and San Manuel Band of Mission Indians—responded that the Project site is not within their ancestral territory.[6] [7] No other tribes have responded to date, so no consultation was required or completed.

However, as discussed above, archival research indicates the Project site in the 1940s had plowed fields and was adjacent to a minimally altered course of the Cucamonga Channel that merged into native areas. Because project grading and excavation could extend 20 feet below ground surface, the Project has the potential to encounter native soils, impact objects, and features associated with the prehistoric occupation of local tribes, and impacts are potentially significant, unless mitigated. The proposed Project would require **Mitigation Measure CUL-1**, which requires an archaeological monitor observe all ground disturbing activities, as well as **Mitigation Measure TCR-1,** which requires the archaeological monitor to consult local Native American tribes to determine the tribal cultural significance of the object and its treatment, if

6 Lucy Padilla, Archaeologist. Agua Caliente Band of Cahuilla Indians. Email message to Nicole Walker. December 3, 2021 (see **Appendix 5.13-1**).

7 Ryan Nordness, Cultural Resource Analyst. San Manuel Band of Mission Indians. Email message to Nicole Walker. December 16, 2021 (see **Appendix 5.13-1**).

required. **Mitigation Measure TCR-2** and **TCR-3** require coordination and procedures with the appropriate Native American Tribe(s) should Native American human remains be discovered or recognized on the Project site. Implementation of **Mitigation Measures CUL-1 and TCR-1** through **TCR-3** would reduce potentially significant impacts to tribal cultural resources determined by criteria provided in PRC 5024.1(c) to less than significant.

5.13.4 CUMULATIVE IMPACTS

The potential for the Project to result in a cumulatively considerable contribution to a significant cumulative impact to tribal cultural resources was analyzed in conjunction with other developments located in the influence areas of the tribes that occupied the region. As discussed, construction of the Project may disturb native soils containing prehistoric objects and features that may be determined to be a tribal cultural resource, and the proposed Project would require **Mitigation Measures CUL-1 and TCR-1** through **TCR-3** to reduce project-level impacts to less than significant. Related projects in the region would also be required to mitigate potential inadvertent discoveries of subsurface resources, including tribal cultural resources, and would comply with PRC 21083.2, which allows lead agencies to make provisions for accidentally discovering archaeological resources, including tribal cultural resources during construction. Furthermore, the proposed Project and related projects would also be required to comply with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5, which provides guidance on the discovery of human remains and its treatment or disposition with appropriate dignity. Therefore, compliance with existing policies and regulations, and implementation of project mitigation, would result in the Project's contribution to impacts on tribal cultural resources being less than cumulatively considerable.

5.13.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, the following impacts would be **potentially significant:**

- **Impact TCR-1:** Earth-disturbing activities during construction may inadvertently uncover tribal cultural resources.
- **Impact TCR-2:** Inadvertent discovery of subsurface artifacts may be of Native American heritage and be potentially significant.

5.13.6 MITIGATION MEASURES

MM CUL-1: Archaeological Monitoring of All Ground-Disturbing Activities During Construction of Phase 1 and Phase 2.

a) Prior to the issuance of grading permits by the City of Ontario for Phase 1 and Phase 2 of the proposed Project, the OIAA and/or its construction contractor must retain a qualified professional archeologist meeting the Secretary of Interior's PQS for Archaeology (as defined in the Code of Federal Regulations, 36 CFR Part 61). The qualified archaeologist will be retained to conduct monitoring of rough grading activities conducted during both Project phases. The qualified archaeologist shall have the authority to redirect earthmoving activities in the event that suspected cultural resources are unearthed during construction activities.

b) The qualified archaeologist shall prepare a Cultural Resources Monitoring and Treatment Plan that will describe processes for archaeological monitoring and for handling incidental discovery of objects, features, and cultural resources for all ground-disturbing construction and preconstruction activities.

c) Prior to the issuance of a grading permit, all construction workers involved with grading and trenching operations shall receive training by the qualified archaeologist to recognize unique archaeological resources, including tribal cultural resources, should such resources be unearthed during ground-disturbing construction activities. The training of all construction workers involved with grading and trenching operations shall explain the importance and legal basis for the protection of significant archaeological resources. It will include a brief review of the cultural sensitivity of the construction area and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel involved with grading and trenching operations that begin work following the initial training session must take the training prior to beginning work; the qualified archaeologist shall be available to provide the training on an as needed basis.

d) In the event subsurface artifacts or features are encountered during ground-disturbing activities, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations within a 100-foot radius of the discovery and seek identification and evaluation of the suspected resource by a qualified archaeologist for listing in the NRHP and CRHR. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note.

e) After the qualified archaeologist makes his/her initial assessment of the nature of the find, the archaeologist shall pursue either protection in place or recovery, salvage, and treatment of the deposits. Recovery, salvage, and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with OIAA or with a recognized scientific or educational repository, including the SCCIC. Preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources, consistent with CEQA Guidelines Section 15126.4(b)(3)(C).

MM TCR-1: **Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.**

a) The project applicant/lead agency shall retain a Native American Monitor from or approved by the appropriate Native American Tribe(s). The monitor shall be retained prior to the commencement of any ground-disturbing activity for the subject project at all project locations (i.e., both onsite and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

b) A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

c) The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the proposed Project applicant/lead agency upon written request to the appropriate Native American Tribe(s).

d) On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the appropriate Native American Tribe(s) from a designated point of contact for the proposed Project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the appropriate Native American Tribe(s) to the proposed Project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the Project site possesses the potential to impact Native American Tribe TCRs.

e) Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American monitor and/or Native American archaeologist. The appropriate Native American Tribe(s) will recover and retain all discovered TCRs in the form and/or manner the Native American Tribe(s) deem appropriate, in the Tribe's sole discretion, and for any purpose the Native American Tribe(s) deem appropriate, including for educational, cultural and/or historic purposes.

MM TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects.

a) Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

b) If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

c) Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

d) Construction activities may resume in other parts of the Project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the appropriate Native American Tribe(s) determine in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the appropriate Native American Tribe(s) and/or archaeologist deems necessary) (CEQA Guidelines Section 15064.5(f)).

e) Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods, if feasible. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

f) Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

MM TCR-3: Procedures for Burials and Funerary Remains.

a) The appropriate Native American Tribe(s) burial policy shall be implemented.

b) If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

c) The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

d) In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and

a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

e) In the event preservation in place is not possible despite good faith efforts by the proposed Project applicant/developer and/or landowner, before ground-disturbing activities may resume on the Project site, the landowner shall arrange a designated site location within the footprint of the proposed Project for the respectful reburial of the human remains and/or ceremonial objects.

f) Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

g) The proposed Project's qualified archaeologist will work closely with the appropriate Native American Tribe(s) to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the appropriate Native American Tribe(s), documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery-related forms of documentation shall be approved in advance by the appropriate Native American Tribe(s). If any data recovery is performed, once complete, a final report shall be submitted to the appropriate Native American Tribe(s) and the NAHC.

5.13.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of **Mitigation Measures CUL-1**, **TCR-1**, **TCR-2**, and **TCR-3** and compliance with regulatory requirements, Project impacts to tribal cultural resources would be less than significant.

5.13.8 REFERENCES

Lucy Padilla, Archaeologist. Agua Caliente Band of Cahuilla Indians. Email message to Nicole Walker. December 3, 2021.

PaleoWest. *Archeological Resource Assessment for the Ontario Airport South Cargo Center Project, City Of Ontario, San Bernardino County, California*. February 16, 2023.

Ryan Nordness, Cultural Resource Analyst. San Manuel Band of Mission Indians. Email message to Nicole Walker. December 16, 2021.

United States Code, tit. 16, sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law 96-95, as amended.

5.14 UTILITIES AND SERVICE SYSTEMS

5.14.1 INTRODUCTION

This section of the Draft Environmental Impact Report (DEIR) discusses existing utility and service systems, including water, wastewater, stormwater, solid waste, electricity, natural gas services, and telecommunications facilities. This section also discusses the Ontario International Airport South Airport Cargo Center Project (proposed Project) effects on these systems. The analysis in this section is based in part on the following technical report(s):

- CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission*. January 31, 2022 (Updated December 2022) (see **Appendix 5.9-1**).
- Meridian Consultants LLC. *Water Supply Assessment (WSA) Ontario South Airport Cargo Center Project*. July 2022, (see **Appendix 5.9-3**).
- Cotton, Shires, and Associates, Inc. *Geotechnical Investigation*. June 2022, (see **Appendix 5.6-1**).

5.14.2 ENVIRONMENTAL SETTING

5.14.2.1 Existing Conditions

Water

The Ontario Municipal Utilities Company (OMUC) provides water service to residents, businesses, and other uses within the City of Ontario (City), including Airport property. Groundwater extraction comprises the majority of the water supplied by OMUC. OMUC currently serves approximately 36,514 customer connections with potable and non-potable water.[1]

The proposed Project site is located north of Mission Boulevard within Ontario International Airport and is currently developed with airport uses. The Project site is located within the City's 1212 Pressure Zone for potable water and the existing water distribution system would be used to serve the Project. **Figure 5.14-1: Existing Potable Water System for the City** illustrates the existing potable water system within the City.

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1 Stetson Engineers. *City of Ontario 2020 Urban Water Management Plan* (UWMP). June 2021. https://wuedata.water.ca.gov/public/uwmp_attachments/7937833487/FINAL%20City%20of%20Ontario%202020%20UWMP.pdf. Accessed December 2021.

According to the City of Ontario 2020 Urban Water Management Plan (2020 OMUC UWMP), during a normal year (FY 2019-20), the City met about 46 percent of its total demands with supplies from the Chino Basin.[2] The Chino Basin is one of the largest groundwater basins in southern California and encompasses about 240 square miles of the Upper Santa Ana River watershed. It lies within portions of San Bernardino, Riverside, and Los Angeles Counties. The total storage capacity of the Chino Basin is approximately 18,300,000 acre-feet (AF).[3] Total extraction from the Chino Basin between 2019-2020 consisted of 149,190 AF.[4]

As of 2020, approximately 46 percent of OMUC's water supply came from groundwater, 34 percent from imported water, and 20 percent of supply was recycled water.[5] During a single dry year (FY 2017-18), the City met about 60 percent of its total demand with supplies from the Chino Basin. During a five-consecutive-year drought multiple-dry-year period (FY 2011-12 to FY 2015-16), the City met between 42 and 63 percent of its total demand with supplies from the Chino Basin. The Chino Basin is actively managed under the Chino Basin adjudication. Each year the Chino Basin Watermaster reviews water supply conditions including local rainfall, groundwater levels, local stormwater runoff available for replenishment, imported water availability, and the amount of water stored in the groundwater basin for future demands, to ensure the Chino Basin is responsibly managed.

According to the 2020 OMUC UWMP, other sources of water include treated groundwater produced by the Chino Basin Desalter Authority (CDA), imported groundwater from the Metropolitan Water District (MWD) of Southern California, groundwater and/or surface water purchased from San Antonio Water Company (SAWCo), and recycled water purchased from Inland Empire Utilities Agency (IEUA).[6] OMUC obtains treated imported water from the Water Facilities Authority (WFA), which is also a wholesale water supplier to the cities of Chino, Chino Hills, Ontario, Upland, and the Monte Vista Water District. WFA purchases untreated imported water from MWD through IEUA. WFA and IEUA are both wholesale water suppliers and IEUA is a member agency of MWD.

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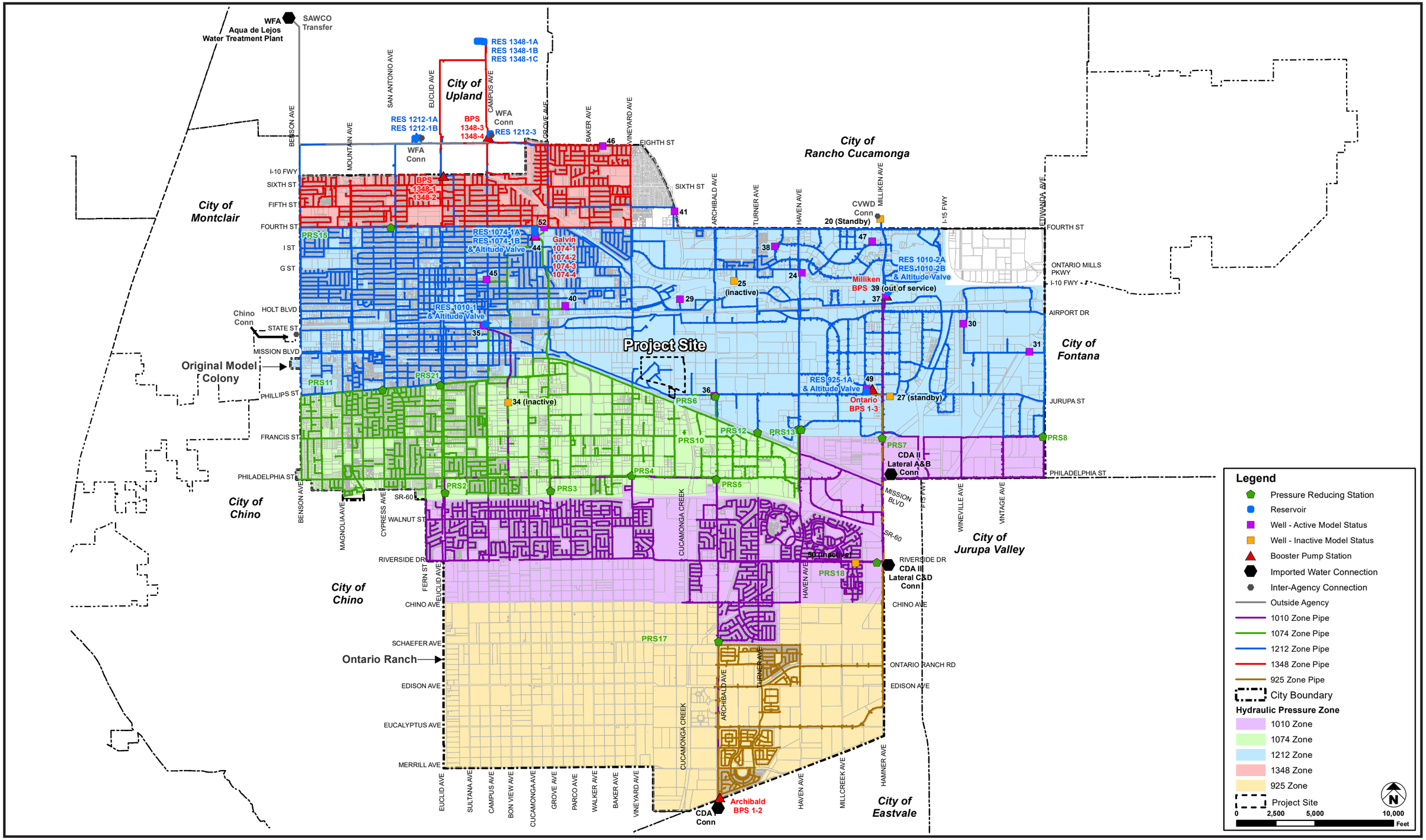
2 Stetson Engineers. *City of Ontario 2020 UWMP*. June 2021. https://wuedata.water.ca.gov/public/uwmp_attachments/7937833487/FINAL%20City%20of%20Ontario%202020%20UWMP.pdf. Accessed December 2021.

3 Stetson Engineers. *City of Ontario 2020 UWMP*.

4 Chino Basin Watermaster. *Fiscal Year 2019-20 43rd Annual Report*. Appendix H. http://www.cbwm.org/docs/annualrep/43rd%20Annual%20Report.pdf. Accessed December 2021.

5 Stetson Engineers. *City of Ontario 2020 UWMP*.

6 Stetson Engineers. *City of Ontario 2020 UWMP*.



SOURCE: OMUC 2020 Water Master Plan Update – 2020

FIGURE **5.14-1**

Meridian Consultants

Existing Potable Water System for the City

332-001-21

MWD is a wholesaler and contractor for State Water Project water imported from northern California. State Water Project water is available as stipulated by Department of Water Resources (DWR) in response to the hydrology and environmental regulations that can change available supply.[7] Therefore, imported water supplies to southern California can be highly variable. Nonetheless, MWD has projected in its 2020 UWMP 100 percent water supply reliability over the next 20 years (2025-2045) during average, single-dry, and multiple-dry years.[8]

Wastewater

Wastewater Collection and Conveyance

OMUC is responsible for the operation and maintenance of the City's wastewater system. The City's wastewater collection system consists of approximately 425 miles of gravity lines, 8,693 associated manholes and cleanouts, three City-owned lift stations, one privately owned/City-maintained lift station, over 7,000 feet of associated force mains, and five siphons.[9] The system is divided into eight sewer sheds with the Airport and Project site being located within Sewer Shed 3.[10] Sewage is collected by the City's system and generally flows from north to south towards the IEUA Upland Interceptor on Ontario Boulevard. The IEUA Upland Interceptor on Ontario Boulevard and the Upland Interceptor Relief on Mission Boulevard combine into one 33-inch trunk sewer at the intersection of Mission Boulevard and Carlos Avenue, which carries flow south to Regional Water Recycling Plant No. 1 (RP-1) for treatment. City sewer mains are primarily constructed of vitrified clay pipe ranging from 4 to 42 inches in diameter.[11] Approximately 75 percent of the pipes are 8 inches in diameter. The City's sewers are classified into two groups: primary sewers, greater than 15 inches in diameter, and secondary sewers, 15 inches or smaller in diameter.

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7 Department of Water Resources (DWR), *State Water Project Delivery Capability Report*, published every 2 years, as well as "Notice to State Water Project Contractors" issued as often as needed.

8 The Metropolitan Water District of Southern California. *2020 Urban Water Management Plan*. June 2021. (Appendix D to the WSA [**Appendix 5.9-3**]).

9 Ontario Municipal Utilities Company (OMUC). *Sewer System Management Plan* (2021). https://www.ontarioca.gov/sites/default/files/Ontario-Files/Municipal-Utilities-Company/Sewer%20System%20Management%20Plan%202021%20rev.5.12.21.pdf. Accessed January 2022.

10 City of Ontario. *Old Model Colony and New Model Colony Sewer Master Plan Update* (2012). Figure 5-1: Existing Sewer System. https://www.ontarioca.gov/sites/default/files/existing_sewer_system.pdf. Accessed July 2022.

11 City of Ontario. *The Ontario Plan EIR*. "Utilities and Service Systems." Page 5.17-21. https://www.ontarioplan.org/wp-content/uploads/sites/4/2016/05/31740.pdf. Accessed August 2022.

Wastewater collection system improvements for the City is reflected in **Figure 5.14-2: City of Ontario Ultimate Sewer System**. The City's sewer master plan improvements have been designed to serve the uses allowed by the City's General Plan. There are three regional connections to the IEUA trunk sewers just south of the Project site.[12]

Wastewater Treatment

Regional wastewater services are provided to the City and its neighboring agencies by IEUA. IEUA operates RP-1 which serves the City.[13] RP-1 currently treats an average influent of wastewater flow of approximately 21 million gallons per day (mgd).[14] However, the hydraulic design can treat domestic sewage of up to 44 mgd and 60 mgd of biosolids. RP-1 is located in the City, near the intersection of State Highway 60 and Archibald Avenue.

The water pumped into the recycled water distribution system meets the requirement of California Title 22 bacteriological water quality regulations. As a source of supply to the recycled water system, RP-1 supplies three pressure zones, namely the 930, 1050, and 1158 Pressure Zones, through three effluent pump stations. As stated above, this facility is currently operating below its maximum capacity.

The existing regional recycled water system consists of approximately 35 miles of pipelines serving five different recycled water pressure zones.[15] The names of these pressure zones refer to the design hydraulic grade line (HGL) of the zone in feet above mean sea level. The existing system serves recycled water to customers in the cities of Chino, Chino Hills, Ontario, and Rancho Cucamonga from the Carbon Canyon Waste Recycling Facility (CCWRF), RP-1, and RP-4. The City's existing recycled water system serves 2,637 acre-feet per year (AFY) of recycled water for irrigation and process uses (not including agricultural users) and consists of 69,821 linear feet (LF) of pipe and 62 major segments.[16]

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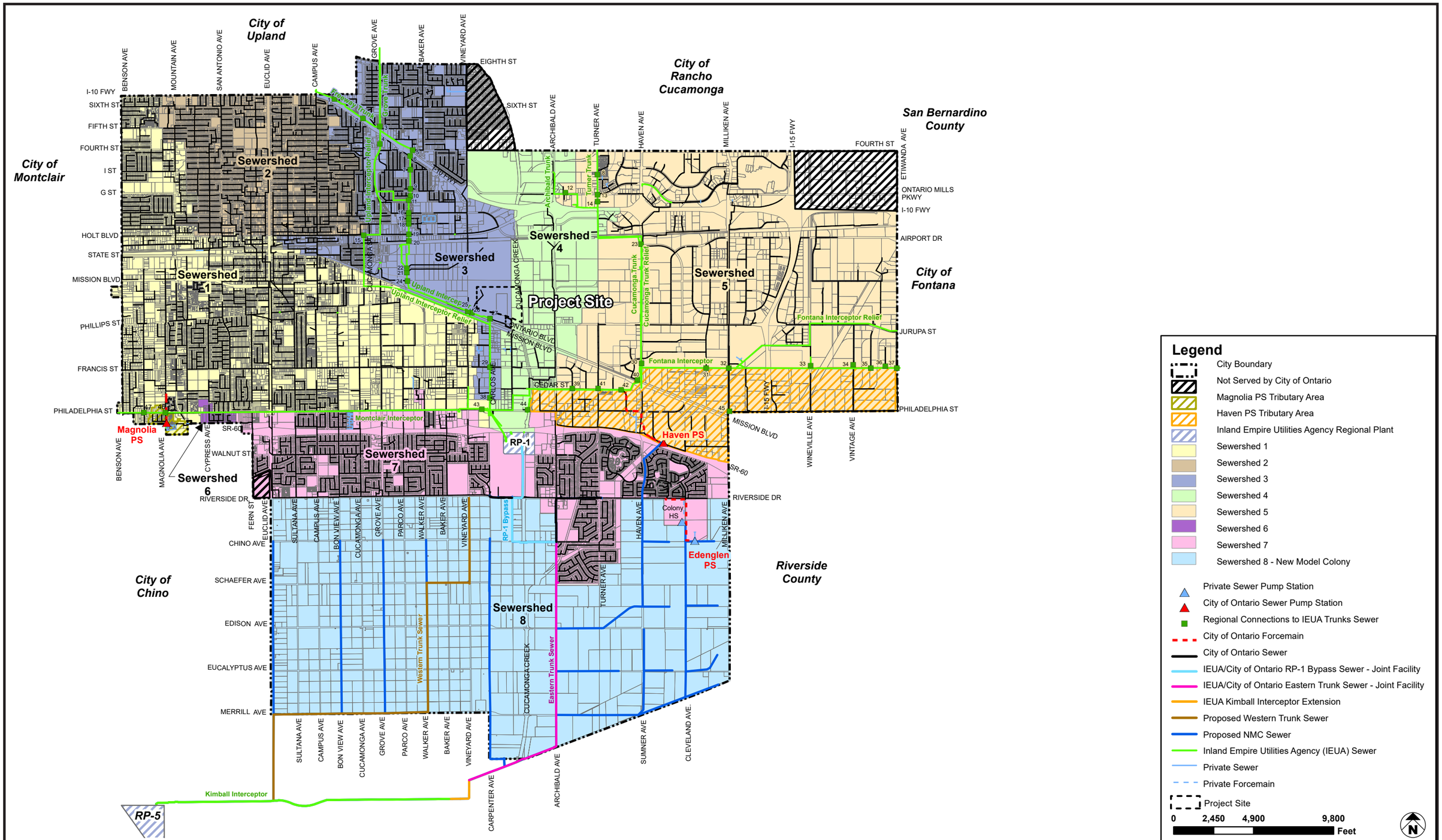
12 City of Ontario. *Old Model Colony and New Model Colony Sew Master Plan Update.*

13 Stetson Engineers. *City of Ontario 2020 UWMP*.

14 Inland Empire Utilities Agency (IEUA). *2020 UWMP*. https://18x37n2ovtbb3434n48jhbs1-wpengine.netdna-ssl.com/wp-content/uploads/2021/05/Final-IEUA-2020-UWMP.pdf. Accessed July 2021.

15 Stantec Consulting Services Inc. *Recycled Water Master Plan Update*. Section 4. June 2020 (Appendix C to the WSA [**Appendix 5.9-3**]).

16 Stantec Consulting Services Inc. *Recycled Water Master Plan Update*. (Appendix C to the WSA [**Appendix 5.9-3**]).



SOURCE: City of Ontario Sewer Master Plan – Feb 2018

FIGURE **5.14-2**

Existing Ultimate Sewer System for the City

Meridian Consultants

332-001-21

The proposed Project site is located within the City's 1158 Pressure Zone for recycled water,[17] as shown in **Figure 5.14-3: Existing Recycled Water System for the City**. City Ordinance No. 2689 requires all new development to connect to and use recycled water for all approved uses, including but not limited to landscape irrigation.[18]

Stormwater Conveyance

The City owns and maintains approximately 137 miles of existing storm drain lines, culverts, and channels of various sizes and materials. Based on the City's drainage patterns, there are fourteen drainage areas identified in the Master Drainage Plan with Drainage Area IV containing the Project site. San Bernardino County Flood Control District (SBCFCD) Storm Drain No. 2 and multiple City-owned storm drains service the area. Within the City, there are storm drain systems which are non-continuous, or existing systems which accept and convey flows in a conduit (pipe, box, or open channel) and then discharge downstream into the street or a ditch, which are picked up eventually by another conduit.[19] The Ontario International Airport is served by existing storm drains with open channels and storm drains to the north and south, as well as regional open channels (Cucamonga and West Cucamonga channels) to the east and west.

Solid Waste

Waste Management, Inc., provides solid waste collection and disposal generated in the Project area through a contract with the City. Solid waste services in the City are taken to the West Valley Transfer Station and Material Recovery Facility (MRF).[20] Refuse, green waste, and recycling are transferred from the West Valley Transfer Station to the El Sobrante Landfill in the City of Corona. Refuse accepted at this location includes construction/demolition and mixed municipal (residential and commercial/industrial) waste. The landfill is permitted to receive a maximum 10,000 tons per day and has a maximum permitted capacity of 184,930,000 tons.[21] The

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17 Stantec Consulting Services Inc. *Recycled Water Master Plan Update*. (Appendix C to the WSA [**Appendix 5.9-3**]).

18 City Municipal Code Sections 6-8.7 to 6-8.279.

19 City of Ontario. *Master Plan of Drainage*. March 2012. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Engineering/Design%20Guidelines/Final%20Report%20%28March%202012%29%20with%20Notes%20%20Rev.%2010-29-19.pdf. Accessed January 2022.

20 City of Ontario. *The Ontario Plan EIR*.

21 Waste Management Inc. *Final Supplemental EIR*. 2009. https://www.wm.com/location/california/inland-empire/_documents/Final_SEIR.pdf. Accessed January 2022.

estimated closure date of the landfill is January 2030 when the maximum capacity would be reached.

Energy

Electricity

Southern California Edison (SCE) provides electrical service to the City. The SCE service area covers 50,000 square miles and includes 15 counties, serving approximately 15 million people in central, coastal, and Southern California.[22] The SCE planning area used approximately 5,225.55 GWh of electricity in 2020.[23]

The nearest substation to the Project site is located approximately 2 miles to the east.[24] This substation provides a maximum of approximately 66 kilovolts (kV).

Natural Gas

Natural gas would be supplied by Southern California Gas (SoCalGas). The nearest gas line to the Project site is a 4-inch line located adjacent to East Avion Street approximately 0.21 miles west of the Project site. The SoCalGas service area reaches 21.8 million consumers through 5.9 million meters in more than 500 communities, covering an area of approximately 24,000 square miles throughout Central and Southern California.[25]

Telecommunications

The City receives landline telephone service from Verizon, Sprint, Vonage, AT&T, and other phone companies. Verizon maintains extensive aerial and underground distribution systems near the Project site. Internet services can be obtained through phone lines or by broadband providers.

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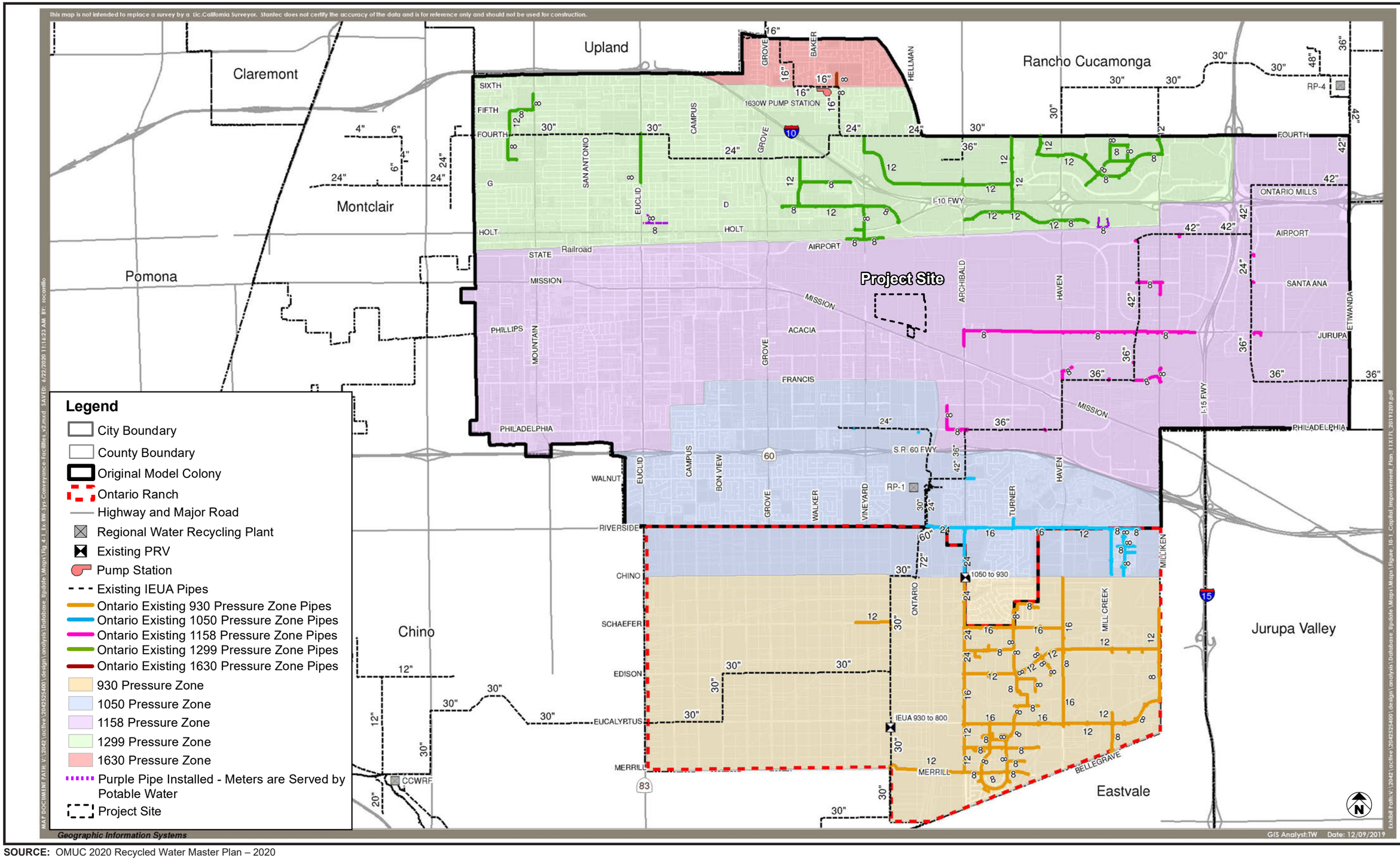
22 Southern California Edison (SCE). "Southern California Edison's Service Area." https://www.sce.com/about-us/who-we-are/leadership/our-service-territory. Accessed January 2022.

23 California Energy Commission (CEC). "Consumption Database: Electricity Consumption by Planning Area." http://ecdms.energy.ca.gov/elecbyplan.aspx. Accessed January 2022.

24 CEC. "California Electric Substations." https://cecgis-caenergy.opendata.arcgis.com/datasets/7f37f2535d3144e898a53b9385737ee0_0/explore?location=34.044871%2C-117.572643%2C15.93. Accessed January 2022.

25 City of Ontario. *The Ontario Plan EIR.*



SOURCE: OMUC 2020 Recycled Water Master Plan – 2020

FIGURE **5.14-3**

Meridian Consultants

Existing Recycled Water System for the City

332-001-21

5.14.2.2 Regulatory Background

Federal

Clean Water Act and National Pollution Elimination Discharge System

The Clean Water Act establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters (US Code, Title 33, Sections 1251 et seq.). Under the act, the US Environment Protection Agency is authorized to set wastewater standards and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that discharge directly into Waters of the United States. The federal Clean Water Act requires wastewater treatment of all effluent before it is discharged into surface waters.

NPDES permits for such discharges in the Project region are issued by the Santa Ana Regional Water Quality Control Board.

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

State Water Resources Control Board: Statewide General Waste Discharge Requirements

The General Waste Discharge Requirements specify that all federal and State agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California need to develop a Sewer Master Plan.[26] The Sewer Master Plan evaluates existing sewer collection systems and provides a framework for undertaking the construction of new and replacement facilities in order to maintain proper levels of service. The Sewer Master Plan also includes inflow and infiltration studies to analyze flow monitoring and water use data, a capacity assurance plan to analyze the

26 State Water Resources Control Board. "Waste Discharge Requirements Program." https://www.waterboards.ca.gov/water_issues/programs/waste_discharge_requirements/. Accessed August 2022.

existing system with existing land use and unit flow factors, a condition assessment and sewer system rehabilitation plan, and a financial plan with recommended capital improvements and financial models.

General Pretreatment Regulations for Existing and New Sources of Pollution

The General Pretreatment Regulations establish responsibilities of federal, State, and local government, industry, and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works (POTW), or which may contaminate sewage sludge. Pretreatment standards are pollutant discharge limits which apply to industrial users.[27]

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.), which was passed in California in 1969 and amended in 2013, the State Water Resources Control Board (SWRCB) has authority over State water rights and waterquality policy. This Act divided the state into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. The City is overseen by the Santa Ana RWQCB.

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983 (Water Code Sections 10610 et seq.) requires water suppliers to:

- Plan for water supply and assess reliability of each source of water over a 20-year period in 5-year increments.
- Identify and quantify adequate water supplies, including recycled water, for existing and future demands in normal, single-dry, and multiple-dry years.
- Implement conservation and the efficient use of urban water supplies.

Significant new requirements for quantified demand reductions have been added, which include a statewide 20 percent reduction in urban per capita water use by 2020.[28] It requires that urban

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27 Code of Federal Regulations. Title 40. Ch. 1. Part 403.

28 California Department of Water Resources. *SB X7-7*. https://water.ca.gov/Programs/Water-Use-And-Efficiency/SB-X7-7. Accessed August 2022.

water retail suppliers determine baseline water use and set reduction targets according to specified requirements and requires agricultural water suppliers to prepare plans and implement efficient water management practices.

California Water Code Section 10910

The California Water Code Section 10910 requires any city or county that determines a project, as defined below, be subject to the California Environmental Quality Act (CEQA).[29] A "Project" means any of the following:

1) A proposed residential development of more than 500 dwelling units.
2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4) A proposed hotel or motel, or both, having more than 500 rooms.
5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
6) A mixed-use project that includes one or more of the projects specified in this subdivision.
7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Section 15155 of the State CEQA Guidelines requires that the lead agency conducting environmental review of a proposed project request the governing body of each public water system that will serve the project to determine whether the projected water demand was included in the most recently adopted urban water management plan. Furthermore, the lead agency shall prepare and approve a water supply assessment for any proposed project that meets the definition of a water demand project, as listed above.

California Green Building Standards Code

Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11) requires that at least 65 percent of the nonhazardous construction and demolition waste from

[29] California Water Code. Section 10910 (a) & Section 10912 (a).

nonresidential construction operations be recycled and/or salvaged for reuse. CALGreen is updated on a three-year cycle; the 2019 CALGreen took effect on January 1, 2020.

Assembly Bill 341

Assembly Bill (AB) 341 (Chapter 476) increased the statewide solid waste diversion goal to 75 percent by 2020. The law, passed in 2011, mandates recycling for businesses producing four or more cubic yards of solid waste per week. Under the law, City businesses must separate recyclables from trash and then either subscribe to City recycling services, self-haul their recyclables, or contract with a permitted private recycler.

The City is required to provide a number of programs to meet the requirements of AB 341. They include a public outreach program to inform City businesses about the mandate, monitoring the progress of each business, notifying them if they are not in compliance, and reporting to the State.[30]

Assembly Bill 939

AB 939 (California Integrated Solid Waste Management Act of 1989; Public Resources Code §§ 40050 et seq.) established an integrated waste-management system that focuses on source reduction, recycling, composting, and land disposal of waste. AB 939 requires every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates; actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code Section 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

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30 City of Ontario. "Mandatory Commercial Recycling." https://www.ontarioca.gov/sites/default/files/Ontario-Files/Municipal-Utilities-Company/ab341_and_ab1826_0.pdf. Accessed August 2022.

AB 1826

In October of 2014, Governor Jerry Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the State implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

California Energy Commission

The California Energy Commission (CEC) was created in 1974 as the State's principal energy planning organization to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- Forecast statewide electricity needs.
- License power plants to meet those needs.
- Promote energy conservation and efficiency measures.
- Develop renewable energy resources and alternative energy technologies.
- Promote research, development, and demonstration.
- Plan for and direct the state's response to energy emergencies.

California Energy Benchmarking and Disclosure

On October 8, 2015, AB 802 was signed into law. AB 802 would revise and recast the above provisions. AB 802 directs the CEC to establish a statewide energy benchmarking and disclosure program that enhances the CEC's existing authority to collect data from utilities and other entities for the purposes of energy forecasting, planning, and program design. Among the specific provisions, AB 802 requires utilities to maintain records of the energy usage data of all buildings to which they provide service for at least the most recent 12 complete months. AB 802 requires each utility, upon the request and the written authorization or secure electronic authorization of the owner, owner's agent, or operator of a covered building, as defined, to deliver or provide aggregated energy usage data for a covered building to the owner, owner's agent, operator, or to the owner's account in the Energy Star Portfolio Manager, subject to specified requirements. AB 802 also authorizes the commission to specify additional information to be delivered by utilities for certain purposes.

California Building Code: Building Energy Efficiency Standards

Title24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards (2019 Standards) went into effect on January 1, 2020.

The 2019 Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements. Under the2019 Standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 Building Energy Efficiency Standards (2016 Standards), and single-family homes will be 7 percent more energy efficient. When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 Standards.

2012 Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce reducing energy demand as well as GHG emissions.

Local

City of Ontario Urban Water Management Plan

The City is required to prepare an Urban Water Management Plan (UWMP) pursuant to Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act. The act requires all urban water suppliers to prepare, adopt, and file a UWMP with the California Department of Water Resources every five years. The Ontario 2020 UWMP outlines current water demands, sources, and supply reliability to the City by forecasting water use based on climate, demographics, and land use changes in the City.[31] The plan also provides demand management measures to increase water use efficiency for various land use types and details a water supply contingency plan in case of shortage emergencies.

31 Stetson Engineers. *City of Ontario 2020 UWMP*.

City of Ontario Landscape Development Guidelines

The City's Landscape Development Guidelines assures that the State's current Model Water Efficient Landscape Ordinance is being implemented in the City.[32] The guidelines include water conservation measures that need to be incorporated into landscape designs, the different elements that need to be incorporated into preliminary landscape plans, and the required landscape construction documents. Construction documents need to include a water efficient landscape worksheet, grading design, erosion control measures, and a maintenance schedule.

City of Ontario Refuse and Recycling Planning Manual

The Integrated Waste Department's Refuse and Recycling Planning Manual assists developers in meeting the City's requirements for refuse and recycling storage and access for service, as well as addressing the City's recycling goals.[33]

The Ontario Plan

The Ontario Plan serves as the City's General Plan, which is mandated by state law. The Ontario Plan states long-term goals, principles, and policies for achieving Ontario's Vision and is used for guidance for the Project as applicable, determined by the OIAA. The Environmental Resources Element includes goals and policies listed below, that are relevant to the proposed Project:[34]

Goal ER-1: **A reliable and cost-effective system that permits the City to manage its diverse water resources and needs**.

- **ER-1.3:** *Conservation and Sustainable Water Supply.* We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability.
- **ER-1.4:** Supply-Demand Balance. We require that available water supply and demands be balanced.
- **ER-1.5:** *Water Resource Management.* Environmental justice areas are prioritized as we coordinate with local agencies to protect water

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32 City of Ontario. "Landscape Planning." https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/landscape/Landscape%20Standards/Landscape%20Development%20Guidelines.pdf. Accessed August 2022.

33 City of Ontario. *Refuse and Recycling Planning Manual*. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Municipal-Utilities-Company/planning_manual-2016_update_0.pdf. Accessed August 2022.

34 City of Ontario. *The Ontario Plan*. "Environmental Resources Element." https://www.ontarioca.gov/about-ontario-ontario-plan-policy-plan/environmental-resources. Accessed October 2022.

quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.

- ER-1.6: *Urban Run-off Quantity.* We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.
- ER-1.7: *Urban Run-off Quality.* We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.
- ER-1.8: *Wastewater Management*. We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.

Goal ER-2: A cost effective, integrated waste management system that meets or exceeds state and federal recycling and waste diversion mandates.

- ER-2.1: *Waste Diversion.* We shall meet or exceed AB 939 requirements.
- ER-2.3: *Purchase Products Made from Recycled Materials.* We purchase recycled-content products where it is cost effective.

Goal ER-3: Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.

- ER-3.1: *Conservation Strategy.* We require conservation as the first strategy to be employed to meet applicable energy-saving standards.
- ER-3.3: *Building and Site Design.* We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.
- ER-3.5: *Fuel-Efficient and Alternative Energy Vehicles and Equipment*. We require purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.
- ER-3.6: *Generation- Renewable Sources.* We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.

Ontario International Airport Authority

The Ontario International Airport Authority (OIAA) has a responsibility to keep track of how tenants use Airport utilities to ensure current infrastructure meets the current demand. As such, it is OIAA's policy to submeter energy usage to ensure that the consumption of energy and natural resources is reduced to a practical minimum. OIAA is committed to responsible energy management and will submeter its facilities and equipment, wherever it is cost-effective to do so. The following policies have been developed by OIAA to measure and track energy consumption in order to meet the long-term goals, medium range objectives, and specific targets shown below.[35]

1.1 Goals (Long-Term):

- Reduce operating costs through energy efficiency.
- Optimize energy performance.
- Minimize environmental impact due to energy consumption.

1.2 Objectives (Medium-Range):

- Set and publish energy performance and targets.
- Monitor and evaluate performance levels.
- Implement an energy monitoring and targeting system.
- Review and assess energy supply costs and contracts.
- Establish a budget for supporting energy efficiency improvements.
- Develop comprehensive building data system.

1.3 Targets (Specifics):

- All new construction, additions, and alterations for terminals and buildings shall install measurement devices to monitor:
  - Building level energy usage for gas, domestic water (DW), chilled-water (CHW), heating hot water (HHW), and electrical services;
  - Concessions level energy usage for gas, DW, CHW, HHW, and electric.

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35 Ontario International Airport Authority (OIAA). *Design and Construction Handbook*. Attachment 9.02-A: Submetering Policy. https://www.flyontario.com/sites/default/files/oiaa_design_construction_handbook_final_january_2019_0.pdf. Accessed August 2022.

  - Disaggregated electrical energy (see Table 1.0 in Design and Construction Handbook)

- Discuss and define project submetering goals, opportunities, and constraints with OIAA at the conceptual phase of the project and include, at minimum, in owner project requirements.

City of Ontario Municipal Code

Volume I, Title 6, Chapter 7

Chapter 7, *Public Sewer System,* of the Ontario Municipal Code sets forth uniform requirements for direct and indirect contributors into the City sewerage system and IEUA treatment system and enables the City to comply with all applicable State and Federal laws, including the Clean Water Act and the General Pretreatment Regulations, and subsequent amendments to each.

Volume I, Title 6, Chapter 8A and 8B

The purpose of Chapter 8A, *Water Conservation Plan*, is to minimize the potential for a water shortage through the practice of water conservation, and to minimize the effect of a shortage of water supplies on the water customers of the City. The chapter adopts provisions that will significantly reduce the inefficient consumption of water, thereby extending the available water resources necessary for domestic, sanitation, and fire protection of the community to the greatest extent possible. Chapter 8B lists rules and regulations for explaining the procedures and methods of the Municipal Utilities Company for updating or implementing new utilities infrastructure.

Volume I, Title 6, Chapter 8C

The purpose of Chapter 8C, *Recycled Water Use*, is to establish procedures, specifications, and limitations for the safe and orderly development and operation of recycled water facilities and systems within the City's service area and adopt rules and regulations controlling such use.

Volume I, Title 6, Chapter 6

The purpose of Chapter 6, *Stormwater Drainage System*, is to ensure the health, safety, and general welfare of the residents of the City by prescribing regulations to effectively prohibit non-stormwater discharges into the City's stormwater drainage system and to specifically achieve the following objectives:

- Control discharges from spills, dumping or disposal of materials other than stormwater.

- Reduce the discharge of pollutants in all stormwater discharges to the maximum extent practicable.
- Protect and enhance the water quality of local, State and Federal watercourses, water bodies, ground water, and wetlands in a manner pursuant to and consistent with the Clean Water Act.

Volume I, Title 6, Chapter 3

Chapter 3, *Integrated Waste Management*, sets forth uniform requirements and regulations for the direct and indirect users of the refuse and recycling collection services of the City. It also allows for the City to comply with all applicable State and Federal laws, including, but not limited to, the Integrated Waste Management Act of 1989, California Code Title 14 Division 7, and any subsequent amendments to each.

5.14.3 ENVIRONMENTAL IMPACT ANALYSIS

5.14.3.1 Thresholds of Significance

The potential for the Project to result in impacts to existing utility and service systems, including water, wastewater, stormwater, solid waste, electricity, natural gas services, and telecommunications facilities is based on Appendix G of the CEQA Guidelines and are as follows:

Would the Project:

U-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

U-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

U-3: 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.

U-4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

U-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.14.3.2 Methodology

The analyses provided below are based on the proposed Project's forecasted utility usage as compared to the existing capacity of utility facilities that serve the Project site. The data used for analysis was obtained through websites and adopted planning documents of the service and utility providers. A WSA prepared for the proposed Project was also used to understand the water demand for the proposed Project (see **Appendix 5.9-3** of this EIR). To provide a conservative estimate, it was assumed that no recycled water would be used for the proposed Project, only potable water. It should also be noted that the Air Cargo Sort Building shall be all-electric (no natural gas usage).

5.14.3.3 Project Impacts

U-1: **The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

Water

Less Than Significant Impact.

Construction

Short-term demand for water may occur during excavation, grading, and construction activities on site. Construction activities would require water primarily for dust mitigation purposes, mixing concrete, cleaning equipment, and other related construction activities. These activities would occur incrementally throughout construction of the proposed Project and are temporary in nature. Water from the existing potable water lines in the vicinity of the Project site would be used. All requirements stated in the OIAA Design and Construction Handbook would be adhered to during the process of connecting existing utilities to the Project site. This would include SWPPP Best Management Practices (BMPs) requirements such as buffer strips, hydroseeding, mulching, geotextile swales, storm drain inlet protection, and silt fencing. Overall, short-term construction activities would require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies.

Operation

During operation, the Air Cargo Sort Building would be connected to the existing 16-inch water main along East Avion Street. Water would be supplied to the Air Cargo Sort Building, parking garage, and aircraft apron, for consumption as well as fire suppression.

The primary source of water for the Project would be existing water supplies used by the City. The 2020 UWMP projected water demands are based on future land uses as specified in the City's latest 2020 Water Master Plan. The Ontario Plan designates the Project site as Airport use.[36] Projected water demand for the Airport, including the Project site, is included in the UWMP 2020 projections under the "Industrial" land use designation. Using the City's current unit water demand factors, the estimated total water demand for the 97-acre Project site that was accounted for in the 2020 UWMP is 119 AFY, as shown in **Table 5.14-1: Water Demand of the Project Site**.

Table 5.14-1 shows the water demand for the Project site during operation is 124,080 gallons per day (GPD) (or 119 AFY), which is 130 AFY less than projected in the UWMP for the Project site. As such, the Project would account for approximately 119 AFY or approximately 0.20 percent of the total supplies for the year 2030 when both phases of the Project are expected to be completed (see **Table 5.14-2).** Therefore, the projected water demand for the Project site in the 2020 UWMP is sufficient to account for the water needed for the Project.

Additionally, the proposed Air Cargo Sort Building would be built to Leadership in Energy and Environmental Design (LEED) Program standards. Inclusion of LEED standards would integrate features such as main meter energy monitoring, reduced watering for low-water vegetation/landscaping, low use water appliances, and grey water harvesting into the Project design. The projected water demand for the Project site in the 2020 UWMP is sufficient to account for the water needed for the Project and the proposed Project would connect to existing utilities, as well as reduce the amount of water demand through LEED certified Project design features. As such, the proposed Project would not require the construction of new or expanded water conveyance, treatment, or collection facilities. The impacts on water facilities during construction and operation would be less than significant, and no mitigation is required.

36 City of Ontario. *The Ontario Plan*.

TABLE 5.14-1
WATER DEMAND OF THE PROJECT SITE

Land Use	Units	Domestic Water Unit Demand[a]	Total Domestic Water Usage (GPD)	Total Domestic Water Usage (AFY)
Industrial	1,128 FTE[b] Employees[c]	110 (GPD/Job) GPD	124,080	119

Notes:

[a] *Water unit factor is for "Industrial" land use designation in the 2020 Water Master Plan Demand; Table 4.8 in Appendix E of UWMP (*2020 UWMP*); Industrial (w/o Recycled Water) = 110 gpd/job or 2,290 gpd/acre*

[b] *Full-time Equivalent (FTE)*

[c] *Meridian Consultants LLC, Water* Supply Assessment *(WSA) Ontario South Airport Cargo Center Project, July 2022 (see* ***Appendix 5.9-3****).*

Sources: City of Ontario. *2020 UWMP*. June 2021. Appendix E – 2020 Water Master Plan.

Wastewater

Less Than Significant Impact.

Wastewater services would be provided by the IEUA.

Near the entry of the proposed truckyard, the sewer line would split into two separate service lines, one to the warehouse area of the cargo building and the other to the office wing. An oil-water separator would be installed in the truckyard, adjacent to the warehouse to separate oil and water mixtures into their separate components generated from the cargo building, as well as surface runoff in the truckyard and visitor parking lot, before entering the municipal sewer system. A sewer manhole would be installed at the fork of the two service lines for monitoring purposes.

As mentioned previously, wastewater generated by the Project site would be processed at RP-1, which is operated by the IEUA. RP-1 currently treats an average influent of wastewater flow of approximately 21 mgd and has a capacity to treat up to 44 mgd of wastewater and 60 mgd of biosolids.[37] Moreover, this facility is currently operating below its maximum capacity. Conservatively assuming that all water consumed by the Project would be discharged as wastewater, the total amount of wastewater generated by the Project is estimated at 124,080 gpd (0.12 mgd). This amount represents approximately 0.28 percent of the total daily wastewater capacity for RP-1. As this plant is currently operating below its capacity, it is expected that the

37 IEUA. *2020 UWMP*.

implementation of the Project would not cause a significant increase in wastewater flow. Based on the available sewer line and wastewater treatment capacity, the proposed Project would not require the construction of new or expanded water conveyance, treatment, or collection facilities, and impacts would be less than significant.

Stormwater Conveyance

Less Than Significant Impact.

The proposed Project would adhere to stormwater and low impact development (LID) standards as set forth by San Bernardino County, California. San Bernardino County falls under the jurisdiction of the California Stormwater Quality Association (CASQA). According to the Geotechnical Investigation for the Project, the soil profile of the Project Site includes medium to very dense silty sand and sand with varying amounts of silt and gravel below approximately 30 feet.[38] Field tests resulted in high percolation rates of the sandy alluvial soils and deep groundwater, which concluded that infiltration onsite should be considered feasible. Moreover, post-development of the Project site would increase peak flow from 105.1 cubic feet per second (cfs) for the main portion of the Project site and 10.5 cfs for the proposed parking garage area to 248.8 cfs for the main portion of the Project site and 11.3 cfs for the proposed parking garage site.[39] Based on methods used at nearby developments, underground stormwater storage has been identified as a typical practice for stormwater management (water quantity and water quality).

Post-development conditions will contain three separate drainage areas: Drainage Area A (DA-A), Drainage Area B (DA-B), and Drainage Area C (DA-C). The proposed aircraft apron would be graded to direct all stormwater runoff within the apron limits to 31 catch basins (18 basins in Phase 1 and 13 basins in Phase 2) installed along the east and west perimeters of the apron, along the nose of the aircraft stalls on the north side of the cargo building, and along the tail of the aircraft stalls to the west of the cargo building. Apron pavement within 50 feet of the cargo building would be sloped away from the building to direct stormwater to the catch basins. Each catch basin will have a two-foot sump to allow sediment in the stormwater to settle before being conveyed downstream through a series of underground pipes. Before stormwater enters the underground infiltration system, it will pass through a central oil-water separator and two main sediment chambers to further treat stormwater for water quality.

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38 Cotton, Shires, and Associates, Inc. *Geotechnical Investigation*. June 2022 (see **Appendix 5.6-1**).

39 CHA. *South Airport Cargo Center at Ontario International Airport – Preliminary Hydrology Study for CEQA Submission*. January 31, 2022 (Updated December 2022) (see **Appendix 5.9-1**).

All stormwater captured on the Project site must be detained and a certain volume must be stored before being discharged into the Cucamonga Channel. Based on an evaluation of Hydrological Conditions of Concern (HCOC) criteria (see Preliminary Hydrology Study, **Appendix 5.9-1)**, 467,800 cubic feet (the main portion of the Project site) and 17,600 cubic feet (the portion of the Project site for the proposed parking garage) of stormwater would need to be stored in the underground infiltration systems before being discharged into a new East Avion Street drainage system that will be completed prior to the opening of the proposed Project.[40] Additionally, post-development drainage areas were analyzed for a maximum allowable peak flow rate to be discharged into the Cucamonga Channel. The maximum allowable peak flow rate for the main portion of the Project site was estimated at 111 cfs compared to the pre-development flow rate of 105.1 cfs. The portion of the Project site for the proposed parking garage would have a maximum allowable peak flow rate of 11 cfs, compared to the pre-development flow rate of 10.5 cfs. Furthermore, the maximum post-development peak flow rate would be 1.05 times the pre-development peak flow rate.

The underground infiltration systems proposed for the Project would consist of a series of connected pipes underground to store water, and a stone and filter media surrounding the pipes to allow for infiltration. Sediment/settling chambers and an oil-water separator would be installed immediately upstream of the underground infiltration system to pre-treat runoff from DA-A and DA-B.[41] To store the required runoff volume of 467,800 cubic feet for the main portion of Project site, the footprint of the underground infiltration system would be approximately 80 feet wide by 265 feet, located on the southeast of the site. For the portion of the Project site for the proposed parking garage, the17,600 cubic feet of runoff would be stored by a 20 feet wide by 65 feet long underground infiltration system, located under the parking garage entrance drive. When the systems reach capacity, it would release stormwater at a controlled rate into the Cucamonga Channel in accordance with San Bernardino County Water Quality Management Plan criteria. Based on preliminary design of the underground infiltration systems, two 24-inch outlet pipes on the downstream side of the systems would discharge the stormwater at a controlled rate not greater than 24 cfs for the main portion of the Project site and 9 cfs for the portion of the Project site for the proposed parking garage (for the 100-year storm) into a new East Avion Street drainage system that will be completed prior to the opening of the proposed Project and into Cucamonga Channel.

An outlet pipe on the downstream side of the storage area would discharge the detained stormwater at a controlled rate into the Cucamonga Channel. A series of storm catch basins and

40 CHA. *Preliminary Hydrology Study*.

41 CHA. *Preliminary Hydrology Study*.

pipes will convey stormwater generally from a west to east direction and ultimately discharge into a new East Avion Street drainage system. Outlet pipes on the downstream side of the storage area will discharge the detained stormwater at a controlled rate into the Cucamonga Channel. As the Project would implement LID features and stormwater effluent from the Project site during construction and operation, which would be stored and discharged at a controlled rate, the proposed Project would not require the construction of new or expanded water conveyance, treatment, or collection facilities and impacts would be less than significant.

Energy

Electricity

Less Than Significant Impact.

Electrical distribution would be supplied by SCE. Concrete encased duct banks would be installed underground to provide power and data/communication to the aircraft apron and all buildings. Medium-voltage duct banks would be separated from low-voltage and communications duct banks. Low voltage duct banks would be combined with communications duct banks in single runs and split into separate manhole and handholes where pull and access points would be available.

The proposed Project would also include a 1.5-Megawatt Solar Photovoltaic Panel system on the rooftops of the Air Cargo Sort Building and the parking garage. The proposed Project would include the use and operation of electric-powered equipment, including forklifts, loaders, tugs, ground power units, and ramp support (vans/carts) that would be stored and charged in designated areas in the cargo building and aircraft apron. Moreover, the Project proposes the four aircraft parking stations for feeder aircraft powered by electric motors, which would be provided in the southeast corner of the Project site. Electric charging stations would also be provided in the employee and visitor parking lots, and truckyard.

Phase 1 of the proposed Project would require approximately 8.5 MW of power. Phase 2 of the proposed Project which would require approximately 2.85 MW of power at buildout. An additional 10 percent of other miscellaneous loads is needed for the proposed Project. At full development, the proposed Project would require approximately 12.4 MW of power. A new substation is being planned by SCE, as a part of the proposed Project, to meet the need for additional power for the proposed Project. This 135-foot by 160-foot proposed substation will be located on previously disturbed areas within the Project site to the west of the proposed parking structure, and within the development footprint and profile of other Project components.

The new substation would connect to existing infrastructure along Mission Boulevard directly south of the Project site.

Therefore, the proposed Project impacts would be less than significant.

Natural Gas

Less Than Significant Impact.

The proposed Project has been designed to eliminate the consumption of natural gas (see PDF GHG-1 [all-electric Air Cargo Sort Building] in **Section 5.7: Greenhouse Gas Emissions**). This design feature of the proposed Project is not required by the California Building Standards Code and represents a "beyond code" commitment that has been informed by State policy regarding the importance of building electrification to California's overall decarbonization efforts and achievement of statewide GHG emission reductions. As the Air Cargo Sort Building would not utilize natural gas, the proposed Project would not require the construction of new or expanded natural gas facilities and impacts would be less than significant.

Telecommunications

Less Than Significant Impact.

Fiber, data, and telecommunication service would be extended to the Project site to support the Project. The Project would connect to existing, underground telecommunication lines. As an urbanized area, adequate telecommunications services exist within the immediate proposed Project vicinity and would be provided to the Project site. Construction and operation of the proposed Project would not necessitate the construction of off-site telecommunication facilities that would have the potential to cause significant environmental impacts. The proposed Project would not require the construction of new or expanded telecommunications facilities and impacts would be less than significant.

U-2: The Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

Less Than Significant Impact.

Water for the Project site is provided by the OMUC. According to the 2020 UWMP, actual water usage for the City in 2020 was estimated at 32,109 AF.[42] The City's projected water demands in

42 Stetson Engineers. *City of Ontario 2020 UWMP*.

2030 is estimated at 45,048 AF.[43] The City's water demand projections incorporate water savings, or "passive savings," which are the result of implementation of new plumbing codes along with consumer awareness of the need to conserve water. The City's Municipal Code Title 6, Chapter 8A, Water Conservation Plan, includes methods for current and ongoing reduction in water use and water waste.

As shown in **Table 5.14-2: Water Supply Sources Forecast,** projected water supply for the City would total 52,550 AF and 58,513 AF for the years 2025 and 2030, respectively. Phase I of the proposed Project would be completed in 2025 and Phase II is projected to be complete in 2029.

TABLE 5.14-2
WATER SUPPLY FORECAST (AFY)

Water Supply	2025	2030	2035	2040	2045
Groundwater	20,249	22,915	24,943	31,476	31,476
Purchased or Imported Water[a]	20,133	22,133	24,133	26,133	26,133
Recycled Water	12,168	13,465	14,762	16,059	16,059
Total	**52,550**	**58,513**	**63,838**	**73,668**	**73,668**

[a] *Combined supply from Water Facilities Authority, Chino Basin Desalter Authority, and San Antonio Water Company.*

Source: City of Ontario. *2020 UWMP* (2021). https://wuedata.water.ca.gov/public/uwmp_attachments/7937833487/FINAL%20City%20of%20Ontario%202020%20UWMP.pdf. Accessed January 2022.

Construction Impacts

As discussed previously, water usage during the construction phases of the proposed Project, mainly to control dust, mix concrete, clean equipment, and other related construction activities would occur incrementally throughout construction of the proposed Project and are temporary in nature. The amount of water used during construction would vary depending on the conditions

43 Construction of Phase 1 of the proposed Project is projected to start in third quarter 2023 and be completed in third quarter 2025. After completion of Phase 1, relocation of existing uses and facilities in the Phase 2 area would occur, followed by the demolition of existing structures and site improvements in the Phase 2 area including site preparation and grading. Construction of the remaining improvements, including the expansion of the Air Cargo Sort Building and aircraft apron improvements, would begin in the third quarter of 2027, after site preparation activities, and be completed by 2029. Assumptions for Project water demands compared with the City's water supply in the year 2030.

of the soil, weather, size of the area being worked, and site-specific operations, but is not expected to be substantial. According to the 2020 UWMP, the total water supply for the City in 2025 is estimated to be 52,550 AF with an additional right to pump groundwater from the Chino Basin.[44] The City's demand has been consistently below the City's supply due to resource management, including the drought management plan. As such, water supplies in the City would be able to accommodate the temporary and incremental use during the construction of the proposed Project.

Operational Impacts

Pursuant to requirements of the California Water Code, a WSA was prepared by the OMUC (see **Appendix 5.9-3**). California Water Code requirements provide that a WSA must "include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water system's existing and planned future uses, including agricultural and manufacturing uses."[45] The City depends on a combination of imported and local supplies to meet its water demands and has taken numerous steps to ensure that it has adequate supplies. Water supplies available to the City are projected to meet full-service demands. OMUC has assumed in its 2020 UWMP that customer water demand and available water supply are equal during "normal" precipitation years.[46] As previously illustrated in **Table 5.14-2,** the estimated total supply for the year of Project buildout (including Phase I and Phase II) would be 58,513 AF. **Table 5.14-1** shows the water demand for the Project was estimated to be 119 AFY.[47] As such, the Project would account for approximately 0.20 percent of the total supplies for the year 2030 when both phases of the Project are expected to be completed.

According to the 2020 UWMP, the total forecasted demand and supply for water during a single dry season would be 57,058 AF for 2025, 63,534 AF for 2030, 68,847 AF for 2035, 79,989 AF for 2040, and 79,989 AF for 2045.[48] The projections show that potable local supplies would remain constant for the 20-year planning horizon for a single dry year or even increase due to the projected increased use of recycled water. The proposed Project total water demand would

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44 Stetson Engineers. *City of Ontario 2020 UWMP*.

45 California Water Code. Section 10910 (c) (3).

46 Stetson Engineers. *City of Ontario 2020 UWMP*.

47 Meridian Consultants. *Water Supply Assessment* (WSA). July 2022 (see **Appendix 5.9-3**).

48 Stetson Engineers. *City of Ontario 2020 UWMP*.

constitute approximately 0.19 percent of the estimated demand during a single dry season in the year 2030 when the Project is expected to be fully built.

Based on the information provided in the 2020 UWMP and Project-specific water demand, the OMUC's projected water supplies will be sufficient to satisfy the demands of the Project, in addition to existing and planned future uses under normal, dry, and multiple dry water years. Impacts would be less than significant.

U-3: **The Project would 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 Impact.

Construction Impacts

As discussed previously, Project construction activities would result in a temporary increase in wastewater generation from construction workers on-site. Portable on-site sanitation facilities would be cleaned, as appropriate, and the wastewater would then be transported to the RP-1 for treatment. The total amount of construction wastewater that would be generated by the Project would be negligible when compared to the average daily treatment capacity of RP-1. Therefore, impacts related to wastewater generation as a result of construction of the proposed Project would be less than significant.

Operational Impacts

Conservatively assuming that all water consumed by the Project would be discharged as wastewater, total wastewater treatment demand of the Project is estimated at 124,080 gpd. RP-1 has a maximum capacity of 44 mgd. The Project would constitute approximately 0.28 percent of the total daily capacity for RP-1. Considering this facility is already operating below its maximum capacity, the Project would not cause significant effect on the processing capacity. Therefore, the Project would not require the construction of new wastewater treatment facilities or expansion of facilities, the construction of which could cause significant environmental effects and impacts would be less than significant.

U-4: **The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.**

Less Than Significant Impact.

Construction Impacts

In response to State-mandated waste reduction goals set forth in CalGreen, and as part of the City's commitment to sustainable development, the City adopted an ordinance that requires certain demolition and/or construction Projects to divert at least 65 percent of waste either through reuse or recycling. Article 6 of the City's Municipal Code requires a construction and demolition recycling plan which instructs any new development to reduce its solid waste to the greatest extent possible through recycling materials. Materials such as concrete, asphalt, clean wood, brick, metal, cardboard, and sheetrock should be prioritized for recycling. The proposed Project would be required to develop and submit this plan for approval and include the estimated volume or weight of construction and demolition debris to be generated.

Implementation of the proposed Project would result in the demolition and removal of existing structures including all walls and fencing, light poles, signage, asphalt and concrete pavements, utilities, and debris. Phase 1 demolition would generate approximately 192,484 square feet of building debris and 2,047,320 square feet of concrete and asphalt paving. Phase 2 demolition would generate approximately 432,295 square feet of building debris and approximately 1,045,440 square feet of concrete and asphalt paving. The building debris would need to be removed and disposed of off-site. The concrete and asphalt paving debris would be recycled for use on the site. It is expected that all pavement found suitable for recycling and reuse would be recycled on-site. Since all demolished paving material would be used on site, the proposed Project would not generate significant volumes of demolished materials to be hauled off-site.

Demolition and disposal of demolition debris would be conducted in accordance with applicable laws and regulations, including Ontario Municipal Code Section 6-3.602, Construction & Demolition Recycling Plans, and the 2019 California Green Building Standards Code with regard to the diversion of recyclable material away from landfills, as well as South Coast Air Quality Management District Rule 403 regarding the generation of fugitive dust at construction sites.

The amount of construction debris requiring disposal can be accommodated at the landfill serving the City given its current capacity. Impacts would be less than significant.

Operational Impacts

Solid waste storage and disposal would comply with Ontario Municipal Code Section 6-3.314, Commercial Storage Standards, and Section 6-3.601, Business Recycling Plan. The proposed Project would generate approximately 15,341 pounds per day (ppd) or approximately 2,800 tons

per year of solid waste.[49] As stated previously, solid waste services in the City are provided by West Valley Transfer Station and MRF through arrangements made by Waste Management, Inc. Solid waste is transferred from West Valley to the El Sobrante Landfill in the City of Corona. The landfill is permitted to receive a maximum 10,000 tons per day and has a maximum permitted capacity of 49,931,100 tons.[50] The proposed Project would account for an estimated 28 percent of the daily maximum.

In addition, the OIAA implemented an Airport-wide recycling program, which complies with AB 939.[51] This program, which continues the ongoing Citywide recycling initiative, involves a mixed paper recover program, including the reconfiguration of the Airport's trash and recycling containers to maximize disposal savings and "grass-cycling."[52]

The Project will meet the City's current and future recycling goals and meet the City's waste management ordinance to divert at least 65 percent of potential waste disposal. In accordance with the Construction and Development (C&D) program, a Waste Management Plan (WMP) must be completed and approved prior to permits being issued to the Project. The WMP explains how the Project would meet the requirement of 65 percent of C&D waste either through recycling, salvage, or deconstruction. With the approval of this plan, the Project would meet the requirements of the City for solid waste diversion. Compliance with this ordinance would result in a majority of the Project's solid waste to be reduced. As such, the proposed Project would not create a significant impact on solid waste generation.

U-5: **The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.**

Less Than Significant Impact.

The proposed Project would be consistent with the applicable regulations associated with solid waste. The proposed Project would also comply with AB 939, AB 341, AB 1826, SB 1383, and City waste diversion goals as presented in the Ontario Municipal Code, as applicable. Since the

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49 CalRecycle. "Disposal Rate Calculator (according to most recent 2020 data using 13.6 pounds/1,128 employee/day)." https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator. Accessed January 2022.

50 Waste Management Inc. *Final Supplemental EIR*.

51 Los Angeles World Airports. "Fact Sheet: ONT Recycling Program (2000)." https://www.lawa.org/news-releases/2000/news-release-91. Accessed January 2022.

52 City of Ontario. "Recycling." https://www.ontarioca.gov/OMUC/Recycling. Accessed January 2022.

proposed Project would comply with federal, State, and local statutes and regulations related to solid waste, impacts would be less than significant.

5.14.4 CUMULATIVE IMPACTS

Water

The geographic context for the cumulative impact analysis on water supply is the OMUC service area (i.e., the City). OMUC, as a public water service provider, is required to prepare and periodically update an UWMP to plan and provide for water supplies to serve existing and projected demands. The 2020 UWMP prepared by OMUC accounts for existing development within the City, as well as projected growth through the year 2045.

Compliance of the proposed Project and related projects with regulatory requirements that promote water conservation such as the Ontario Municipal Code, the California Green Building Code, as well as AB 32, would assist in ensuring that adequate water supply is available on a cumulative basis. According to the City's 2020 UWMP, the City has adequate supplies to serve 100 percent of its customers during normal, dry year, and multiple dry year demand through 2045 accounting for projected population increases and corresponding increases in water demand. Projected water demand for the Project was included in the 2020 UWMP projections based on the General Plan land use designation for "Industrial" uses. The Project would consist of 857,762 square feet of warehouse and office space in the Air Cargo Sort Building. The remainder of the site acreage would consist of aircraft uses and truckyard and visitor parking. The projected water demand for the Project is 0.48 percent of the water demand for the land use that was accounted for in the 2020 UWMP. Therefore, implementation of the Project would not obstruct the City's ability to meet water demands of its customers in normal, single dry, and multiple dry years. OMUC would be able to supply the water demands of the proposed Project as well as future growth, including the related projects listed in Section 4.0, **Table 4.2: Cumulative Related Projects**. No significant cumulative impacts will result from the Project, cumulatively considered projects and other growth, and the Project's contribution to cumulative impacts will not be cumulatively considerable.

Wastewater

Wastewater generated by the proposed Project would be processed at the RP-1 treatment plant. As previously stated, RP-1 treats an average influent of wastewater flow of approximately 28 mgd. The hydraulic design can treat domestic sewage of up to 44 mgd and 60 mgd of solids. Moreover, this facility is currently operating below its maximum capacity. The proposed Project's wastewater would represent 0.28 percent of the total daily capacity for RP-1. Based on the capacity of the RP-1, no significant cumulative impacts will result from the Project, related

projects and other growth and the Project's contribution to cumulative impacts will not be cumulatively considerable.

Stormwater

As discussed earlier, the proposed Project would meet applicable LID requirements and would meet these standards by retaining and treating all stormwater on the site prior to discharge. As a result, the amount of peak stormwater flows from the Project site will decrease from existing conditions. All other new development would decrease as compared to older sites that did not include recent LID requirements. The cumulatively considered projects would also be subject to these applicable requirements. Therefore, cumulative impacts related to stormwater infrastructure would be less than significant.

Solid Waste

Solid waste disposal is a regional issue addressed by regional agencies, in this case the County of San Bernardino. The County promotes the efforts of individual jurisdictions to maximize waste reduction and recycling, expand existing landfills, and promote alternative technologies to reduce waste. In response to State-mandated waste reduction goals set forth in CalGreen, and as part of the City's commitment to sustainable development, the City adopted an ordinance that requires certain demolition and/or construction projects to divert at least 65 percent of waste either through recycling, salvage, or deconstruction.[53]

As noted above, the El Sobrante Landfill would serve the proposed Project's solid waste generation with a maximum capacity of 10,000 tons per day. As discussed above, SB 1383 establishes statewide greenhouse gas emission reduction goals consisting of reducing the amount of organic material disposed in landfills by 50% from the 2014 level by the year 2020 and reducing the amount of organic material disposed in landfills by 75% from the 2014 level by the year 2025.

Like the proposed Project, cumulatively considered projects would be required to comply with applicable regulations related to solid waste, including SB 1383 and those pertaining to waste reduction and recycling. Detailed components regarding waste reduction and recycling would be finalized for each related project on a project-by-project basis at the time of plan submittal to the City for the necessary building permits and reviews conducted pursuant to the California Green Building Code, as applicable. As the cumulatively considered projects would also be

53 City of Ontario Municipal Code. Title I. Article 6. Chapter 3.

subject to these applicable requirements, cumulative impacts related to solid waste would be less than significant.

Natural Gas

As with the proposed Project, during construction and operation, other future related projects would be required to incorporate energy conservation features, comply with applicable regulations including anti-idling construction vehicle regulations, the 2019 Title 24 standards and CALGreen code, and incorporate mitigation measures, as necessary. In addition, natural gas infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by SoCalGas occur as needed. Related projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate, and incorporate mitigation measures, as necessary. As discussed above, the Air Cargo Sort Building would not utilize natural gas. No significant cumulative impacts will result from the Project, cumulatively considered projects and other growth, and the Project's contribution to cumulative impacts will not be cumulatively considerable.

Electricity

As with the proposed Project, during construction and operation, related projects would be required to incorporate energy conservation features, comply with applicable regulations including anti-idling construction vehicle regulations, the 2019 Title 24 standards and CALGreen code, and incorporate mitigation measures, as necessary. As discussed above, a new substation is being planned by SCE to meet the need for additional power for the proposed Project. This 135-foot by 160-foot proposed substation will be located within the Project site to the west of the proposed parking structure. The new substation would connect to existing infrastructure along Mission Boulevard directly south of the Project site. It is not anticipated that development of this new substation will result in any significant environmental effects as it would be sited on previously disturbed areas within the Project site and within the development footprint and profile of other Project components, and, therefore, would result in less than significant impacts. No significant cumulative impacts are anticipated given the planned construction of this new substation.

Telecommunications

Telecommunications are regulated by the Federal Communications Commission and the California Public Utilities Commission. No significant cumulative impacts will result from the Project, cumulatively considered projects and other growth, and the Project's contribution to cumulative impacts will not be cumulatively considerable.

5.14.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impacts to utilities would be less than significant.

5.14.6 MITIGATION MEASURES

The proposed Project would have a less than significant impact on utilities and service system resources. Therefore, no mitigation measures would be required.

5.14.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant. No mitigation measures are required.

5.14.9 REFERENCES

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6.0 ALTERNATIVES

6.1 INTRODUCTION

The identification and analysis of alternatives to a proposed project is a fundamental aspect of the environmental review process under CEQA. Public Resources Code Section 21002 states, in part: "it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." In addition, Public Resources Code Section 21002.1(a) states: "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."

CEQA Guidelines Section 15126.6(a) provides the following guidance regarding an EIR's discussion of alternatives:

> *An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible.*

CEQA Guidelines Section 15126.6(b) emphasizes the selection of project alternatives should be based primarily on the ability to avoid or substantially lessen significant impacts attributable to a proposed project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." CEQA Guidelines Section 15126.6(f) further directs that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are addressed. In selecting project alternatives for analysis, potential alternatives must be feasible. CEQA Guidelines Section 15126.6(f)(1) states:

> *Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…,*

> *and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.*

Beyond these factors, CEQA Guidelines Section 15126.6(e) requires the analysis of a "no project" alternative and CEQA Guidelines Section 15126.6(f)(2) requires the evaluation of alternative location(s) for a proposed project, if feasible. Based on the alternatives analysis, CEQA Guidelines Section 15126.6(e)(2) requires an EIR to designate an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, then the EIR must identify an environmentally superior alternative among the other alternatives. CEQA Guidelines Section 15126.6(d) states:

> *The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project… If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.*

In accordance with CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the proposed Project.

6.2 SIGNIFICANT IMPACTS OF THE ONTARIO AIRPORT SOUTH AIRPORT CARGO CENTER PROJECT

In accordance with Section 15126.6(b) of the State CEQA Guidelines, the alternatives in this section have been selected to evaluate means for avoiding or substantially reducing significant impacts of the Project, identified in **Section 5.0: Environmental Impact Analysis** of this Draft EIR.

Table 6.0-1: Environmental Impact Summary presents a summary of findings for each topic analyzed in this EIR for the proposed Project. As shown, impacts related to air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, transportation, and tribal cultural resources were determined to be significant prior to mitigation.

TABLE 6.0-1 ENVIRONMENTAL IMPACT SUMMARY			
Topic	Potentially Significant Impact?	Mitigated to Less than Significant?	Unavoidable Significant Impact?
Aesthetics	No	N/A	N/A
Air Quality	Yes	No	Yes
Biological Resources	Yes	Yes	No
Cultural Resources	Yes	Yes	No
Energy	No	N/A	N/A
Geology and Soils	Yes	Yes	No
Greenhouse Gas Emissions	Yes	No	Yes
Hazards and Hazardous Materials	Yes	Yes	No
Hydrology and Water Quality	No	N/A	N/A
Noise	Yes	Yes	No
Public Services	No	N/A	N/A
Transportation	Yes	No	Yes
Tribal Cultural Resources	Yes	Yes	No
Utilities and Service Systems	No	N/A	N/A

Measures are identified to mitigate these impacts to less than significant, with the exception of the air quality, greenhouse gas emissions, and transportation impacts associated with operation of the proposed Air Cargo facility. For those three impact categories, and as summarized further below, no feasible mitigation is available to reduce impacts to a level of insignificance.

As discussed in **Section 5.12: Transportation,** in this EIR, the truck, employee and other trips generated by the proposed Project would result in the proposed Project's Total VMT per service population (employees for this Project) being 22 percent above the City of Ontario's (City's) VMT significance threshold of 29.76 VMT per service population. Approximately 70 percent of the proposed Project's VMT would be generated by employee, guest, and delivery trips, with the other 30 percent generated by trucks associated with the movement of cargo from the proposed facility throughout the region.

To mitigate the significant VMT impact, the proposed Project's total VMT per service population would need to be reduced by 22 percent. It is not feasible to reduce the portion (30 percent) of Project VMT generated by trucks transporting cargo, as the proposed Project is an air cargo facility serving a large region and the operational and economic viability of the proposed Project relies on trucks picking up and delivering cargo. In addition, to mitigate the VMT impact of the proposed Project focusing solely on truck trips, the truck VMT would need to be reduced by 75 percent. To mitigate the VMT impact of the proposed Project focusing solely on passenger vehicles, the passenger car VMT of the proposed Project would need to be reduced by 33 percent. VMT generated by employees, guests, and deliveries, considered alone, is already under the City's VMT significance threshold of 29.76 VMT per service population. As discussed in **Section 5.12: Transportation** of this EIR, implementation of all feasible mitigation for employee trips is estimated to reduce the proposed Project's employee VMT by a maximum of 5.10 percent, which falls short of the 33 percent reduction required to mitigate the passenger car VMT impact of the proposed Project to less than significant.

As discussed in **Section 5.2: Air Quality**, the proposed Project's operational emissions during Phase 1 and Phase 2 would exceed SCAQMD significance thresholds for CO, VOC, NOx (Phases 1 and 2), and SO_2 (Phase 2 only), primarily due to aircraft, followed by employee vehicles, delivery trucks, and emergency generators. The proposed Project would incorporate Project Design Features **PDF AQ-3** through **PDF AQ-8**, Mitigation Measures **MM AQ-1** through **MM AQ-7,** and mitigation measures **TRANS-1** through **TRANS-5** in **Section 5.12: Transportation,** of this Draft EIR to reduce operational air quality emissions to the greatest extent feasible. Nevertheless, reducing operational emissions from aviation operations to a less than significant level would not be feasible as the proposed Project is an air cargo facility serving a large region, and the operational and economic viability of the proposed Project relies on these aviation operations. Mitigation to further reduce the proposed Project's impact is not feasible because neither SCAQMD nor OIAA have the authority to regulate aircraft operations and aircraft engines; such regulatory authority is vested under the federal Clean Air Act with the United States Environmental Protection Agency (USEPA) (in consultation with the FAA). As such, operational air quality emissions would be significant and unavoidable.

As discussed in **Section 5.7: Greenhouse Gas Emissions**, the proposed Project would generate approximately 128,000 $MTCO_2e$ of GHG emissions per year at full build-out. The majority (i.e., over 75 percent) of the GHG emissions associated with future operation of the proposed Project are related to aircraft sources (i.e., aircraft, APU, and ground service equipment [GSE]). As discussed above, the Airport does not have authority to regulate aircraft operations or emissions from aircraft engines as aircraft are a federal source regulated by the USEPA. Project Design Features **PDF AQ-3** through **PDF AQ-5**, **PDF AQ-7**, **PDF AQ-8,** Mitigation Measures **MM AQ-**

1 through MM AQ-7, and Mitigation Measures TRANS-1 through TRANS-5 in Section 5.12, Transportation, of this Draft EIR would serve to reduce GHG emissions. Additionally, the proposed Project includes Project Design Features PDF GHG-1 and PDF GHG-2 to reduce GHG emissions to the greatest extent feasible. Nevertheless, there are no feasible mitigation measures that would reduce the proposed Project's GHG emissions to a level below significance. As such, the proposed Project's GHG emissions would be significant and unavoidable.

6.3 PROJECT OBJECTIVES

As identified in the State CEQA Guidelines, the achievement of proposed Project objectives was considered in determining potentially feasible alternatives that would avoid or substantially lessen any significant effects of the proposed Project.

The objectives of the Ontario International Airport Authority (OIAA) for the Ontario Airport South Airport Cargo Center Project include:

A. Allow the Project proponent to accommodate current and projected air cargo volume growth.

B. Integrate the Project proponent's airside, landside, and sorting facilities in a location with access to major surface transportation corridors to improve operational efficiency.

C. Redevelop underutilized Airport property.

D. Maximize revenue generation from Airport property.

E. Provide employment opportunities for residents of the City and the Inland Empire.

6.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

The range of alternatives required within an EIR is governed by the "rule of reason," under CEQA Guidelines Section 15126.6(f), which requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. An EIR need not consider an alternative with an unlikely or speculative potential for implementation, nor an alternative that would result in effects that cannot be reasonably ascertained.

An EIR is not required to evaluate alternatives that are not feasible. The term feasible is defined in the CEQA Guidelines Section 15364 as "capable of being accomplished in a successful

manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." CEQA Guidelines Section 15126.6(f)(1) provides additional factors that may be taken into account when addressing the feasibility of alternatives. These factors include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to potential alternative sites.

Under CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons underlying the lead agency's determination. Pursuant to the CEQA Guidelines 15126.6(c), the following factors may be used to eliminate alternatives from detailed consideration in an EIR: (i) the alternative's failure to meet most of the basic project objectives; (ii) the alternative's infeasibility; or (iii) the alternative's inability to avoid significant environmental impacts.

Development of the proposed air cargo facility at other airports serving the Los Angeles region was initially considered as an alternative to the proposed Project. To meet the air and ground transportation requirements for the proposed facility, location at an airport in proximity to the Los Angeles Basin area is needed.

In addition, the following airfield infrastructure operational criteria need to be met:

- Airfield infrastructure to meet the operational needs of the proposed Project, which includes access to two runways, one at least 12,000 feet in length and one no less than 10,000 feet in length to accommodate the Project Proponent's air cargo fleet. To ensure all weather operations, the Project Proponent requires at least one runway with CAT III capability.[1] Due to the time-sensitive nature of the Project Proponent's cargo (approximately 90 percent of the cargo arriving in the Los Angeles area consists of express shipments), the Project Proponent requires facilities that can ensure minimal disruption to aircraft operations.
- The largest aircraft used by the Project Proponent are the B-747 and B-777. The departure length for these aircraft ranges from 10,100 feet to over 11,000 feet. The Project Proponent requires a 12,000-foot-long runway for these aircraft to ensure the runway can accommodate fully loaded aircraft during specific weather conditions, such as higher operating temperatures.

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1 A category III A approach is a precision instrument approach and landing with no decision height or a decision height lower than 100ft (30m) and a runway visual range not less than 700ft (200m).

- The runway requirements for the remaining aircraft in the fleet mix ranges from 8,000 to 8,700 feet. The Project Proponent requires a 10,000-foot-long runway for these aircraft to ensure the runway can accommodate fully loaded aircraft during specific weather conditions, such as higher operating temperatures.
- Access to two runways is required to ensure continuous operations, if one runway is not in service due to runway maintenance or an emergency. When the 12,000-foot runway is closed, payload restrictions for critical aircraft and/or rerouting flights will be implemented to support continuous operations using only a 10,000-foot-long runway.

Airports in the region evaluated as potential alternative locations for the proposed cargo facility include Long Beach Airport (LGB), Los Angeles International Airport (LAX), March Air Reserve Base (ARB), Palm Springs International Airport (PSP), and San Bernardino International Airport (SBD). As discussed below, four of the airports considered (LGB, March ARB, PSP, SBD) do not meet the airfield operational criteria. One of the airports considered, (LAX), does not have any sites of sufficient size with direct airfield access available.

Long Beach Airport (LGB): LGB does not meet the airfield operational criteria. LGB has three runways, but no runway with a length of 12,000 feet or longer. As shown below, the longest runway at LGB is 10,000 feet in length.

- Runway 8L/26R 6,192 feet
- Runway 8R/26L 3,918 feet
- Runway 12/30 10,000 feet

LGB, therefore, is not capable of accommodating the Project Proponent's aircraft that require a runway length of 12,000 feet for optimal operations.

Los Angeles International Airport (LAX) – The Project Proponent is currently operating at LAX. The facility at LAX is operating at its maximum capacity. This facility is surrounded by existing airport uses and cannot be expanded. There are no available sites of sufficient size at LAX with airfield access to accommodate the proposed air cargo facility.

March Air Reserve Base (ARB) – March ARB does not meet the airfield operational criteria. The airport has two runways, but the second runway is not 10,000 feet in length. As shown below, the second runway at March AFB has a length of approximately 3,000 feet.

- Runway 14/32 13,302 feet
- Runway 12/30 3,061 feet

March ARB, therefore, does not provide a second runway of 10,000 feet, which the Project Proponent requires in the event that the main runway is out of service.

Palm Springs International Airport (PSP) – PSP does not meet the Project Proponent's airfield operational criteria. The airport has two runways, but the airport does not have a 12,000-foot-long runway. As shown below, PSP has one 10,000-foot-long runway with the second runway under 5,000 feet in length.

- Runway 13L/31R 4,952 feet
- Runway 13R/31L 10,000 feet

PSP, therefore, is not capable of accommodating the Project Proponent's aircraft that require a runway length of 12,000 feet for optimal operations.

San Bernardino International Airport (SBD) – SBD does not meet the Project Proponent's airfield operational criteria as it has only one runway.

SBD, therefore, does not provide a second runway of 10,000 feet, which the Project Proponent requires in the event that the main runway is out of service.

For these reasons, location of the proposed Project at other airports in the region was determined to be infeasible and this alternative was eliminated from further evaluation in this EIR.

6.5 ALTERNATIVES

6.5.1 Alternative 1 – No Project/No Development Alternative

Section 15126.6(e) of the CEQA Guidelines state: "the No Project/No Build Alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, for purposes of this analysis, Alternative 1, the No Project/No Development Alternative (Alternative 1), assumes the proposed Project is not built and the existing airport-related buildings located on the Project site, which includes hangars, ancillary structures, and related parking facilities and site improvements, would remain. Existing leases and non-OIAA tenant operations would continue to operate on the Project site and no relocation of these existing uses would occur.

Aesthetics

As there would be no new development or changes to the existing buildings and site improvements with Alternative 1, there would be no changes to existing scenic vistas, public

views, or the existing visual characteristics of the Project site. As the proposed Project would not result in any significant aesthetics impacts, Alternative 1 would not avoid or substantially lessen any significant aesthetics impacts associated with the proposed Project.

Air Quality

With Alternative 1, no emissions from construction activities associated with the proposed Project at the Airport would occur. As the proposed air cargo facility would not be developed, no emissions would be generated from operation of the new facility at the Airport. As summarized above, the proposed Project would result in significant and unavoidable operational air quality impacts due to the amount of emissions generated by the increase in flights at the Airport that would occur with the proposed Project. Alternative 1 would avoid these operational air quality impacts as this increase in flights would not occur at the Airport.

Biological Resources

The Project site does not contain sensitive plant habitat and does not provide suitable habitat for sensitive wildlife species or for foraging and nesting by sensitive bird species. No special-status species, sensitive natural communities, jurisdictional waters or streambeds, or wildlife movement corridors are present within the Project site. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any biological resources that may be encountered during construction activities. Alternative 1 would avoid any potential impacts to biological resources as the Project site would not be developed with the proposed air cargo facility. As the proposed Project would result in less than significant impacts with mitigation, Alternative 1 would not avoid or substantially lessen any significant biological resource impacts that would occur with the proposed Project after implementation of the proposed mitigation measures.

Cultural Resources

Under Alternative 1, there would be no changes to the existing buildings and site improvements. None of the buildings on the Project site have been determined to be historic resources. As no ground disturbing and grading activities would occur under Alternative 1, the potential for subsurface cultural resources to be encountered and disturbed by construction of the proposed Project would be avoided. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any cultural resources that may be encountered during construction activities. As the proposed Project would result in less than significant impacts with mitigation, Alternative 1 would not avoid or substantially lessen any significant cultural resource impacts that would occur with the proposed Project after implementation of the proposed mitigation measures.

Energy

Under Alternative 1, there would be no new development or changes to the existing buildings and site improvements associated with the proposed Project, and energy use would remain similar to existing conditions. The proposed Project would result in an increase in energy consumption during construction and operation. Specifically, the proposed Project would require approximately 12.4 megawatts (MW) of power at full development. Although the proposed Project would include a 1.5 MW Solar PV Panel system, the proposed Project would result in a net increase of electricity usage compared to existing conditions. The proposed Project would also increase VMT and aircraft travel resulting in an increase in gas, diesel, and jet fuel consumption. Under Alternative 1, no development would occur; therefore, these increases in energy consumption would be avoided. As such, Alternative 1 would reduce energy impacts compared to the proposed Project. Nevertheless, as the proposed Project's energy impacts are less than significant, Alternative 1 would not avoid or substantially lessen any significant energy impacts that would occur with the proposed Project.

Geology and Soils

Alternative 1 would not expose additional people and/or structures to potential adverse effects associated with geologic and seismic hazards. Incorporation of the recommendations in the Geotechnical Investigation into the proposed Project would mitigate the potential for significant impacts from geologic and soils conditions. As no ground disturbing and grading activities would occur under Alternative 1, the potential for subsurface paleontological resources to be encountered and disturbed by construction of the proposed Project would be avoided. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any paleontological resources that may be encountered during construction activities. As the proposed Project would result in less than significant impacts with mitigation, Alternative 1 would not avoid or substantially lessen any significant impact to geological, soil, or paleontological resources, or unique geological features that may occur with the proposed Project after implementation of the proposed mitigation measures.

Greenhouse Gas Emissions

Under Alternative 1, no change in greenhouse gas (GHG) emissions would occur at the Airport as construction of the proposed air cargo facility would not occur and there would be no changes to existing uses and associated activities. As described above, the GHG emissions associated with construction and operation of the proposed Project would result in an unavoidable significant impact. Alternative 1 would avoid this significant impact.

Hazards and Hazardous Materials

There would be no changes to existing buildings and site characteristics under Alternative 1. The Project site is not identified as a hazardous materials site; however, past uses have resulted in the presence of hazardous materials in the soil on the site. As shown in **Table 5.8-1** in **Section 5.8, Hazards and Hazardous Materials**, Recognized Environmental Conditions (REC)s were identified within the existing Project site. Additionally, the Phase II ESA noted the presence of per- and polyfluoroalkyl substances (PFAS) impacted materials on the Project site. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts related to any hazards and hazardous materials that may occur during construction and operational activities. As the proposed Project would result in less than significant impacts with mitigation, Alternative 1 would not avoid or substantially lessen any significant hazards.

Hydrology and Water Quality

As there would be no new development or changes to the existing buildings and site improvements with Alternative 1, no construction or operational impacts related to hydrology and water quality would occur. The Project site is subject to inundation by 100-year storm floodwaters at depths of one foot or less, exposure to which is addressed by the design of the proposed Project. Under Alternative 1, the existing hydrologic and drainage patterns on the Project site would remain unchanged. The proposed Project would result in less than significant impacts due to significant reductions in stormwater discharges, and improved water quality from the reduced discharges. Therefore, compared to existing conditions, Alternative 1 would not avoid or substantially lessen any significant hydrology and water quality impacts that would occur with the proposed Project.

Noise

Though construction noise and vibration impacts as a result of the proposed Project would be less than significant, under Alternative 1, no new construction would occur on the Project site and all existing uses would continue to operate as they currently do, resulting in no construction noise or vibration. The proposed Project would increase roadway noise levels, but would not exceed significance thresholds and, thus, result in less than significant impacts. These increases in roadway noise levels would not occur under Alternative 1. Additionally, the increase in flight operations at the Airport that would occur with the proposed Project would not occur. The No Action alternative would avoid significant noise impacts to the five residential units in Phase 1 and 15 residential units in Phase 2 ,located in proximity to the Airport associated with increased aircraft operations generated by the proposed Project. Mitigation measures, including implementation of a Residential Sound Insulation Program (RSIP), are identified for the proposed

Project to mitigate this impact to less than significant. As the proposed Project would result in less than significant impacts with mitigation, Alternative 1 would not avoid or substantially lessen any significant noise impacts that would occur with the proposed Project after implementation of the proposed mitigation measures.

Public Services

As there would be no new development or changes to the existing buildings and site improvements with Alternative 1, no new land uses would be established on the Project site that would increase the demand or need for new or physically altered public services facilities. Alternative 1 would not generate an increase in calls for fire protection, emergency medical services, or police protection services. Under Alternative 1, there would be no need to relocate Airport Operations Bureau K-9 Substation. The impact of the proposed Project on public services would be less than significant and, for this reason, Alternative 1 would not avoid or substantially lessen any significant impacts related to public services that would occur with the proposed Project.

Transportation

As there would be no new development or changes to the existing buildings and site improvements with Alternative 1, no increase in long-term traffic volumes and vehicle miles traveled (VMT) would occur. As described above, the VMT emissions associated with construction and operation of the proposed Project would result in an unavoidable significant impact. Alternative 1 would avoid this significant impact.

Tribal Cultural Resources

Under Alternative 1, there would be no changes to the existing buildings and no site improvements would occur. As no ground disturbing or grading activities would occur, Alternative 1 would avoid the potential to disturb any subsurface tribal cultural resources that may be present on the Project site. Mitigation measures are identified for the proposed Project to mitigate the potential for impacts to any subsurface resources that may be encountered during construction to less than significant. As the proposed Project would result in less than significant impacts with mitigation, Alternative 1 would not avoid any significant impact to significant tribal cultural resources that would occur with the proposed Project.

Utilities and Service Systems

There would be no changes to existing buildings and site characteristics under Alternative 1. As such, there would be no increased demand for water, wastewater conveyance or treatment, solid

waste disposal, natural gas, electricity, or telecommunications services. As the proposed Project would result in less than significant impacts, Alternative 1 would not avoid or substantially lessen any significant impacts to utilities and service systems that would occur with the proposed Project.

6.5.2 Alternative 2 – Reduced Project Size Alternative

This alternative considers reducing the size of the proposed Project to reduce the significant and unavoidable transportation (VMT), operational air quality, and greenhouse gas emission (GHG) impacts identified for the Project as proposed. The proposed Project would result in an increase in the number of annual aviation operations at the Airport. In 2029, with completion of Phase 2, the proposed Project would include up to 33 daily departures and arrivals (66 total aircraft operations) with up to 17 daytime (7:00 AM–6:59 PM) departures and 20 daytime arrivals, and 3 evening (7:00 PM–9:59 PM) departures. In addition, the proposed Project would accommodate 3 evening arrivals, 13 nighttime (10:00 PM–6:59 AM) departures, and 10 nighttime arrivals. Truck operations would occur daily, primarily coinciding with the arrival and departure times of the scheduled flights. At proposed Project buildout, the proposed facility would operate with 1,315 employees. As discussed in *6.2 Significant Impacts of the Ontario Airport South Airport Cargo Center Project*, above, with the total aircraft operations, truck operations, and employee trips under both Phase 1 and Phase 2, the proposed Project would result in significant unavoidable VMT, operational air quality, and GHG impacts.

The proposed Project is an air cargo facility serving a large region, and the operational and economic viability of the proposed Project relies on truck and aviation operations. For these reasons, it is not feasible to modify the proposed Project by reducing the size of the proposed Project and the associated activities could sufficiently reduce the proposed Project's VMT, operational Air Quality emissions and GHG emissions, to a less than significant level. A reduction in the size of the proposed Project could, however, result in a meaningful reduction in these impacts.

Alternative 2 considers construction and operation of only Phase 1 of the proposed Project. This would include the demolition of existing structures and site improvements in the Phase 1 area, site preparation, and construction of all proposed improvements on the eastern 60 acres of the Project site, including the Air Cargo Sort Building (611,158 square feet on six (6) acres), aircraft apron improvements and GSE support (47 acres), truckyard and visitor parking (five (5) acres), and employee parking garage (four (4) acres), as shown in **Figure 3.3**.

Aircraft operations would include up to 22 daily arrivals and departures with a maximum of 44 total daily aircraft operations. In 2025, it is anticipated aircraft operations would occur seven days

per week, with up to 8 daytime (7:00 AM–6:59 PM) departures and 9 daytime arrivals, 1 evening (7:00 PM–9:59 PM) departure and 3 evening arrivals, and 13 nighttime (10:00 PM–6:59 AM) departures and 10 nighttime arrivals.

Construction of Alternative 2 would start in the third quarter of 2023 and be completed by the third quarter of 2025 when the proposed air cargo flight operations at the Airport would begin. Construction would include the demolition of existing structures and site improvements in the Phase 1 area, site preparation and grading, and construction of all proposed improvements under Phase I.

Aesthetics

The Project site is designated "Airport" in the Ontario Plan and zoned "ONT" – Ontario Airport zone. Use of the Project site is subject to regulatory oversight by OIAA and the FAA through the approved Ontario International Airport Layout Plan (ALP) and Airport Land Use Compatibility Plan (ALUCP). However, as discussed in **Section 5.1: Aesthetics,** the proposed Project is an aeronautical-related use that is allowed and anticipated under the ALUCP. Alternative 2 (like the proposed Project) would be consistent with policies in The Ontario Plan applicable to the Airport and the regulations in the ALUCP.

The Project site is not located in the vicinity of a State Scenic Highway. Due to the distance and intervening land uses, no portion of the Project site or surrounding area is viewable from the nearest designated scenic highways: R-91, approximately 16 miles southwest of the Project Site, or the SR-142, 9.5 miles southwest of the Project Site. Additionally, the Project site does not contain any scenic resources, such as rock outcroppings or trees, or historic buildings that would be damaged.

Views of the Santa Ana Mountains and Chino Hills to the east and south would not be affected by implementation of Phase 1 of the proposed Project or Alternative 2. Equipment would be staged on-site, which would have a minimal impact on scenic views from East Mission Boulevard looking north during construction. Development within this area of the Airport would not substantially alter the scenic views provided along Mission Boulevard of the San Gabriel Mountains backdrop because the peaks rise to 7,000 feet above mean sea level.

Like the proposed Project, construction activities under Alternative 2 would occur during daylight hours, to the extent possible. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes only and would occur only for the duration required for the temporary construction process. Alternative 2 would not introduce a substantial source of light which would affect day or nighttime views in the area. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes

only and would occur only for the duration required for the temporary construction process. Existing lighting systems in operation during the construction period would be maintained.

Aesthetics impacts would be less than significant and would be similar to the impacts of developing Phases 1 and 2 of the Project, as proposed. Alternative 2 would not avoid or substantially lessen any significant impacts to aesthetics.

Air Quality

As discussed in **Section 5.2: Air Quality**, construction impacts during Phase 1 and Phase 2 would be less than significant. Under Alternative 2, only Phase 1 would be constructed. As such, construction emissions would be reduced compared to the proposed Project as Phase 2 construction activities would not occur. As with the proposed Project, all construction activities associated with Alternative 2 would comply with applicable CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment, including limiting heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time, and with applicable SCAQMD regulations, such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. The proposed Project also includes **PDF AQ-1** and **PDF AQ-2**, and **MM AQ-1** through **MM AQ-3** to reduce air quality emissions to the greatest extent feasible during construction. It is anticipated that Alternative 2 would implement similar PDFs and MMs to reduce construction emissions. Additionally, all construction activities would comply with the measures included in the Ontario Airport Air Quality Improvement Plan (AQIP), including use of Tier 4 equipment. The short-term employment growth associated with construction would not conflict with the employment or housing projections within the AQMP. Overall, Alternative 2 would reduce construction air quality emissions compared to the proposed Project. However, as the proposed Project would result in less than significant impacts with mitigation during construction, Alternative 2 would not avoid or substantially lessen any significant impacts associated with construction air quality impacts.

During operation of Phase 1, the proposed Project's emissions would exceed SCAQMD significance thresholds for CO, VOC, and NO_x. During operation of Phase 2, the proposed Project's operational emissions would exceed SCAQMD significance thresholds for CO, VOC, NO_x, and SO_2. Under Alternative 2, operation of Phase 2 would not occur. Therefore, Alternative 2 would avoid the exceedance of SO_2 emissions and reduce the magnitude of the CO, VOC, and NOx during operation of Phase 2 of the proposed Project. However, the Phase 1 exceedances of CO, VOC, and NO_x emissions would still occur under Alternative 2. Alternative 2 would continue to comply with SCAQMD rules, such as Rule 402 (nuisance) and Rule 1110.2 (emissions from engines).), during operation. Similar to the proposed Project, Alternative 2 would incorporate Project Design Features **PDF AQ-3** through **PDF AQ-8** and Mitigation Measures

MM AQ-1 through **MM AQ-7,** and mitigation measures **TRANS-1** through **TRANS-5** in **Section 5.12: Transportation,** of this Draft EIR to reduce operational air quality emissions to the extent feasible. Nevertheless, reducing Phase 1 operational emissions from aviation operations to a less than significant level would not be feasible and Alternative 2 would result in the same operational emission from aviation operations. While Alternative 2 would substantially lessen emissions and avoid the significant operational SO_2 impact under Phase 2 of the proposed Project, operational air quality impacts would remain significant.

Biological Resources

The Project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. Like the proposed Project, Alternative 2's design would comply with the ONT Wildlife Hazard Management Plan, the ONT Rules and Regulations, and FAA Policy. The trees proposed for installation as part of the landscape plan for the proposed Project would be approved by OIAA in consultation with the USDA Wildlife Biologist under Alternative 2. These trees would not contribute to an increase in wildlife at the Project site.

The Project site does not have the potential to support any of the special-status plant species known to occur within the vicinity of the site. Plant species found in the proposed Project area do not provide suitable long-term roosting or maternity habitat. Of the 57 special-status wildlife species that have been recorded as observed in the Guasti and Ontario quadrangles, none of the species were observed during the field survey conducted for the proposed Project. The Project site could support the Cooper's Hawk, California horned lark, and California gull, which are CDFW Watch List Species. The Project site could support the burrowing owl, which is a California Species of Special Concern and has been documented approximately 900 feet east of the Project site. The Project site is not located within federally designated Critical Habitat.

There are no riparian corridors, creeks, or natural areas existing within or connecting the Project site to natural, undeveloped areas. No blue-line streams are located within the Project site, and it does not support any identifiable drainage courses, inundated areas, wetland features, hydric soils, or hydrogeomorphic features such as perennial creeks. The Cucamonga Channel adjacent to the eastern boundary of the Project site is identified as a riverine resource but does not support riparian habitat or other sensitive natural plant communities. The Project site is not within a wildlife corridor or linkage. Implementation of Alternative 2 (like the proposed Project) would be confined to the Project site, away from regional wildlife corridors and linkages such as the Santa Ana River. Implementation would not directly impact existing wildlife movement opportunities.

Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any biological resources that may be encountered during construction activities. Alternative 2 would result in similar impacts to the proposed Project and would utilize similar mitigation measures. As such, Alternative 2 impacts to biological resources would be less than significant with comparable mitigation and would be similar in comparison to the proposed Project's less than significant impacts with mitigation. Alternative 2 would not avoid or substantially lessen any significant impacts to biological resources.

Cultural Resources

The 1980s-era private jet center located on the portion of the Project site that would be developed with Phase 1 of the proposed Project is not of sufficient age to be eligible for listing in the National Historic Preservation Act (NHPA), California Register of Historical Resources (CRHR), or as local Ontario Landmarks/Historic Districts, based on the records search, research, field survey, and applicable cultural resource codes and regulations conducted for the proposed Project. Further, as discussed and detailed on the Department of Parks and Recreation forms included in Appendix 5.4-2, both the Ontario Air National Guard hangar and former General Electric maintenance facility are ineligible for listing in the National Register of Historic Place, California Register of Historic Resources, or as Ontario Landmarks/Historic Districts. Neither Phase 1 of the proposed Project nor Alternative 2 would directly or indirectly impact any historical resources on the Project site and surrounding area.

Similar to the proposed Project, ground disturbing activities for Alternative 2 could extend to a depth of up to 20 feet below the existing ground surface and, therefore, there is a potential to encounter subsurface cultural resources that may be present on the site. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any cultural resources that may be encountered during construction activities. Alternative 2 would result in similar impacts to the proposed Project and would utilize similar mitigation measures. Impacts to cultural resources from both Phase 1 and Phase 2 of the proposed Project would be less than significant with comparable mitigation. For these reasons, Alternative 2 would not avoid or substantially lessen any significant impacts to cultural resources.

Energy

During construction, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. A total of approximately 2,849 kilowatt-hours (kWh) of electricity is anticipated to be consumed during construction of the proposed Project. As Alternative 2 does not include construction of Phase 2, electricity consumption would

be less compared to the proposed Project. Additionally, Phase 1 would require approximately 241,710 gallons of diesel fuel (on-site equipment) and approximately 87,625 gallons of diesel fuel (off-site haul/vender trucks), along with 62,415 gallons of gasoline fuel (employee trips). Phase 2 of the proposed Project. Phase 2 would require approximately 219,540 gallons of diesel fuel (on-site equipment) and approximately 62,820 gallons of diesel fuel (off-site haul/vender trucks), along with 54,220 gallons of gasoline fuel (employee trips). As such, Alternative 2 would avoid the consumption of 336,580 gallons of petroleum-based fuel needed for Phase 2 construction. Overall, Alternative 2 would reduce construction energy resource consumption compared to the proposed Project. However, as the proposed Project would result in less than significant impacts, Alternative 2 would not avoid or substantially lessen any significant impacts associated with construction energy impacts.

Like Phase 1 of the proposed Project, Alternative 2 would incorporate sustainable project design features and technology during operation. The Air Cargo Sort Building would meet LEED certification standards and be all-electric (no natural gas usage). A 1.5 MW Solar PV Panel system would be installed on the rooftop of the Air Cargo Sort Building and the parking structure. During operation, Phase 1 of the proposed Project would require approximately 8.5 MW of power with Phase 2 and other miscellaneous loads requiring another approximately 2.85 MW of power. As Alternative 2 does not include operation of Phase 2, the consumption of approximately 2.85 MW of power would be avoided. The proposed Project would consume fuel due to vehicles, GSE, emergency generators, and aircrafts. Diesel-powered fuel trucks and GSE would be used during Phase 1 and replaced with electric GSE within Phase 2. Phase 1 would consume a total of 193,295 gallons of diesel, 437,890 gallons of gasoline, and 6.4 million gallons of jet fuel. Moreover, Phase 2 would consume a total of 252,040 gallons of diesel, 406,610 gallons of gasoline, and 10.6 million gallons of jet fuel. Alternative 2 would avoid the consumption of 7.1 million gallons of gasoline, diesel, and jet fuel needed for Phase 2 operation. Overall, Alternative 2 would reduce operational energy resource consumption compared to the proposed Project. However, as the proposed Project would result in less than significant impacts with mitigation, Alternative 2 would not avoid or substantially lessen any significant impacts associated with operational energy impacts.

Geology and Soils

As discussed in **Section 5.6: Geology and Soils**, potential impacts related to geology, soil conditions, and to any subsurface paleontological resources that may be present on the Project site as a result of the proposed Project, would be reduced to less than significant through mitigation and conformance with all applicable local, State, and federal regulatory requirements. The Project site sits in the Upper Santa Ana River Valley, a highly seismically active area within Southern California. As indicated in the Geotechnical Study (see **Appendix 5.6-1**), active or

potentially active faults are not known to exist on or trend toward the Project site. There are several active faults surrounding the Project site to the north, east, south, and west. The Project site is not located within a designated Alquist - Priolo Earthquake Hazard Zone. The proposed Project and Alternative 2 would comply with all applicable City grading permit regulations, plans, and inspections to reduce the potential for impacts related to sedimentation and erosion to less than significant.

As indicated in the Paleontological Resource Assessment (see **Appendix 5.6-2**), the Project site contains artificial fill (Qaf) of the late Holocene epoch, which was deposited on Young alluvial-fan deposits (Qyf_1 and Qyf_3) of the Pleistocene epoch. Due to the artificial nature and origin off-site of this fill, the Qaf has no paleontological sensitivity. Holocene units are typically considered to have low paleontological sensitivity. As Holocene units transition with greater depth, they encounter Pleistocene deposits, which have higher sensitivity for findings and the potential to produce the remains of diverse land animals. Construction of both phases of the proposed Project would require ground disturbance of 20 feet below ground surface (bgs) related to utilities trenching, although most of the ground disturbance would be less than 7 feet bgs. Deeper excavations, beyond nine (9) feet bgs, at the Project site may extend down into older Pleistocene sediments.

Mitigation measures are identified for the proposed Project to avoid the potential significant impacts to any paleontological resources that may be encountered during construction activities, as well as the implementation and incorporation of the recommendations in the Geotechnical Investigation. Alternative 2 would result in similar impacts as the proposed Project and would utilize similar mitigation measures. Thus, Alternative 2 impacts to geology and soils would be less than significant with comparable mitigation. For these reasons, Alternative 2 would not avoid or substantially lessen any significant impacts to geology and soils.

Greenhouse Gas Emissions

The estimated construction GHG emissions for the proposed Project are 3,898 $MTCO_2e$ for Phase 1 and 3,349 $MTCO_2e$ for Phase 2. Under Alternative 2, the construction emissions generated by Phase 2 would not occur. Phase 1 of the proposed Project would generate approximately 79,798 $MTCO_2e$ attributable to annual operational and amortized construction GHG emissions, which is 838 percent less than the 128,057 $MTCO_2e$ attributable to annual operational and amortized construction GHG emissions that would be generated by the proposed Project with development of Phase 2. While substantially less, the net increase in GHG emissions that would be generated during Phase 1 of the proposed Project over baseline conditions is still considered to be a significant impact on the environment. The majority of the

GHG emissions generated by the proposed Project are related to aircraft operations, which cannot be feasibly mitigated to a less than significant level.

As discussed in **Table 5.7-7** in **Section 5.7: Greenhouse Gas Emissions**, implementation of the proposed Project would have no conflicts with many of the State and local plans, policies, and regulations that have been adopted for the purpose of reducing GHG emissions. However, the proposed Project may conflict with some plans, policies, and regulations, including (California) Executive Orders S-3-05, B-30-15, and B-55-18; and the 2022 Climate Change Scoping Plan due to its incremental contribution of additional GHG emissions to the atmosphere.[2] Similar to the proposed Project, Alternative 2 may conflict with these same plans, policies, and regulations.

As described above, while building Phase 1 only of the proposed Project under Alternative 2, this would substantially lessen the GHG emissions generated by operation of the proposed Project; however, impacts would remain significant. Therefore, Alternative 2 would substantially lessen, but not avoid, the significant GHG impacts identified for the proposed Project.

Hazards and Hazardous Materials

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would also not be affected or impacted by contamination identified in the general vicinity of the Project site. The use, storage, transport, and disposal of any hazardous materials during construction or operation of the proposed Project and Alternative 2 would be required to conform to existing laws and regulations. Strict adherence to all emergency response plan requirements set forth by San Bernardino County Fire Protection District (SBCFPD) and the Ontario Fire Department (OFD) would be required through the duration of the construction phase of Phase 1 of the proposed Project and for Alternative 2. Operation would involve the ground transport of aviation fuel. These fuel trucks would be in compliance with the fueling operations and fuel spills rules set forth in the Ontario International Airport Rules and Regulations to minimize the risk of fuel release.

Investigations of the Project site identified contamination of soil on the site with hazardous materials. As with the proposed Project, aa Soil Management Plan (SMP) would be implemented during construction of Alternative 2 to reduce the potential for accidental exposure to hazardous materials that may be present in soil that could be disturbed by construction to less than significant. Based on the results of the additional investigations conducted for the Phase II ESA,

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2 California Air Resources Board (CARB). *California's 2017 Climate Change Scoping Plan*. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed January 2023.

installation of a vapor intrusion mitigation system (VIM system) under the proposed Air Cargo Sort Building would prevent potential vapor intrusion from the subsurface under both the proposed Project and Alternative 2.

Similar to the proposed Project, the impact of Alternative 2 on residential uses around the Airport would be mitigated through the implementation of a RSIP for housing units within the future 65-69 dBA noise contour. Alternative 2 (similar to the proposed Project) would comply with applicable aviation-related regulations and safeguards in the Ontario ALUCP and no impacts related to aviation safety would result from the proposed Project or Alternative 2.

The Project site is not located along interstates within the City that serve as major emergency response and evacuation routes. Adequate emergency access for emergency vehicles would be maintained along public streets that abut the Project site. The Project site is in a Local Responsibility Area and classified by CAL FIRE as non-VHFHSZ (non-very high fire hazard severity zone).[3] The Project site and surrounding areas are flat and developed with urban uses that would not contribute to the uncontrolled spread of wildfire or exacerbate potential wildfire risks, including downslope flooding and landslides caused by runoff, slope instability, or drainage changes from wildfire from either the proposed Project or Alternative 2.

Mitigation measures are identified for the proposed Project, and would be similarly utilized in Alternative 2, to avoid significant impacts related to hazards and hazardous materials during construction and operational activities. As the proposed Project would result in less than significant impacts with mitigation, Alternative 2 would not, therefore, avoid or substantially lessen any significant hazards and hazardous materials impacts that would occur with the proposed Project.

Hydrology and Water Quality

Alternative 2 would be similar to the proposed Project, as it would include a stormwater treatment system designed to reduce pollutants of concern in runoff from the Project site in compliance with the San Bernardino County Regional Municipal Separate Stormwater Sewer System (MS4) permit requirements. Compliance is expected with the regulatory requirements and conditions of the San Bernardino County MS4 Permit, as well as the Construction General Permit, including incorporation of operational best management practices (BMPs), to target pollutants of concern. The Construction General Permit requires preparation of a Stormwater

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3 CAL Fire. Office of the State Fire Marshal. "Fire Hazards Severity Zones." https://egis.fire.ca.gov/FHSZ/. Accessed July 2022.

Pollution Prevention Plan (SWPPP). The SWPPP would detail erosion control and sediment control BMPs to be implemented during construction to minimize erosion and retain sediment on site. Furthermore, the collection, treatment, and controlled release of stormwater runoff in the planned underground water treatment facility to the drainage channels would ensure that runoff from the site does not contain significant amounts of sediment into the drainage channels and result in substantial erosion or siltation on the Project site. Adherence to the regulatory requirements and conditions of the State General Construction Permit, implementation of the SWPPP, and adherence to the City's Erosion and Sediment Control Plan requirements, would ensure that surface and groundwater quality are not adversely impacted during construction. Implementation of the Low-Impact Design (LID) and BMP measures at the site, including catch basins, underground detention, and sediment filtration chambers, would ensure that water quality would not be impacted by the development and operation of the proposed Project or Alternative 2.

With the implementation of specified BMPs and detention features, neither the proposed Project, nor Alternative 2, would substantially increase the rate or amount of surface runoff from the site and there would be flooding impacts as a result.

The proposed Project would result in less than significant hydrology and water quality impacts. Alternative 2 would not, therefore, avoid or substantially lessen any significant impacts to hydrology and water quality that would occur with the proposed Project.

Noise

Like the proposed Project, construction of Alternative 2 would not generate noise levels that would exceed the significance threshold at the nearby sensitive receptors. The forecasted vibration levels due to on-site construction and operational activities would not exceed the building damage significance threshold of 0.12 particle velocity (PPV) inches per second for all Project-identified sensitive receptors due to distance, changes in elevations, and intervening structures.

Additionally, roadway noise levels under Alternative 2 would not create a readily perceptible increase of 5 dBA or greater at locations where ambient noise levels are less than 60 dBA; a barely perceptible increase of 3 dBA or greater at locations where ambient noise levels range from 60 to 65 dBA; and community noise level impact increase of 1.5 dBA or greater at locations where ambient noise levels already exceed 65 dBA. This is similar to the roadway noise levels generated by the proposed Project.

The increase in aircraft operations at the Airport under the proposed Project would result in a significant impact in noise for a small number of residential units located near the Airport. Phase

1 operations would impact five residential units and Phase 2 would impact 15 residential units. A RSIP will be implemented to mitigate this impact to less than significant. This alternative, including only Phase 1 of the proposed Project, would impact 10 fewer residential units compared to the proposed Project.

Mitigation measures are identified for the proposed Project to avoid the potential for significant noise impacts generated by operation of the proposed facility that would also apply to this alternative. As the proposed Project would result in less than significant impacts with mitigation, and Alternative 2 would not. Therefore, avoiding or substantially lessening any significant noise impacts that would result from the proposed Project could be done with the Project and not with Alternative 2.

Public Services

Ontario Fire Department (OFD) facilities, Station 10, would meet the current and future needs for fire protection services for the construction and operation of the proposed Project. Response time to the Project site from Station 10 would be less than three minutes. Station 10 has existing aircraft-rescue firefighting equipment that is available to suppress fires on the airfield and has adequate equipment to accommodate general industrial warehouse operations in the cargo building. All proposed structures would be built to current fire codes and standards, and would have fire extinguishers, wet and dry sprinkler systems, pre-action sprinkler systems, fire alarm systems, fire pumps, backflow devices, and clean agent waterless fire suppression systems pursuant to the California Fire Code, CBC, City of Ontario Fire Code, OIAA, and other applicable regulations regarding fire safety. Field inspections would be conducted prior to occupancy to ensure that the proposed Project's fire suppression systems are sufficient and fully operable. Similar to the proposed Project, the existing fire protection equipment and services offered at Station 10 would be sufficient to accommodate Alternative 2.

The Ontario Police Department (OPD) facilitates the Airport Operations Bureau (AOB), which would meet the current and future needs for police protection services for the construction and operation of the proposed Project. For Alternative 2 (similar to the proposed Project), the AOB would respond to calls for service requiring a police response.

During construction for either the proposed Project or Alternative 2, the entire construction area would be fenced off and access would be limited to up to two access points with security guards. No access would be allowed into the airfield and other secured Airport areas from the construction site. Once constructed, the property would be fully secured, with limited access into the Air Cargo Sort Building under either the proposed Project or Alternative 2. Fencing would be installed along the perimeter of the property in accordance with Airport standards. The entire

Project site, including the interior and exterior of the cargo building and parking structure on the south side of East Avion Street, would be installed with security cameras, alarm systems, and adequate lighting for operations during the day and nighttime security.

The proposed Project would not result in significant impacts related to public services and Alternative 2, with similar operational security features and facilities, would not avoid or substantially lessen any significant impacts to public services.

Transportation

The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Truck trips during construction would comply with truck route requirements identified within the Ontario Plan. Roadway improvements may result in temporary impacts through lane closures, noise, and dust. Construction of Alternative 2 would not conflict with any program, plan, ordinance, or policy related to roadway facilities. Similar to Alternative 2, improvements are not needed at any study locations for Phase 1 proposed Project conditions to maintain consistency with applicable performance standards. As with Alternative 2, construction of the proposed Project may result in temporary effects on adjacent streets, including effects from any temporary lane closures. Transit facilities would not substantially change during construction of Alternative 2 (similar to the proposed Project). Temporary construction impacts to bicycle and pedestrian facilities may occur during construction as a result of potential lane and sidewalk closures for roadway improvements. Alternative 2 (similar to the proposed Project) would be consistent with the adopted plans regarding circulation system and is not expected to decrease the performance or safety of these facilities.

Alternative 2 (similar to the proposed Project) would include the realignment of and widening of arterial roadways and intersections. The proposed roadway network identifies access points on the surrounding streets at appropriate locations that would not create any hazards. All roadway and driveway improvements would comply with federal, State, and local design and safety standards, as would all corresponding sidewalk and crosswalk improvements.

All construction traffic would be required to comply with a temporary traffic control plan that meets the applicable requirements of the California Manual on Uniform Traffic Control Devices. Alternative 2 (similar to the proposed Project) would maintain adequate emergency access during construction. Alternative 2 would provide emergency access on East Avion Street to major arterials Archibald Avenue, Jurupa Street, and Vineyard Avenue. The location and design of these access points would be adequate for emergency access. The proposed roadway network improvements would not result in inadequate emergency access to the site and would not

impede existing emergency access to the existing surrounding uses under either the proposed Project or Alternative 2.

The Total VMT per service population of the Project site is compared to the Ontario Plan Buildout Conditions VMT per service population to determine if it exceeds the City's impact threshold for VMT. Alternative 2 would anticipate approximately 2,777 new Project trips and a VMT of 45,411, resulting in a total VMT per service population (employees) of 34.53. This is incrementally lower than Phase 2 of the proposed Project which anticipates approximately 2,824 new Project trips and a VMT of 50,163, resulting in a total VMT per Service Population of 38.15 in Opening Year (2029). While reduced, the VMT impact of Alternative 2 (Phase 1 only of the proposed Project) would still exceed the Citywide average of 29.76 VMT per service population, resulting in a significant transportation impact. As with Alternative 2, approximately 30 percent of the VMT generated by the proposed Project would be generated by trucks associated with the movement of cargo from the proposed facility throughout the region. Because the proposed Project is an air cargo facility serving a large region and the operations and economic viability of the proposed Project relies on the ability to transport cargo, reducing the VMT from these truck trips is not feasible and, for this reason, this significant VMT impact cannot be reduced to a less than significant impact even with implementation of Alternative 2. Mitigation measures are identified for the proposed Project to reduce VMT from employee and other trips to the greatest extent feasible, but the amount of VMT generated would remain significant, as with Alternative 2. With the VMT impacts of Phase 1 of the proposed Project, as Alternative 2 would be incrementally less than those associated with Phase 11 and Phase 2 combined, this impact would remain significant with mitigation. Alternative 2 would therefore not avoid or substantially lessen the significant transportation impacts identified for the proposed Project.

Tribal Cultural Resources

No tribal cultural resources (TCRs) as defined by Public Resources Code Section 5020.1(k) have been identified on the Project Site, based on a literature review (see **Appendix 5.4-1**). No tribal cultural resources were identified during the field survey conducted as part of the Cultural Resources investigations of the site. Consultation with 12 Native American tribal groups did not result in the identification of TCRs or requests for consultation.

Mitigation measures identified for the proposed Project to avoid the potential for significant impacts to any subsurface tribal cultural resources that may be encountered during construction would apply to Phase 1 and to Alternative 2. Alternative 2 would therefore not avoid or substantially lessen any significant impacts to TCRs.

Utilities and Service Systems

Demolition of existing buildings and site improvements to build Phase 1 of the proposed Project would generate approximately 192,484 square feet of building debris and 2,047,320 square feet of concrete and asphalt paving. The concrete and asphalt paving would be recycled and used on the site to the extent possible. Demolition and disposal of demolition debris for either the proposed Project or Alternative 2 would be conducted in accordance with applicable laws and regulations, including Ontario Municipal Code Section 6-3.602, Construction & Demolition Recycling Plans, and the 2019 California Green Building Standards Code with regard to the diversion of recyclable material away from landfills.

Alternative 2 (like the proposed Project) will also meet the City's current and future recycling goals during operation and meet the City's waste management ordinance to divert at least 65 percent of potential waste disposal. The proposed Project and Alternative 2 would be consistent with the applicable regulations associated with solid waste. Alternative 2 (like the proposed Project) would also comply with AB 939, AB 341, AB 1826, SB 1383, and City waste diversion goals as presented in the Ontario Municipal Code, as applicable. Similar to the proposed Project, all requirements stated in the OIAA Design and Construction Handbook would be adhered to during the process of connecting existing utilities to the Project Site for Alternative 2. This would include SWPPP BMPs, Low Impact Development (LID) standards, the 2019 Title 24 standards, and CALGreen code.

Based on the information provided in the City of Ontario 2020 UWMP, the Ontario Municipal Utility Company's projected water supplies will be sufficient to satisfy the demands of both Phase 1 and 2 of the proposed Project, in addition to existing and planned future uses under normal, dry, and multiple dry water years. The same is necessarily true for Alternative 2. Alternative 2 would require approximately 8.5 MW of power at buildout, similar to Phase 1 of the proposed Project. A new substation is being planned by Southern California Edison (SCE) to meet the need for additional power for the proposed Project. This substation would be located within the Project site in areas that are already disturbed and planned for development for the proposed Project (and within the profile of other Project components) and, as such, impacts related to the construction of this substation would be less than significant. Alternative 2 therefore would not result in significant impacts related to the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities.

As such, Alternative 2 would result in similar impacts to the proposed Project and would not avoid or substantially lessen any significant impacts to utilities and service systems that would be generated by the proposed Project.

6.5.3 Alternative 3 – Different Location on Airport Alternative

Under this alternative, the proposed Project would be constructed and operate on a site located on the northwest edge of the Airport, as shown in **Figure 6.1: Alternative Location at Ontario Airport**. This site provides a contiguous land area of approximately 90 acres in size. The site would provide direct airfield access to support the international and domestic cargo aircrafts for the proposed Project. The location of Alternative 3 would provide the airfield infrastructure to support the operational needs of the proposed Project, including access to two runways, one at least 12,000 feet in length and one no less than 10,000 feet in length, with at least one runway with CAT III approach capability to accommodate air cargo aircraft fleet mix. This location at the Airport also has connections via the surrounding street network to the I-10, SR-60, and I-15 Freeways.

Aesthetics

Alternative 3 would involve development of the proposed Air Cargo Sort Building, aircraft apron, and related site improvements on the alternative site. Development of the proposed facility on this alternative site (like the proposed Project) would not substantially impact a scenic vista, would not be located in the vicinity of a State Scenic Highway, and would be consistent with applicable zoning and other regulations governing scenic quality. Glare associated with the proposed Project design would be minimal and efforts would be taken to reduce as much glare as possible. As such, Alternative 3 would result in similar less than significant impacts to the Project and would not avoid or substantially lessen any significant impacts to aesthetics that would result from the Project as proposed.

Air Quality

Alternative 3 would include development of the proposed Project on an alternative site at the Airport. Construction emission levels under Alternative 3 would be similar for Phase 1 and Phase 2 compared to the proposed Project. During operation of Phase 1, the proposed Project's emissions would exceed SCAQMD significance thresholds for CO, VOC, and NO_x. During operation of Phase 2, the proposed Project's operational emissions would exceed SCAQMD significance thresholds for CO, VOC, NO_x, and SO_2. Under Alternative 3, these emissions would also occur. Therefore, Alternative 3 would result in similar impacts compared to the proposed Project. However, the alternative site is located closer to residential receptors to the north of the Airport. As such, health risk impacts may increase due to this alternative. It is anticipated that Alternative 3 would implement similar PDFs and MMs to reduce construction and operation emissions. However, no feasible mitigation measures are available to mitigate the emissions generated by the aircraft operations associated with the proposed Project to a less than

significant impact. Alternative 3 would not, therefore, avoid or substantially lessen the significant air quality impacts identified for the proposed Project.

Biological Resources

Similar to the proposed Project site, the Alternative 3 site is largely developed with few acres of vacant disturbed areas on the southern portion of the site. This alternative site would have a similar low potential for special-status plant and wildlife species at the Project site. Mitigation measures are identified for the proposed Project, and would be similarly applied to Alternative 3, to avoid the potential for significant impacts to any biological resources that may be encountered during construction activities on this alternative site.

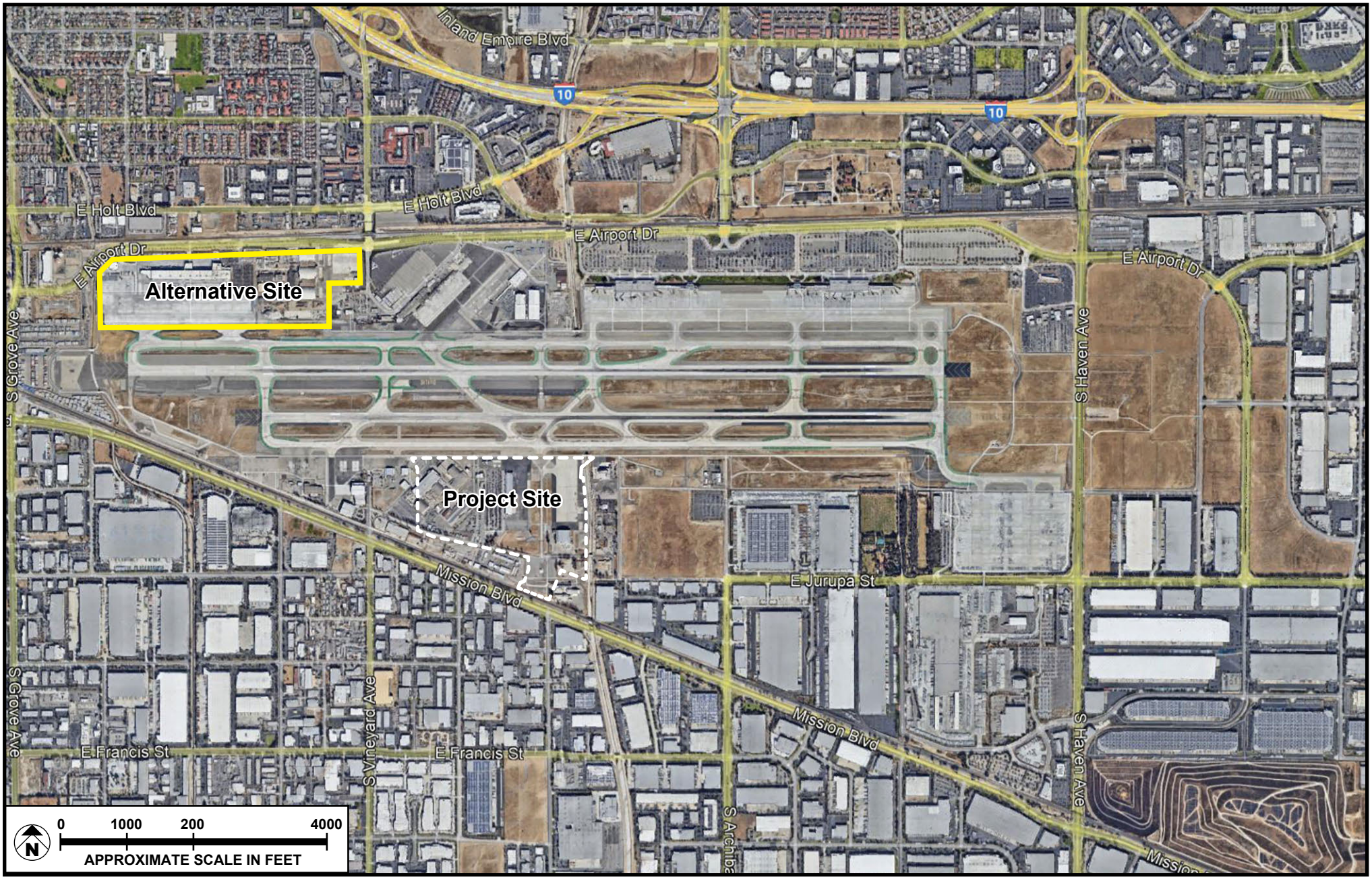
As such, Alternative 3 would result in similar less than significant impacts to biological resources as the proposed Project. Alternative 3 would not, therefore, avoid or substantially lessen any significant impacts to biological resources.

Cultural Resources

This Alternative 3 site is developed with newer buildings than the Project site, but the Project site does not contain any buildings determined to be historic resources. Any construction activities involving disturbance of subsurface soils has the potential for encountering and unearthing archaeological or other unknown subsurface cultural artifacts. Mitigation measures are identified for the proposed Project, and would be similarly applied to Alternative 3, to avoid the potential for significant impacts to any cultural resources that may be encountered during construction activities and would be applicable to the construction activities at this alternative site. Any impacts to cultural resources would less than significant with mitigation and would be similar in comparison to the less than significant impacts with mitigation identified for the proposed Project. Alternative 3 therefore would not avoid or substantially lessen any significant impacts to cultural resources.

Energy

Alternative 3 would include the development and operation of the proposed facilities at an alternative site at the Airport. During construction, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. A total of approximately 2,849 kWh of electricity is anticipated to be consumed during construction of the proposed Project. Additionally, Phase 1 would require approximately 241,710 gallons of diesel fuel (on-site equipment) and approximately 87,625 gallons of diesel fuel (off-site haul/vender trucks), along with 62,415 gallons of gasoline fuel (employee trips).



SOURCE: Google Earth - 2022; Meridian Consultants LLC - 2022

FIGURE **6.1**

Meridian Consultants

Alternative Location at Ontario Airport

332-001-21

Phase 2 of the proposed Project. Phase 2 would require approximately 219,540 gallons of diesel fuel (on-site equipment) and approximately 62,820 gallons of diesel fuel (off-site haul/vender trucks), along with 54,220 gallons of gasoline fuel (employee trips). Alternative 3 would result in similar energy consumption during construction compared to the proposed Project. Alternative 3 would not avoid or substantially lessen any significant impacts associated with construction energy impacts.

Like the proposed Project, Alternative 3 would incorporate sustainable project design features and technology. The Air Cargo Sort Building would meet LEED certification standards and be all-electric (no natural gas usage).). A 1.5-Megawatt Solar PV Panel system would be installed on the rooftop of the Air Cargo Sort Building and the parking structure. During operation, Phase 1 of the proposed Project would require approximately 8.5 MW of power with Phase 2 requiring approximately 2.85 MW and other miscellaneous loads requiring an additional 10 percent of power. The proposed Project would consume fuel due to vehicles, GSE, emergency generators, and aircrafts. Diesel-powered fuel trucks and GSE would be used during Phase 1 and replaced with electric GSE within Phase 2. Operation of Phase 1 would consume a total of 193,295 gallons of diesel, 437,890 gallons of gasoline, and 6.4 million gallons of jet fuel. Operation of Phase 2 would consume a total of 252,040 gallons of diesel, 406,610 gallons of gasoline, and 10.6 million gallons of jet fuel. Alternative 3 would result in similar energy consumption during operation compared to the proposed Project. Therefore, Alternative 3 would not avoid or substantially lessen any significant impacts associated with construction energy impacts.

Geology and Soils

This alternative site is located approximately 1 mile northwest of the proposed Project site on the north side of the runways at the Airport, and geology and soil conditions would be similar to the conditions found on the Project site. As discussed in **Section 5.6**, potential impacts from seismic events, erosion and topsoil loss, unique paleontological/geological features, expansive soils, and unstable geological units or soils, would be reduced to less than significant through mitigation and conformance with all applicable local, State, and federal regulatory requirements. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any paleontological resources that may be encountered during construction activities, as well as toto implement and incorporate the recommendations in the Geotechnical Investigation. Similar measures would mitigate the potential for impacts at this alternative site. No significant geology and soils impacts are identified for the proposed Project after mitigation and, for this reason, development of the proposed Project at this alternative site would not avoid or substantially lessen any significant impacts.

Greenhouse Gas Emissions

Alternative 3 would include the development and operation of the proposed Project at an alternative site at the Airport and would generate very similar levels of GHG emissions during construction and operation, approximately 7,248 $MTCO_2e$ during construction and approximately 127,815 $MTCO_2e$ annually during operation when compared to baseline emissions. As with the proposed Project, the net increase in GHG emissions for Alternative 3 would be considered significant. As the majority of the GHG emissions identified for the proposed Project are associated with aircraft operations associated with the proposed Project and no measures are available to mitigate these aviation emissions, Alternative 3 would not avoid or substantially lessen the significant GHG impacts identified for the proposed Project.

Hazards and Hazardous Materials

Construction and operation of the proposed Project on this alternative site would comply with applicable aviation-related regulations and safeguards. The use, storage, transport, and disposal of construction and operation-related hazardous materials would be required to conform to existing laws and regulations. All emergency response plan requirements set forth by SBCFPD and the OFD, would be met during construction. This alternative site has been more recently developed than the Project site and, for this reason, any contamination of soil or groundwater by hazardous materials was likely remediated to meet applicable regulatory standards or could be mitigated by mitigation measures similar to those identified for the proposed Project.

As the number of air cargo flight operations would be the same with this alternative, similar impacts to those identified for the proposed Project would occur regarding safety hazards or excessive noise for people residing or working near the Airport. The impact on residential uses around the Airport would be mitigated through the implementation of a RSIP for housing units within the future 65-69 dBA noise contour. Alternative 3 impacts related to hazards and hazardous materials would be less than significant with mitigation comparable to that identified for the proposed Project. For these reasons, Alternative 3 would not avoid or substantially lessen any significant impacts to hazards and hazardous materials.

Hydrology and Water Quality

Similar to the proposed Project, Alternative 3 would comply with all applicable regulatory requirements and conditions of the State General Construction Permit, implementation of a SWPPP, and adherence to the City's Erosion and Sediment Control Plan requirements. Compliance with these regulatory requirements and conditions would ensure that surface and groundwater quality are not adversely impacted during construction. LID features and on-site detention facilities would ensure that stormwater runoff does not exceed the capacity of the

City's storm drain system, which includes the Airport. Alternative 3 would not result in or contribute to flooding and the site is not located near open bodies of water or within an inundation zone of a seiche. Like the proposed Project, Alternative 3 would also keep the storage of potentially hazardous materials on-site to a minimum, which would reduce the potential for hazardous materials to be released into surface water during flooding. Construction and operation of Alternative 3 would not include groundwater extraction. Water demand during operation of Alternative 3 would be sufficiently accommodated by the existing water treatment and delivery system within the City. As such, Alternative 3 would result in similar less than significant impacts to the proposed Project. Alternative 3 would not avoid or substantially lessen any significant impacts to hydrology and water quality.

Noise

As the number of air cargo flight operations would be the same with this alternative, similar impacts to those identified for the proposed Project would occur, with the impact on residential uses around the airport to be mitigated through the implementation of a residential sound insulation program (RSIP) for housing units within the future 65-69 dBA noise contour. Alternative 3 noise impacts would be less than significant with mitigation similar to those identified for the proposed Project. Alternative 3 would not avoid or substantially lessen any significant noise impacts.

Public Services

Similar to the proposed Project, the existing OFD Station 10 would meet the current and future needs for fire protection services for the construction and operation of the proposed facilities on this alternative site. Additionally, the existing OPD AO would meet the current and future needs for police protection services for the construction and operation of Alternative 3. Under Alternative 3, there would be no need to relocate Airport Operations Bureau K-9 Substation, which is currently located on the Project site, to another site at the Airport. Alternative 3 impacts to public services would be less than significant and would be similar in comparison to the impacts of the proposed Project's less than significant impacts. Alternative 3 would not avoid or substantially lessen any significant impacts to public services.

Transportation

The operational characteristics of the proposed Project would not change with development of the proposed facilities on this alternative site. The proposed Project would generate approximately 2,824 new trips and VMT of 50,163 in Opening Year (2029), and approximately 2,824 new trips and a VMT of 50,465 under Cumulative Conditions (2040). Mitigation measures are identified for the proposed Project to reduce the potential for significant impacts to

transportation during operational activities; however, these mitigation measures would not reduce proposed Project VMT below the City's impact threshold because of the amount of VMT associated with trucks transporting cargo. These mitigation measures would apply to the alternative site but would not reduce impacts to less than significant levels, similar to the proposed Project. Alternative 3 would, therefore, not avoid or substantially lessen the significant transportation impact identified for the proposed Project.

Tribal Cultural Resources

Potential impacts associated with Alternative 3 would be similar to developing the proposed Project on the Project site. Mitigation measures are identified for the proposed Project to avoid the potential for significant impacts to any subsurface tribal cultural resources that may be encountered during construction and would be similarly applied to Alternative 3. As potential impacts would be similar with this alternative, as the proposed Project and these potential impacts can be mitigated to less than significant, Alternative 3 would not avoid or substantially lessen any significant impacts.

Utilities and Service Systems

Alternative 33 would develop the proposed facilities at an alternative site at the Airport without any changes to the size of the facility or its operational characteristics. Similar to the proposed Project, all requirements in the OIAA Design and Construction Handbook would be adhered to during the process of connecting facilities to existing utilities. Based on the information provided in the 2020 Urban Water Management Plan and the Water Supply Assessment prepared by the Ontario Municipal Utility Company, the City's water supplies will be sufficient to meet the demands of the proposed facilities. Additionally, Alternative 3 would constitute approximately 0.28 percent of the total daily wastewater capacity for Regional Plant 1, like the proposed Project. Alternative 3 would require a total electrical demand of 12.4 MW, similar to the proposed Project. A new substation by SCE would be needed to meet the need for additional power for the proposed Project. Under Alternative 3, this substation would be located within the Airport in areas that are already disturbed and, as such, impacts related to the construction of this substation would be less than significant. Alternative 3, therefore, would not result in significant impacts related to the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. As such, Alternative 3 would result in similar impacts to the proposed Project. Alternative 3 would not avoid or substantially lessen any significant impacts to utilities and service systems.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify an environmentally superior alternative among the alternatives evaluated. If the "no project" alternative is the environmentally superior alternative, the EIR must identify another environmentally superior alternative among the remaining alternatives.

The "No Project" Alternative (Alternative 1) would avoid all significant impacts identified for the proposed Project. The No Project Alternative would not, however, achieve any of the objectives of the proposed Project.

Of the other alternatives considered, the Environmentally Superior Alternative is the Reduced Project Size Alternative (Alternative 2) because this alternative would substantially lessen the unavoidable significant air quality and greenhouse gas impacts and incrementally reduce the VMT impacts identified for the proposed Project. While reduced, these impacts would remain significant after implementation of all feasible mitigation. Development of only Phase 1 of the proposed Project would also not meet the objectives of the proposed Project to accommodate current and projected air cargo volume growth and would only partially meet the objectives of redeveloping and maximizing revenue for the OIAA from underutilized Airport property.

7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines[1] requires that an EIR "contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and therefore were not discussed in detail in the EIR." The proposed Project would result in similar airport related development and uses as those existing on the Project site. As described in the Notice of Preparation (**Appendix 1.0**) and below, Project implementation would not result in significant impacts related to the seven environmental topics as discussed below. Therefore, detailed evaluation of the potential impacts of the Project related to these topics is not provided in this EIR:

- **Agriculture and Forestry Resources.** The Project site is not designated farmland or under a Williamson Act contract.[2] The California Department of Conservation designates the site Urban and Built-Up Land.[3] The site is currently developed with, and surrounded by, airport related and industrial uses. Due to its location within the Airport and its developed condition, the Project site is not suitable for agricultural and timberland production. Based on these characteristics, the proposed Project would not impact agricultural and timberland resources.

- **Land Use and Planning.** The proposed Project has been designed and would operate in accordance with OIAA rules and regulations, and as an aeronautical development and use under OIAA's jurisdiction. Also, the City of Ontario General Plan land use designation for the Project site is Airport, and the site is zoned ONT for Ontario International Airport.[4,5] The ONT zoning district allows airport terminals (including commercial and

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1 California Environmental Quality Act (CEQA) Guidelines. Section 15128.

2 City of Ontario. "Status of Williamson Act Contracts." September 28, 2017. http://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Ontario-Ranch/williamson_act_status_map_sept._2017.pdf.

3 California Department of Conservation. "California Important Farmland: 1984-2018." https://maps.conservation.ca.gov/dlrp/ciftimeseries/. Accessed August 2021.

4 City of Ontario. *The Ontario Plan*. Exhibit LU-01, Land Use Plan. https://www.ontarioplan.org/wp-content/uploads/sites/4/2021/05/TOPLUP_Map24x3610_6_20210524_V_1. Accessed October 2021.

5 City of Ontario. "Zoning Map." Adopted 2015, December 1, and amended in 2021, February 2. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Documents/Zoning%20Map/Zoning_20210212.pdf. Accessed October 2021.

service uses related to the terminals), car rental agencies, and airport-related industrial and delivery uses, at a maximum intensity of 0.55 floor to area ratio (FAR). The proposed Project proposes 1,261,712 square feet of buildings and structures on the 97-acre site, which results in a FAR of approximately 0.34, under the maximum allowed intensity of 0.55 FAR.

The proposed Project is also required to comply with the FAA-approved Ontario International Airport Layout Plan (ALP). The ALP serves as a guide for the Airport's future development and identifies the Project site as "Airport Development Area," which is the designation for future development.[6] The proposed Project would be consistent with adjacent Airport and industrial uses, as well as applicable OIAA, City of Ontario, and FAA-adopted plans, policies, and regulations. The proposed Project would not physically divide an established community or result in offsite land use changes. Accordingly, the proposed Project would have less-than-significant effects related to Land Use and Planning.

- **Mineral Resources.** According to the Ontario General Plan Final EIR, the City contains no mineral resources of Statewide significance. There are, however, a few sites in the City, the closest of which is approximately one mile to the north, that contain regionally significant mineral resources deposited by the Deer and Day Creek alluvial fan with potential aggregate resources, commonly known as gravel.[7] Project implementation would not impact these sites or result in the loss of regionally and locally important mineral resources. Based on this information, the proposed Project would have a less-than-significant effect on mineral resources.

- **Population and Housing.** The Project site contains airport office buildings, hangars, and support facilities. There are no residences on the Project site. Project implementation would not displace people or result in the demolition of existing housing that would require the construction of replacement housing elsewhere. The proposed Project would not impact housing stock. The proposed Project includes utility improvements; however, these would be designed to serve Project operations and would not directly or indirectly result in unplanned population growth.

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6 Ontario International Airport Authority. *Airport Layout Plan Narrative Report*. Future Land Use, Sheet 16. April 2021.

7 City of Ontario. *The Ontario Plan Draft EIR*. Figure 5.11-1, Mineral Resource Zones. https://www.ontarioplan.org/wp-content/uploads/sites/4/2016/05/32084.pdf. Accessed August 2021.

The proposed Project would increase employment opportunities in the region. The proposed Project would create approximately 1,315 jobs. According to the US Bureau of Labor Statistics, in June 2021, there was an unemployment rate of 7.9 percent (approximately 165,600 people were unemployed) in the Riverside-San Bernardino-Ontario area.[8] Accordingly, the 1,315 jobs generated by the proposed Project can employ existing residents in the Riverside-San Bernardino-Ontario area; thus, the proposed Project would not trigger the need for new housing. The proposed Project would result in less-than-significant effects related to population and housing.

- **Parks/Recreation.** The City of Ontario contains a variety of recreational opportunities, including regional and City parks, school recreation facilities, private parks and golf courses, and recreational trails for bicycles, horses, and hiking. Park and recreation facilities closest to the Project site include a bicycle corridor along Mission Boulevard and the Cucamonga Creek Multipurpose Trail. Project construction and operation would not directly affect these or other recreation facilities. Therefore, the proposed Project would not result in significant effects on parks and recreation facilities.

- **Public Services** (Schools and Other Public Facilities. Potential impacts to Fire and Police Public Services are discussed in Section 5.11 of this Draft EIR). The Project site is within the boundaries of the Ontario-Montclair Elementary School District and Chaffey Joint Union High School District. The proposed Project does not include residential development and would not generate students that would need to be housed at public school facilities. Nevertheless, the Project would comply with applicable laws and regulations, including the payment of school impact fees for the proposed commercial/industrial development that would reduce potential impacts to school facilities to less than significant. The Project would not require any other government services, such as library and public health services; therefore, potential effects related to other public facilities would be less than significant.

- **Wildfire.** The Project site is in a Local Responsibility Area and classified by CAL FIRE as non-VHFHSZ (non-very high fire hazard severity zone).[9] The site and surrounding areas are flat and developed with urban uses that would not contribute to the uncontrolled spread of wildfire or exacerbate potential wildfire risks, including downslope flooding and

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8 U.S. Bureau of Labor Statistics. "Riverside-San Bernardino-Ontario, CA." https://www.bls.gov/eag/eag.ca_riverside_msa.htm. Accessed August 2021.

9 CAL Fire. Office of the State Fire Marshal. "Fire Hazards Severity Zones." https://egis.fire.ca.gov/FHSZ/. Accessed August 2021.

landslides caused by runoff, slope instability, or drainage changes from wildfire. Furthermore, as further discussed in HAZ-6 in Draft EIR **Section 5.8: Hazards and Hazardous Materials**, the proposed Project would not impair adopted emergency response and evaluation plans. Therefore, the proposed Project would not result in, or be subject to, significant effects related to wildfire risk.

8.0 OTHER CEQA CONSIDERATIONS

This section of the Draft EIR considers and discusses other topics identified in the CEQA Guidelines, including significant unavoidable impacts, significant irreversible environmental changes, growth inducing effects, and potential secondary effects that would result from the proposed Project.

8.1 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(c) requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Based on the analysis conducted within this Draft EIR document, operation of the proposed Project would result in significant air quality, greenhouse gas emission, and transportation impacts that cannot be mitigated to a less-than-significant level. As discussed below, no feasible mitigation is available to reduce impacts to a level of insignificance.

Air Quality

As discussed in **Section 5.2: Air Quality**, estimated emissions from operation of Phase 1 and Phase 2 of the proposed Project would exceed SCAQMD significance thresholds for CO, VOC, NOx (Phases 1 and 2), and SO_2 (Phase 2 only), primarily due to aircraft emissions, followed by employee vehicles, delivery trucks, and emergency generators. The proposed Project would incorporate Project Design Features **PDF AQ-3** through **PDF AQ-8** and Mitigation Measures **MM AQ-4** through **MM AQ-7,** as well as mitigation measures **TRANS-1** through **TRANS-5** in **Section 5.12, Transportation,** of this Draft EIR to reduce operational air quality emissions to the greatest extent feasible. Neither the SCAQMD nor OIAA have the authority to regulate aircraft operations or emissions from aircraft engines and the majority of the emissions estimated for operation of the proposed Project are from aircraft operations. The 2022 AQMP identifies actions that can be taken by other agencies with regulatory jurisdiction to address these sources of emissions, including the adoption of more stringent criteria pollutant standards for aircraft engines and use of cleaner aviation fuels. It is anticipated that these types of future technology improvements will reduce the aviation emissions associated with the proposed Project over time. As the proposed Project is an air cargo facility serving the region, the operational and economic viability of the proposed Project relies on these aviation operations. For these reasons, there are no additional feasible mitigation measures that would reduce operational emissions to below significance thresholds and operational air quality emissions would remain significant after implementation of all feasible mitigation.

Greenhouse Gas Emissions

As discussed in **Section 5.7: Greenhouse Gas Emissions**, the proposed Project would generate approximately 128,057 $MTCO_2e$ of GHG emissions per year at full build-out. The majority (i.e., over 75 percent) of the GHG emissions associated with future operation of the proposed Project are related to aircraft sources (i.e., aircraft, auxiliary power unit [APU], and ground service equipment [GSE]). Project Design Features **PDF AQ-3** through **PDF AQ-5**, **PDF AQ-7**, **PDF AQ-8**, Mitigation Measures **MM AQ-4** through **MM AQ-7,** and mitigation measures **TRANS-1** through **TRANS-5** in **Section 5.12: Transportation,** would serve to reduce GHG emissions. Additionally, the proposed Project includes Project Design Features **PDF GHG-1** and **PDF GHG-2** to reduce GHG emissions to the greatest extent feasible. As discussed above, neither the SCAQMD nor OIAA have the authority to regulate aircraft operations or emissions from aircraft engines and the majority of the emissions estimated for operation of the proposed Project are from aircraft operations. As with the operational air quality emissions associated with the proposed Project, while it is anticipated future technology improvements are anticipated to reduce Project GHG emissions over time, there are no additional feasible mitigation measures available at this time that would reduce GHG emissions to below significance thresholds. For this reason, the proposed Project's GHG emissions would remain significant after implementation of all feasible mitigation.

Transportation

As discussed in **Section 5.12: Transportation,** in this EIR, the truck, employee, and other trips generated by the proposed Project would result in the Project Total VMT per service population (employees for this proposed Project) being 22 percent above the City's VMT significance threshold of 29.76 VMT per service population. Approximately 70 percent of the proposed Project VMT would be generated by employee, guest, and delivery trips, with the other 30 percent generated by trucks associated with the movement of cargo from the proposed facility throughout the region. To mitigate the significant VMT impact, Project total VMT per service population would need to be reduced by 22 percent. It is not feasible to reduce the portion (30 percent) of Project VMT generated by trucks transporting cargo, as the proposed Project is an air cargo facility serving a large region and the operational and economic viability of the proposed Project relies on trucks picking up and delivering cargo. To mitigate the VMT impact of the proposed Project, focusing solely on truck trips, the truck VMT would need to be reduced by 75 percent. In addition, to mitigate the VMT impact of the proposed Project focusing solely on passenger vehicles, the proposed Project's passenger car VMT would need to be reduced by 33 percent. VMT generated by employees, guests, and deliveries, considered alone, is already under the City's VMT significance threshold of 29.76 VMT per service population. As discussed in **Section 5.12, Transportation,** of this EIR, implementation of all feasible mitigation measures

(MM TRANS-1 through MM TRANS-5) for employee trips is estimated to reduce the proposed Project's employee VMT by a maximum of 5.10 percent, which is the maximum extent feasible but falls short of the 33 percent reduction required to mitigate the VMT impact of the proposed Project to less than significant. There are no additional feasible mitigation measures available at this time that would reduce operational VMT to below significance thresholds and for this reason, VMT would remain significant after implementation of all feasible mitigation.

Conclusion

Significant unavoidable impacts related to air quality, GHG, and transportation have been identified. No feasible mitigation is available to reduce these impacts to less than significant levels. All other significant impacts of the Proposed Project would be reduced to a less than significant level with the implementation of mitigation measures identified in this Draft EIR.

8.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(d) of the CEQA Guidelines requires that a Draft EIR include discussion of irreversible environmental change. The Guidelines indicate that "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" and "irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Impacts could consist of reduction in availability of resources, commitment of future generations to specific land uses, or accidents that cause irreversible damage.

The Project site is already developed and dedicated to airport uses. The proposed Project would not result in a new commitment of land. Construction of the proposed Project would require the consumption of resources that do not replenish themselves or which may renew so slowly as to be considered nonrenewable. This would include resources such as asphalt and concrete, metals, and petrochemical construction materials. Construction and operation of the proposed Project would also require energy resources such as electricity and various fuels. This would represent the loss of non-renewable resources, which are generally not retrievable; however, there are sufficient resources to serve the proposed Project.

Nonrecoverable materials and energy would be used during construction and operation activities; however, the amounts needed would be accommodated by existing supplies. Further, OIAA is committed to construct the proposed facilities to meet high standards for efficiency and environmental design. Implementation of best practices and standards that emphasize strategies for sustainable site development, water savings, energy efficiency, materials selection, and environmental quality would reduce the use of renewable and nonrenewable resources that would continue over time through construction and long-term operation of the proposed Project.

For example, the proposed Project would incorporate sustainable project design features and technology, such as meeting LEED certification standards for the Air Cargo Sort Building and a 1.5 MW Solar PV Panel system on the rooftop of the Air Cargo Sort Building and parking structure.

Although the implementation of best practices and standards that emphasize strategies for sustainable site development would reduce the use of materials and energy during construction and operation of the proposed Project, they would nevertheless be unavailable for other uses. The resources utilized for the proposed Project would be permanently committed to the Airport and, therefore, be considered irreversible.

8.3 GROWTH INDUCEMENT

Section 15126.2(e) of the CEQA Guidelines requires that a Draft EIR include discussion of the potential growth-inducing impacts of a project. This Draft EIR addresses the ways in which the proposed Project "could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." This information can be an important factor in a decision to approve a project. As stated in CEQA Guidelines, "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

The Proposed Project would not facilitate any unplanned growth. The proposed Project is located entirely on developed and active Airport property within an urbanized area of San Bernardino County, and its construction would not open additional areas to development. The proposed Project is an air cargo center, illustrated in Figure 3.3: Site Plan, which includes a cargo sorting building (Air Cargo Sort Building), truckyard, parking facilities, two aviation support buildings (GSE and aircraft line maintenance buildings), and aircraft apron improvements. The Air Cargo Sort Building, proposed north of East Avion Street, would contain a sorting facility and office spaces. The aircraft parking apron would surround the building to the west, north, and east. A ground-level visitor parking lot and truckyard are proposed on the south side of the cargo building, with access from East Avion Street. A parking structure for employees is proposed south of East Avion Street, with a pedestrian bridge connecting the parking structure to the office building. The proposed Project would be implemented in two phases. Phase 1 would take place on the easternmost 62 acres of the Project site and Phase 2 would occur on the remaining western 35 acres.

The proposed Project is required to comply with the FAA-approved Ontario International Airport Layout Plan (ALP). The ALP serves as a guide for the Airport's future development and identifies the Project site as "Airport Development Area," which is the designation for future aeronautical

development.[1] The proposed Project would be consistent with adjacent Airport and industrial uses, as well as applicable OIAA, City of Ontario, and FAA-adopted plans, policies, and regulations.

The proposed Project would increase employment opportunities in the region. The proposed Project would create approximately 1,315 jobs. According to the US Bureau of Labor Statistics, in June 2021, there was an unemployment rate of 7.9 percent (approximately 165,600 people were unemployed) in the Riverside-San Bernardino-Ontario area.[2] Accordingly, the 1,315 jobs generated by the proposed Project can employ existing residents in the Riverside-San Bernardino-Ontario area; thus, the proposed Project would not trigger the need for new housing. Correspondingly, with development of the proposed Project, runway use and flight patterns would increase; however, there would not be an increase in number of passengers expected to use the Airport as the proposed Project is an air cargo facility. It is not expected that the proposed Project would affect population growth or tourism in Ontario and the surrounding region.

Land uses surrounding the Project site include airport-related and industrial uses. No changes to existing or planned land uses on or off Airport property would result from the proposed Project. The Airport operates two secured airport access points (SAAP) onto the Airport airfield: one on the north side of the airfield and one on the south side of the airfield. The South SAAP, located in the northeast corner of the Phase 2 Project area, would be relocated prior to the construction of Phase 2 to the proposed Project to a 2.5-acre site located at the north end of South Vineyard Avenue, adjacent to Taxiway 'S,' approximately one-quarter mile west of its current location and approximately 270 feet west of the western boundary of the Project site. Construction of the new South SAAP would occur over approximately six months and the existing South SAAP would remain in operation until the new SAAP is operational. No other land acquisition or new facilities are proposed in the surrounding communities as a result of, or to accommodate, the proposed Project. The proposed Project is consistent with plans, goals, policies, zoning, and local controls that have been adopted and govern over the Project site.

The proposed Project would not induce growth at the Airport beyond that which would occur without the improvements and therefore would not result in a significant growth-inducing impact.

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1 Ontario International Airport Authority. *Airport Layout Plan Narrative Report*. Future Land Use, Sheet 16. April 2021.

2 U.S. Bureau of Labor Statistics. "Riverside-San Bernardino-Ontario, CA." https://www.bls.gov/eag/eag.ca_riverside_msa.htm. Accessed: August 2021.

8.4 POTENTIAL SECONDARY EFFECTS

Section 15126.4(a)(1)(D) of the CEQA Guidelines requires:

> *If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed.*

As described above, the potential for additional impacts, which could result from implementation of each mitigation measure proposed as part of the proposed Project, was reviewed. The following provides a summary of the potential secondary impacts that might occur as a result of the implementation of the proposed mitigation measures for those environmental issue areas where mitigation is provided.

Air Quality

Mitigation Measure AQ-1 requires that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks that meet CARB's 2010 engine emissions standards or newer, cleaner trucks. **Mitigation Measure AQ-2** requires that construction equipment such as concrete/industrial saws, pumps, aerial lifts, light stands, air compressors, and forklifts be electric or alternative-fueled (i.e., non-diesel), where feasible, as well as the condition that pole power be utilized at the earliest feasible point in time and be used to the maximum extent feasible in lieu of generators. **Mitigation Measure AQ-3** supports and encourages ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such as bulletin boards or email announcements, and also partially subsidizes transit fares or passes for the construction crew members who can feasibly use transit. **Mitigation Measure AQ-4** requires, in addition to the GSE noted within **Project Design Feature AQ-3**, all other on-site cargo-handling equipment, such as yard trucks, holsters, yard goats, pallet jacks, and similar equipment, to be electric, with the necessary electrical charging stations provided. **Mitigation Measure AQ-5** requires, where feasible, the use of zero-emission project-related delivery trucks as part of business operations beginning in 2025 (within at least 25 percent of the proposed Project fleet), and, where feasible, the use of zero-emission project-related delivery trucks as part of the business operations beginning in 2029 (within at least 50 percent of the proposed Project fleet). **Mitigation Measure AQ-6** includes in the design requirements for the proposed Project that a cool roof be installed at the parking garage to reduce energy use and urban heat island effects. **Mitigation Measure AQ-7** encourages the use of single engine taxi operations for Project-related aircraft. **Mitigation Measures AQ-2** through **AQ-7** would also serve to reduce GHG emissions. These mitigation measures would be

incorporated into and implemented during the proposed Project's design, the construction management process, and the proposed Project operations, and would not result in secondary impacts to the physical environment.

Biological Resources

Mitigation Measure BIO-1 requires preconstruction focused surveys prior to ground disturbance to determine the presence of burrowing owls. These surveys conform to the survey protocol established by the CDFW Staff Report on Burrowing Owl Mitigation and will be conducted by a qualified biologist.[3] **Mitigation Measure BIO-2** requires pre-construction Nesting Bird Surveys (NBS) performed by a qualified Avian Biologist prior to Project-related disturbance to determine the presence of nesting birds in compliance with the Migratory Bird Treaty Act. These mitigation measures would be incorporated into the construction management process and would not result in secondary impacts to the physical environment.

Cultural Resources

Mitigation Measure CUL-1 requires the retention of a qualified archaeologist be retained to conduct archeological monitoring of all ground disturbing activities during construction of both phases of the proposed Project. This mitigation measure requires a qualified archaeologist prepare a Cultural Resources Monitoring and Treatment Plan, and that all construction workers involved with grading and trenching operations shall receive training by the qualified archaeologist to recognize unique archaeological resources, including tribal cultural resources. This mitigation measure would be incorporated into the construction management process and would not result in secondary impacts to the physical environment.

Geology and Soils

Mitigation Measure GEO-1 requires a professional paleontologist (Paleontological monitor) to be retained to monitor earth-disturbing construction activities and to prepare and implement a Paleontological Resources Mitigation and Monitoring Plan (PRMMP) for the proposed Project. **Mitigation Measure GEO-2** requires that prior to the start of the proposed Project ground-disturbing activities, all field personnel will receive a worker's environmental awareness training on paleontological resources. **Mitigation Measure GEO-3** requires that in the event that a paleontological resource is discovered, the Paleontological temporarily divert the construction equipment around the find until it is assessed for scientific significance and, if appropriate, collected. **Mitigation Measure GEO-4** requires that upon completion of ground disturbing

[3] California Department of Fish and Wildlife. 2012. "Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game." March 7, 2012.

activity and curation of fossils where necessary, the qualified Paleontologist prepare a final mitigation and monitoring report. **Mitigation Measure GEO-5** requires that the proposed Project implement and incorporate the recommendations in the Geotechnical Investigation. These mitigation measures would be incorporated into the Project design the construction management process and would not result in secondary impacts to the physical environment.

Hazards and Hazardous Materials

Mitigation Measure HAZ-1 requires a Soil Management Plan (SMP) containing soil criteria as well as soil management and construction risk management protocols to be implemented during proposed Project development shall be prepared prior to disturbance of soils on the site by construction activities and implemented during construction. **Mitigation Measure HAZ-2** requires a vapor intrusion mitigation system (VIM system) to be installed under Phase II of the proposed Air Cargo Building. These mitigation measures would be incorporated into the proposed Project's design and into the construction management process and would not result in secondary impacts to the physical environment.

Noise

Mitigation Measure NOI-1 requires the implementation of a Residential Sound Insulation Program (RSIP) to mitigate aviation noise increases in all non-compatible residential units within the 65+ decibel (dB) contour. This mitigation measure would not result in secondary impacts to the physical environment.

Transportation

Mitigation Measure TRANS-1 requires that the Project implement a Commute Trip Reduction (CTR) program to reduce single-occupancy vehicle trips and encourage alternative modes of transportation. **Mitigation Measure TRANS-2** requires a ridesharing program to be promoted to future employees of the site. **Mitigation Measure TRANS-3** requires subsidized, discounted, or free Omnitrans, Metrolink, or Amtrak transit passes to be provided to employees to encourage use of transit routes/stops located less than a mile from the proposed Project. **Mitigation Measure TRANS-4** requires on-site bicycle parking and end-of-trip facilities to be provided for employee use. **Mitigation Measure TRANS-5** requires an employer-sponsored vanpool service to be implemented and be fully funded by the project proponent. These mitigation measures would be incorporated into the proposed Project's operations and would not result in secondary impacts to the physical environment.

Tribal Cultural Resources

Mitigation Measure TCR-1 requires a Native American Monitor from or approved by the appropriate Native American Tribe(s) be retained and that the monitor be retained prior to the commencement of any ground-disturbing activity for the subject project at all project locations. **Mitigation Measure TCR-2** and **TCR-3** require coordination and procedures with the appropriate Native American Tribe(s), should Native American human remains be discovered or recognized on the Project site. These mitigation measure would be incorporated into the construction management process and would not result in secondary impacts to the physical environment.

Conclusion

The proposed Project would not result in potential secondary impacts as a result of the implementation of the proposed mitigation measures.

9.0 REFERENCES

15 USC sec. 2601 et seq. *Toxic Substances Control Act of 1976*.

16 USC Section 1536(a)(2).

42 U.S.C Section 7401, et seq.

42 USC sec. 11001 et seq. *Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986*.

64 Code of Federal Regulations (CFR). Sections 60727–60731.

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Matthew J. Janousek, P.E., Supervising Geotechnical Engineer
Gerardo Hernandez, Staff Geologist

GSI Environmental Inc.

Bita Tabatabai, PE, Principal Engineer
Samantha Curtis, PG, Senior Geologist
Vincent Robino, PG

Fehr and Peers

Paul Herrmann, P.E., Senior Associate

10.3 ORGANIZATIONS CONSULTED

City of Ontario

Jay Bautista, Traffic/Transportation Manager
Lorena Mejia, Senior Planner

Ontario Municipal Utilities Company

Christopher Quach, P.E., Senior Associate Engineer
Alexis Mascarinas, EIT, Associate Engineer

HNTB Corporation

Kim Hughes, Department Manager
Yue Xu, Noise and Air Quality
Ryan Lombardi, Construction Emissions Analysis, Document Development
Justin Bychek, Aviation Planning Lead
Ken Poon, Aviation Planning, Airfield Simulation

Ramboll

Eric C. Lu, Managing Principal